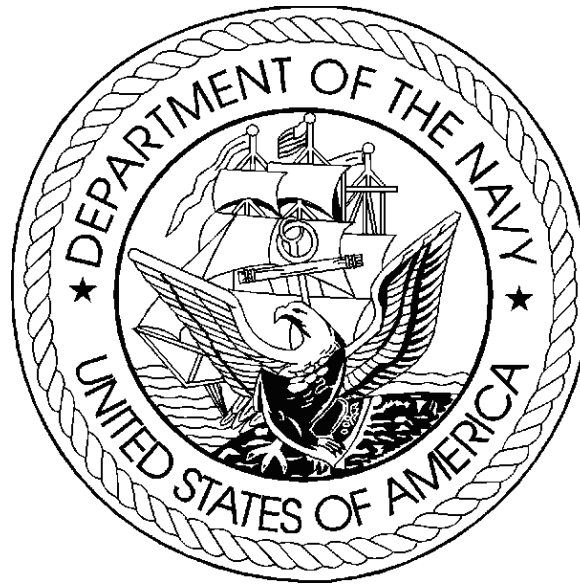


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**Department of Defense
Fiscal Year (FY) 2016 President's Budget Submission**

February 2015



Navy

Justification Book Volume 1 of 5

Other Procurement, Navy

Budget Activity 01

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The estimated total cost for producing the Department of Navy budget justification material is approximately \$1,436,000 for the 2015 fiscal year.
This includes \$74,000 in supplies and \$1,362,000 in labor.

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Navy • President's Budget Submission FY 2016 • Procurement

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Department of Defense Appropriations Act, 2016

Other Procurement, Navy

For procurement, production, and modernization of support equipment and materials not otherwise provided for, Navy ordnance (except ordnance for new aircraft, new ships, and ships authorized for conversion); the purchase of passenger motor vehicles for replacement only; expansion of public and private plants, including the land necessary therefore, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to approval of title; and procurement and installation of equipment, appliances, and machine tools in public and private plants; reserve plant and Government and contractor-owned equipment layaway, \$6,626,901,000, to remain available for obligation until September 30, 2018.

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Department of the Navy
 FY 2016 President's Budget
 Exhibit P-1 FY 2016 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

09 Jan 2015

Appropriation -----	FY 2014 (Base & OCO) -----	FY 2015 Base Enacted -----	FY 2015 OCO Enacted -----	FY 2015 Total Enacted -----
Other Procurement, Navy	5,689,605	5,846,558	123,710	5,970,268
Total Department of the Navy	5,689,605	5,846,558	123,710	5,970,268

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Department of the Navy
FY 2016 President's Budget
Exhibit P-1 FY 2016 President's Budget
Total Obligational Authority
(Dollars in Thousands)

09 Jan 2015

Appropriation -----	FY 2016 Base -----	FY 2016 OCO -----	FY 2016 Total -----
Other Procurement, Navy	6,614,715	12,186	6,626,901
Total Department of the Navy	6,614,715	12,186	6,626,901

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Department of the Navy
FY 2016 President's Budget
Exhibit P-1 FY 2016 President's Budget
Total Obligational Authority
(Dollars in Thousands)

09 Jan 2015

Appropriation: Other Procurement, Navy

Budget Activity -----	FY 2014 (Base & OCO) -----	FY 2015 Base Enacted -----	FY 2015 OCO Enacted -----	FY 2015 Total Enacted -----
01. Ships Support Equipment	1,451,727	1,826,087	8,210	1,834,297
02. Communications & Electronics Equip	2,092,833	2,224,244	5,870	2,230,114
03. Aviation Support Equipment	461,283	369,182		369,182
04. Ordnance Support Equipment	871,905	581,412	103,930	685,342
05. Civil Engineering Support Equip	79,117	53,042	3,300	56,342
06. Supply Support Equipment	55,005	88,200		88,200
07. Personnel & Command Support Equip	432,019	379,307		381,707
08. Spares and Repair Parts	245,716	325,084		325,084
Total Other Procurement, Navy	5,689,605	5,846,558	123,710	5,970,268

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Department of the Navy
 FY 2016 President's Budget
 Exhibit P-1 FY 2016 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

09 Jan 2015

Appropriation: Other Procurement, Navy

Budget Activity -----	FY 2016 Base -----	FY 2016 OCO -----	FY 2016 Total -----
01. Ships Support Equipment	1,902,164		1,902,164
02. Communications & Electronics Equip	2,382,342		2,382,342
03. Aviation Support Equipment	419,225		419,225
04. Ordnance Support Equipment	874,442		874,442
05. Civil Engineering Support Equip	54,933	186	55,119
06. Supply Support Equipment	246,708		246,708
07. Personnel & Command Support Equip	406,858		418,858
08. Spares and Repair Parts	328,043		328,043
Total Other Procurement, Navy	6,614,715	12,186	6,626,901

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Department of the Navy
FY 2016 President's Budget
Exhibit P-1 FY 2016 President's Budget
Total Obligational Authority
(Dollars in Thousands)

09 Jan 2015

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2014 (Base & OCO) Quantity Cost	FY 2015 Base Enacted Quantity Cost	FY 2015 OCO Enacted Quantity Cost	FY 2015 Total Enacted Quantity Cost	S e c
-----	-----	-----	-----	-----	-----	-----	-
Budget Activity 01: Ships Support Equipment							

Ship Propulsion Equipment							
1	LM-2500 Gas Turbine	A	9,022	7,822		7,822	U
2	Allison 501k Gas Turbine	A	5,536	2,155		2,155	U
3	Hybrid Electric Drive (HED)			12,638		12,638	U
Generators							
4	Surface Combatant HM&E	A	16,129	26,664		26,664	U
Navigation Equipment							
5	Other Navigation Equipment	A	33,386	39,298		39,298	U
Periscopes							
6	Sub Periscopes & Imaging Equip	A	45,704	57,221		57,221	U
Other Shipboard Equipment							
7	DDG Mod	A	285,994	324,219		324,219	U
8	Firefighting Equipment	A	14,389	15,134		15,134	U
9	Command and Control Switchboard	A	2,436	2,219		2,219	U
10	LHA/LHD Midlife	A	6,350	14,048		14,048	U
11	LCC 19/20 Extended Service Life Program	A	37,329	22,025		22,025	U
12	Pollution Control Equipment	B	17,514	10,146		10,146	U
13	Submarine Support Equipment	A	10,074	11,815		11,815	U
14	Virginia Class Support Equipment	A	69,341	70,689		70,689	U
15	LCS Class Support Equipment		47,078	25,742		25,742	U

P-1C1: FY 2016 President's Budget (Published Version of PB Position), as of January 9, 2015 at 15:31:22

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Department of the Navy
FY 2016 President's Budget
Exhibit P-1 FY 2016 President's Budget
Total Obligational Authority
(Dollars in Thousands)

09 Jan 2015

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2016 Base Quantity	Cost	FY 2016 OCO Quantity	Cost	FY 2016 Total Quantity	Cost	S e c
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Budget Activity 01: Ships Support Equipment									

Ship Propulsion Equipment									
1	LM-2500 Gas Turbine	A		4,881			4,881		U
2	Allison 501k Gas Turbine	A		5,814			5,814		U
3	Hybrid Electric Drive (HED)			32,906			32,906		U
Generators									
4	Surface Combatant HM&E	A		36,860			36,860		U
Navigation Equipment									
5	Other Navigation Equipment	A		87,481			87,481		U
Periscopes									
6	Sub Periscopes & Imaging Equip	A		63,109			63,109		U
Other Shipboard Equipment									
7	DDG Mod	A		364,157			364,157		U
8	Firefighting Equipment	A		16,089			16,089		U
9	Command and Control Switchboard	A		2,255			2,255		U
10	LHA/LHD Midlife	A		28,571			28,571		U
11	LCC 19/20 Extended Service Life Program	A		12,313			12,313		U
12	Pollution Control Equipment	B		16,609			16,609		U
13	Submarine Support Equipment	A		10,498			10,498		U
14	Virginia Class Support Equipment	A		35,747			35,747		U
15	LCS Class Support Equipment			48,399			48,399		U

P-1C1: FY 2016 President's Budget (Published Version of PB Position), as of January 9, 2015 at 15:31:22

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Department of the Navy
FY 2016 President's Budget
Exhibit P-1 FY 2016 President's Budget
Total Obligational Authority
(Dollars in Thousands)

09 Jan 2015

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2014 (Base & OCO) Quantity Cost	FY 2015 Base Enacted Quantity Cost	FY 2015 OCO Enacted Quantity Cost	FY 2015 Total Enacted Quantity Cost	S e c
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16	Submarine Batteries		37,000	36,352		36,352	U
17	LPD Class Support Equipment		20,425	39,519		39,519	U
18	Strategic Platform Support Equip	A	12,986	11,558		11,558	U
19	DSSP Equipment	A	2,455	5,518		5,518	U
20	CG Modernization	A	10,539				U
21	LCAC	A	14,431	7,158		7,158	U
22	Underwater Eod Programs		31,513	50,366	8,210	58,576	U
23	Items Less Than \$5 Million	A	68,590	62,772		62,772	U
24	Chemical Warfare Detectors	A	4,413	2,937		2,937	U
25	Submarine Life Support System	A	8,292	8,385		8,385	U
	Reactor Plant Equipment						
26	Reactor Power Units	A		298,200		298,200	U
27	Reactor Components	A	256,744	288,822		288,822	U
	Ocean Engineering						
28	Diving and Salvage Equipment	A	5,588	10,572		10,572	U
	Small Boats						
29	Standard Boats	A	28,676	126,445		126,445	U
	Training Equipment						
30	Other Ships Training Equipment	A	32,845	17,152		17,152	U
	Production Facilities Equipment						
31	Operating Forces Ipe	A	46,868	39,409		39,409	U

P-1C1: FY 2016 President's Budget (Published Version of PB Position), as of January 9, 2015 at 15:31:22

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Department of the Navy
FY 2016 President's Budget
Exhibit P-1 FY 2016 President's Budget
Total Obligational Authority
(Dollars in Thousands)

09 Jan 2015

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2016 Base Quantity	Cost	FY 2016 OCO Quantity	Cost	FY 2016 Total Quantity	Cost	S e c
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16	Submarine Batteries			23,072			23,072		U
17	LPD Class Support Equipment			55,283			55,283		U
18	Strategic Platform Support Equip	A		18,563			18,563		U
19	DSSP Equipment	A		7,376			7,376		U
20	CG Modernization	A							U
21	LCAC	A		20,965			20,965		U
22	Underwater Eod Programs			51,652			51,652		U
23	Items Less Than \$5 Million	A		102,498			102,498		U
24	Chemical Warfare Detectors	A		3,027			3,027		U
25	Submarine Life Support System	A		7,399			7,399		U
	Reactor Plant Equipment								
26	Reactor Power Units	A							U
27	Reactor Components	A		296,095			296,095		U
	Ocean Engineering								
28	Diving and Salvage Equipment	A		15,982			15,982		U
	Small Boats								
29	Standard Boats	A		29,982			29,982		U
	Training Equipment								
30	Other Ships Training Equipment	A		66,538			66,538		U
	Production Facilities Equipment								
31	Operating Forces Ipe	A		71,138			71,138		U

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Department of the Navy
FY 2016 President's Budget
Exhibit P-1 FY 2016 President's Budget
Total Obligational Authority
(Dollars in Thousands)

09 Jan 2015

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2014 (Base & OCO) Quantity Cost	FY 2015 Base Enacted Quantity Cost	FY 2015 OCO Enacted Quantity Cost	FY 2015 Total Enacted Quantity Cost	S e c
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Other Ship Support							
32	Nuclear Alterations	A	106,328	118,129		118,129	U
33	LCS Common Mission Modules Equipment		35,966	30,938		30,938	U
34	LCS MCM Mission Modules		34,885	15,270		15,270	U
35	LCS SUW Mission Modules		19,481	14,750		14,750	U
36	Remote Minehunting System (RMS)	A					U
Logistic Support							
37	LSD Midlife		73,420				U
Total Ships Support Equipment			1,451,727	1,826,087	8,210	1,834,297	
Budget Activity 02: Communications & Electronics Equip							

Ship Sonars							
38	SPQ-9B Radar	A	27,934	26,735		26,735	U
39	AN/SQQ-89 Surf ASW Combat System	A	83,231	78,802		78,802	U
40	SSN Acoustics	A	175,852	160,932		160,932	U
41	Undersea Warfare Support Equipment	A	15,869	4,663		4,663	U
42	Sonar Switches and Transducers	A	12,953	11,621		11,621	U
43	Electronic Warfare MILDEC	A	8,958				U
ASW Electronic Equipment							
44	Submarine Acoustic Warfare System	A	20,937	22,721		22,721	U
45	SSTD	A		10,653		10,653	U
46	Fixed Surveillance System	A	94,338	170,831		170,831	U

P-1C1: FY 2016 President's Budget (Published Version of PB Position), as of January 9, 2015 at 15:31:22

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Department of the Navy
FY 2016 President's Budget
Exhibit P-1 FY 2016 President's Budget
Total Obligational Authority
(Dollars in Thousands)

09 Jan 2015

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2016 Base Quantity	Cost	FY 2016 OCO Quantity	Cost	FY 2016 Total Quantity	Cost	S e c
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Other Ship Support									
32	Nuclear Alterations	A		132,625			132,625		U
33	LCS Common Mission Modules Equipment			23,500			23,500		U
34	LCS MCM Mission Modules			85,151			85,151		U
35	LCS SUW Mission Modules			35,228			35,228		U
36	Remote Minehunting System (RMS)	A		87,627			87,627		U
Logistic Support									
37	LSD Midlife			2,774			2,774		U
			-----		-----		-----		
Total Ships Support Equipment				1,902,164			1,902,164		
Budget Activity 02: Communications & Electronics Equip									

Ship Sonars									
38	SPQ-9B Radar	A		20,551			20,551		U
39	AN/SQQ-89 Surf ASW Combat System	A		103,241			103,241		U
40	SSN Acoustics	A		214,835			214,835		U
41	Undersea Warfare Support Equipment	A		7,331			7,331		U
42	Sonar Switches and Transducers	A		11,781			11,781		U
43	Electronic Warfare MILDEC	A							U
ASW Electronic Equipment									
44	Submarine Acoustic Warfare System	A		21,119			21,119		U
45	SSTD	A		8,396			8,396		U
46	Fixed Surveillance System	A		146,968			146,968		U

P-1C1: FY 2016 President's Budget (Published Version of PB Position), as of January 9, 2015 at 15:31:22

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Department of the Navy
FY 2016 President's Budget
Exhibit P-1 FY 2016 President's Budget
Total Obligational Authority
(Dollars in Thousands)

09 Jan 2015

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2014 (Base & OCO) Quantity Cost	FY 2015 Base Enacted Quantity Cost	FY 2015 OCO Enacted Quantity Cost	FY 2015 Total Enacted Quantity Cost	S e c
----	-----	-----	-----	-----	-----	-----	-
47	SURTASS	A	9,545	9,619		9,619	U
48	Maritime Patrol and Reconnaissance Force Electronic Warfare Equipment	A	18,130	14,390		14,390	U
49	AN/SLQ-32 Reconnaissance Equipment	A	150,353	195,082		195,082	U
50	Shipboard IW Exploit	A	100,736	123,362		123,362	U
51	Automated Identification System (AIS) Submarine Surveillance Equipment		896	164		164	U
52	Submarine Support Equipment Prog Other Ship Electronic Equipment	A	44,464	36,938		36,938	U
53	Cooperative Engagement Capability	B	29,592	33,939		33,939	U
54	Trusted Information System (TIS)		396	324		324	U
55	Naval Tactical Command Support System (NTCSS)	A	14,302	18,192		18,192	U
56	ATDLS	A	3,836	16,768		16,768	U
57	Navy Command and Control System (NCCS)		7,201	5,219		5,219	U
58	Minesweeping System Replacement	A	54,900	40,482		40,482	U
59	Shallow Water MCM	B	12,748				U
60	Navstar GPS Receivers (SPACE)	A	11,765	15,232		15,232	U
61	American Forces Radio and TV Service	A	6,483	4,524		4,524	U
62	Strategic Platform Support Equip	A	7,631	6,382		6,382	U

P-1C1: FY 2016 President's Budget (Published Version of PB Position), as of January 9, 2015 at 15:31:22

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Department of the Navy
FY 2016 President's Budget
Exhibit P-1 FY 2016 President's Budget
Total Obligational Authority
(Dollars in Thousands)

09 Jan 2015

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2016 Base Quantity	Cost	FY 2016 OCO Quantity	Cost	FY 2016 Total Quantity	Cost	S e c
-----	-----	-----	-----	-----	-----	-----	-----	-----	-
47	SURTASS	A		12,953			12,953		U
48	Maritime Patrol and Reconnaissance Force Electronic Warfare Equipment	A		13,725			13,725		U
49	AN/SLQ-32 Reconnaissance Equipment	A		324,726			324,726		U
50	Shipboard IW Exploit	A		148,221			148,221		U
51	Automated Identification System (AIS) Submarine Surveillance Equipment			152			152		U
52	Submarine Support Equipment Prog Other Ship Electronic Equipment	A		79,954			79,954		U
53	Cooperative Engagement Capability	B		25,695			25,695		U
54	Trusted Information System (TIS)			284			284		U
55	Naval Tactical Command Support System (NTCSS)	A		14,416			14,416		U
56	ATDLS	A		23,069			23,069		U
57	Navy Command and Control System (NCCS)			4,054			4,054		U
58	Minesweeping System Replacement	A		21,014			21,014		U
59	Shallow Water MCM	B		18,077			18,077		U
60	Navstar GPS Receivers (SPACE)	A		12,359			12,359		U
61	American Forces Radio and TV Service	A		4,240			4,240		U
62	Strategic Platform Support Equip	A		17,440			17,440		U

P-1C1: FY 2016 President's Budget (Published Version of PB Position), as of January 9, 2015 at 15:31:22

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Department of the Navy
FY 2016 President's Budget
Exhibit P-1 FY 2016 President's Budget
Total Obligational Authority
(Dollars in Thousands)

09 Jan 2015

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2014 (Base & OCO) Quantity Cost	FY 2015 Base Enacted Quantity Cost	FY 2015 OCO Enacted Quantity Cost	FY 2015 Total Enacted Quantity Cost	S e c
-----	-----	-----	-----	-----	-----	-----	-
	Training Equipment						
63	Other Training Equipment	A	40,644	42,810		42,810	U
	Aviation Electronic Equipment						
64	Matcals	A	8,953	16,999		16,999	U
65	Shipboard Air Traffic Control	B	8,675	9,366		9,366	U
66	Automatic Carrier Landing System	A	20,758	21,357		21,357	U
67	National Air Space System	B	16,870	26,639		26,639	U
68	Fleet Air Traffic Control Systems	A	8,909	9,214		9,214	U
69	Landing Systems	A	13,486	13,902		13,902	U
70	ID Systems	A	34,818	28,543		28,543	U
71	Naval Mission Planning Systems	A	14,131	13,950		13,950	U
	Other Shore Electronic Equipment						
72	Deployable Joint Command & Control	A	3,249	1,205		1,205	U
73	Maritime Integrated Broadcast System		11,646	3,447		3,447	U
74	Tactical/Mobile C4I Systems	A	22,817	16,766		16,766	U
75	DCGS-N	A	17,350	23,649		23,649	U
76	CANES		325,340	335,989		335,989	U
77	RADIAC	A	9,835	5,153		5,153	U
78	CANES-Intell		55,262	61,215		61,215	U
79	GPETE	A	6,253	6,284		6,284	U
80	MASF						U

P-1C1: FY 2016 President's Budget (Published Version of PB Position), as of January 9, 2015 at 15:31:22

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Department of the Navy
FY 2016 President's Budget
Exhibit P-1 FY 2016 President's Budget
Total Obligational Authority
(Dollars in Thousands)

09 Jan 2015

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2016 Base Quantity	Cost	FY 2016 OCO Quantity	Cost	FY 2016 Total Quantity	Cost	S e c
-----	-----	-----	-----	-----	-----	-----	-----	-----	-
	Training Equipment								
63	Other Training Equipment	A		41,314			41,314		U
	Aviation Electronic Equipment								
64	Matcals	A		10,011			10,011		U
65	Shipboard Air Traffic Control	B		9,346			9,346		U
66	Automatic Carrier Landing System	A		21,281			21,281		U
67	National Air Space System	B		25,621			25,621		U
68	Fleet Air Traffic Control Systems	A		8,249			8,249		U
69	Landing Systems	A		14,715			14,715		U
70	ID Systems	A		29,676			29,676		U
71	Naval Mission Planning Systems	A		13,737			13,737		U
	Other Shore Electronic Equipment								
72	Deployable Joint Command & Control	A		1,314			1,314		U
73	Maritime Integrated Broadcast System								U
74	Tactical/Mobile C4I Systems	A		13,600			13,600		U
75	DCGS-N	A		31,809			31,809		U
76	CANES			278,991			278,991		U
77	RADIAC	A		8,294			8,294		U
78	CANES-Intell			28,695			28,695		U
79	GPETE	A		6,962			6,962		U
80	MASF			290			290		U

P-1C1: FY 2016 President's Budget (Published Version of PB Position), as of January 9, 2015 at 15:31:22

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Department of the Navy
FY 2016 President's Budget
Exhibit P-1 FY 2016 President's Budget
Total Obligational Authority
(Dollars in Thousands)

09 Jan 2015

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2014 (Base & OCO) Quantity Cost	FY 2015 Base Enacted Quantity Cost	FY 2015 OCO Enacted Quantity Cost	FY 2015 Total Enacted Quantity Cost	S e c
-----	-----	-----	-----	-----	-----	-----	-
81	Integ Combat System Test Facility	A	8,143	4,016		4,016	U
82	EMI Control Instrumentation	A	4,664	4,113		4,113	U
83	Items Less Than \$5 Million	A	64,642	58,365	5,870	64,235	U
	Shipboard Communications						
84	Shipboard Tactical Communications	A		14,410		14,410	U
85	Ship Communications Automation	A	23,877	20,830		20,830	U
86	Communications Items Under \$5M	A	28,941	14,145		14,145	U
	Submarine Communications						
87	Submarine Broadcast Support	A	7,856	11,057		11,057	U
88	Submarine Communication Equipment	A	64,376	64,954		64,954	U
	Satellite Communications						
89	Satellite Communications Systems	A	27,381	11,453		11,453	U
90	Navy Multiband Terminal (NMT)		183,620	247,617		247,617	U
	Shore Communications						
91	JCS Communications Equipment	A	4,463	4,369		4,369	U
92	Electrical Power Systems	A	778	1,402		1,402	U
	Cryptographic Equipment						
93	Info Systems Security Program (ISSP)	A	125,902	108,002		108,002	U
94	MIO Intel Exploitation Team	A	1,000	979		979	U
	Cryptologic Equipment						
95	Cryptologic Communications Equip	A	12,251	11,502		11,502	U

P-1C1: FY 2016 President's Budget (Published Version of PB Position), as of January 9, 2015 at 15:31:22

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Department of the Navy
FY 2016 President's Budget
Exhibit P-1 FY 2016 President's Budget
Total Obligational Authority
(Dollars in Thousands)

09 Jan 2015

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2016 Base Quantity	Cost	FY 2016 OCO Quantity	Cost	FY 2016 Total Quantity	Cost	S e c
-----	-----	-----	-----	-----	-----	-----	-----	-----	-
81	Integ Combat System Test Facility	A		14,419			14,419		U
82	EMI Control Instrumentation	A		4,175			4,175		U
83	Items Less Than \$5 Million	A		44,176			44,176		U
	Shipboard Communications								
84	Shipboard Tactical Communications	A		8,722			8,722		U
85	Ship Communications Automation	A		108,477			108,477		U
86	Communications Items Under \$5M	A		16,613			16,613		U
	Submarine Communications								
87	Submarine Broadcast Support	A		20,691			20,691		U
88	Submarine Communication Equipment	A		60,945			60,945		U
	Satellite Communications								
89	Satellite Communications Systems	A		30,892			30,892		U
90	Navy Multiband Terminal (NMT)			118,113			118,113		U
	Shore Communications								
91	JCS Communications Equipment	A		4,591			4,591		U
92	Electrical Power Systems	A		1,403			1,403		U
	Cryptographic Equipment								
93	Info Systems Security Program (ISSP)	A		135,687			135,687		U
94	MIO Intel Exploitation Team	A		970			970		U
	Cryptologic Equipment								
95	Cryptologic Communications Equip	A		11,433			11,433		U

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Line No	Item Nomenclature	Ident Code	FY 2014 (Base & OCO) Quantity Cost	FY 2015 Base Enacted Quantity Cost	FY 2015 OCO Enacted Quantity Cost	FY 2015 Total Enacted Quantity Cost	S e c
-----	-----	-----	-----	-----	-----	-----	-
	Other Electronic Support						
96	Coast Guard Equipment	A	2,893	2,967		2,967	U
			-----	-----	-----	-----	
	Total Communications & Electronics Equip		2,092,833	2,224,244	5,870	2,230,114	
	Budget Activity 03: Aviation Support Equipment						

	Sonobuoys						
97	Sonobuoys - All Types	A	177,305	182,946		182,946	U
	Aircraft Support Equipment						
98	Weapons Range Support Equipment	A	50,624	47,944		47,944	U
99	Expeditionary Airfields	A	4,676				U
100	Aircraft Support Equipment	A		55,195		55,195	U
101	Aircraft Rearming Equipment	A	11,263				U
102	Aircraft Launch & Recovery Equipment	A	58,110				U
103	Meteorological Equipment	A	19,118	12,825		12,825	U
104	DCRS/DPL	A	1,425	1,415		1,415	U
105	Aviation Life Support	A	29,588				U
106	Airborne Mine Countermeasures	A	77,114	23,152		23,152	U
107	Lamps MK III Shipboard Equipment	A	18,290				U
108	Portable Electronic Maintenance Aids		7,969				U
109	Other Aviation Support Equipment	A	2,412				U
110	Autonomic Logistics Information System (ALIS)		3,389				U

P-1C1: FY 2016 President's Budget (Published Version of PB Position), as of January 9, 2015 at 15:31:22

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Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2016 Base Quantity	Cost	FY 2016 OCO Quantity	Cost	FY 2016 Total Quantity	Cost	S e c
-----	-----	-----	-----	-----	-----	-----	-----	-----	-
	Other Electronic Support								
96	Coast Guard Equipment	A		2,529			2,529		U
				-----		-----	-----		
	Total Communications & Electronics Equip			2,382,342			2,382,342		
	Budget Activity 03: Aviation Support Equipment								

	Sonobuoys								
97	Sonobuoys - All Types	A		168,763			168,763		U
	Aircraft Support Equipment								
98	Weapons Range Support Equipment	A		46,979			46,979		U
99	Expeditionary Airfields	A							U
100	Aircraft Support Equipment	A		123,884			123,884		U
101	Aircraft Rearming Equipment	A							U
102	Aircraft Launch & Recovery Equipment	A							U
103	Meteorological Equipment	A		15,090			15,090		U
104	DCRS/DPL	A		638			638		U
105	Aviation Life Support	A							U
106	Airborne Mine Countermeasures	A		14,098			14,098		U
107	Lamps MK III Shipboard Equipment	A							U
108	Portable Electronic Maintenance Aids								U
109	Other Aviation Support Equipment	A							U
110	Autonomic Logistics Information System (ALIS)								U

P-1C1: FY 2016 President's Budget (Published Version of PB Position), as of January 9, 2015 at 15:31:22

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Exhibit P-1 FY 2016 President's Budget
Total Obligational Authority
(Dollars in Thousands)

09 Jan 2015

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2014 (Base & OCO) Quantity Cost	FY 2015 Base Enacted Quantity Cost	FY 2015 OCO Enacted Quantity Cost	FY 2015 Total Enacted Quantity Cost	S e c
-----	-----	-----	-----	-----	-----	-----	-
111	Aviation Support Equipment	A		45,705		45,705	U
	Total Aviation Support Equipment		461,283	369,182		369,182	
Budget Activity 04: Ordnance Support Equipment							

Ship Gun System Equipment							
112	Ship Gun Systems Equipment	A		5,572		5,572	U
113	Naval Fires Control System	A	1,188				U
114	Gun Fire Control Equipment	A	4,447				U
Ship Missile Systems Equipment							
115	Ship Missile Support Equipment	A		143,570		143,570	U
116	NATO Seasparrow	A	58,368				U
117	RAM GMLS	A	491				U
118	Ship Self Defense System	B	51,858				U
119	AEGIS Support Equipment	A	59,757				U
120	Tomahawk Support Equipment	A	63,371	60,062		60,062	U
121	Vertical Launch Systems	A	626				U
122	Maritime Integrated Planning System-MIPS	A	2,779				U
FBM Support Equipment							
123	Strategic Missile Systems Equip	A	224,484	201,832		201,832	U
ASW Support Equipment							
124	SSN Combat Control Systems	A	73,078	60,767		60,767	U
125	ASW Support Equipment	A		7,559		7,559	U

P-1C1: FY 2016 President's Budget (Published Version of PB Position), as of January 9, 2015 at 15:31:22

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Line No	Item Nomenclature	Ident Code	FY 2016 Base Quantity	Cost	FY 2016 OCO Quantity	Cost	FY 2016 Total Quantity	Cost	S e c
-----	-----	-----	-----	-----	-----	-----	-----	-----	-
111	Aviation Support Equipment	A		49,773			49,773		U
	Total Aviation Support Equipment			419,225			419,225		
Budget Activity 04: Ordnance Support Equipment									

Ship Gun System Equipment									
112	Ship Gun Systems Equipment	A		5,300			5,300		U
113	Naval Fires Control System	A							U
114	Gun Fire Control Equipment	A							U
Ship Missile Systems Equipment									
115	Ship Missile Support Equipment	A		298,738			298,738		U
116	NATO Seasparrow	A							U
117	RAM GMLS	A							U
118	Ship Self Defense System	B							U
119	AEGIS Support Equipment	A							U
120	Tomahawk Support Equipment	A		71,245			71,245		U
121	Vertical Launch Systems	A							U
122	Maritime Integrated Planning System-MIPS	A							U
FBM Support Equipment									
123	Strategic Missile Systems Equip	A		240,694			240,694		U
ASW Support Equipment									
124	SSN Combat Control Systems	A		96,040			96,040		U
125	ASW Support Equipment	A		30,189			30,189		U

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Total Obligational Authority
(Dollars in Thousands)

09 Jan 2015

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2014 (Base & OCO) Quantity Cost	FY 2015 Base Enacted Quantity Cost	FY 2015 OCO Enacted Quantity Cost	FY 2015 Total Enacted Quantity Cost	S e c
-----	-----	-----	-----	-----	-----	-----	-
126	Submarine ASW Support Equipment	A	3,913				U
127	Surface ASW Support Equipment	A	3,909				U
128	ASW Range Support Equipment	A	28,694				U
	Other Ordnance Support Equipment						
129	Explosive Ordnance Disposal Equip	B	148,516	20,619	103,930	124,549	U
130	Items Less Than \$5 Million	A	14,180	10,759		10,759	U
	Other Expendable Ordnance						
131	Anti-Ship Missile Decoy System	A	62,361				U
132	Surface Training Device Mods	A	43,213				U
133	Submarine Training Device Mods	A	26,672				U
134	Training Device Mods	A		70,672		70,672	U
			-----	-----	-----	-----	
	Total Ordnance Support Equipment		871,905	581,412	103,930	685,342	
Budget Activity 05: Civil Engineering Support Equip							

	Civil Engineering Support Equipment						
135	Passenger Carrying Vehicles	A	4,480	2,282		2,282	U
136	General Purpose Trucks	A	3,817	547		547	U
137	Construction & Maintenance Equip	A	12,651	6,187		6,187	U
138	Fire Fighting Equipment	A	14,748	14,621		14,621	U
139	Tactical Vehicles	B	7,039	957		957	U
140	Amphibious Equipment	A	5,741	8,187		8,187	U
141	Pollution Control Equipment	A	3,852	2,942		2,942	U

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Line No	Item Nomenclature	Ident Code	FY 2016 Base Quantity	Cost	FY 2016 OCO Quantity	Cost	FY 2016 Total Quantity	Cost	S e c
-----	-----	-----	-----	----	-----	----	-----	----	-
126	Submarine ASW Support Equipment	A							U
127	Surface ASW Support Equipment	A							U
128	ASW Range Support Equipment	A							U
	Other Ordnance Support Equipment								
129	Explosive Ordnance Disposal Equip	B		22,623			22,623		U
130	Items Less Than \$5 Million	A		9,906			9,906		U
	Other Expendable Ordnance								
131	Anti-Ship Missile Decoy System	A							U
132	Surface Training Device Mods	A							U
133	Submarine Training Device Mods	A							U
134	Training Device Mods	A		99,707			99,707		U
				-----		-----	-----		
	Total Ordnance Support Equipment			874,442			874,442		
Budget Activity 05: Civil Engineering Support Equip									

	Civil Engineering Support Equipment								
135	Passenger Carrying Vehicles	A		2,252		186	2,438		U
136	General Purpose Trucks	A		2,191			2,191		U
137	Construction & Maintenance Equip	A		2,164			2,164		U
138	Fire Fighting Equipment	A		14,705			14,705		U
139	Tactical Vehicles	B		2,497			2,497		U
140	Amphibious Equipment	A		12,517			12,517		U
141	Pollution Control Equipment	A		3,018			3,018		U

P-1C1: FY 2016 President's Budget (Published Version of PB Position), as of January 9, 2015 at 15:31:22

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Department of the Navy
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Line No	Item Nomenclature	Ident Code	FY 2014 (Base & OCO) Quantity Cost	FY 2015 Base Enacted Quantity Cost	FY 2015 OCO Enacted Quantity Cost	FY 2015 Total Enacted Quantity Cost	S e c
-----	-----	-----	-----	-----	-----	-----	-
142	Items Under \$5 Million	A	25,607	16,142	3,300	19,442	U
143	Physical Security Vehicles	A	1,182	1,177		1,177	U
			-----	-----	-----	-----	
	Total Civil Engineering Support Equip		79,117	53,042	3,300	56,342	
Budget Activity 06: Supply Support Equipment							

Supply Support Equipment							
144	Materials Handling Equipment	A	6,340	10,937		10,937	U
145	Other Supply Support Equipment	A	7,681	6,674		6,674	U
146	First Destination Transportation	A	6,266	5,668		5,668	U
147	Special Purpose Supply Systems	A	34,718	64,921		64,921	U
			-----	-----	-----	-----	
	Total Supply Support Equipment		55,005	88,200		88,200	
Budget Activity 07: Personnel & Command Support Equip							

Training Devices							
148	Training Support Equipment	A	22,527	22,046		22,046	U
Command Support Equipment							
149	Command Support Equipment	A	60,128	24,208		24,208	U
150	Education Support Equipment	A		874		874	U
151	Medical Support Equipment	A	4,925	2,634		2,634	U
153	Naval MIP Support Equipment	A		3,573		3,573	U
154	Operating Forces Support Equipment	A	11,019				U
155	C4ISR Equipment	A		9,788		9,788	U

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Line No	Item Nomenclature	Ident Code	FY 2016 Base Quantity	Cost	FY 2016 OCO Quantity	Cost	FY 2016 Total Quantity	Cost	S e c
-----	-----	-----	-----	-----	-----	-----	-----	-----	-
142	Items Under \$5 Million	A		14,403			14,403		U
143	Physical Security Vehicles	A		1,186			1,186		U
				-----		-----	-----		
	Total Civil Engineering Support Equip			54,933		186	55,119		
Budget Activity 06: Supply Support Equipment									

	Supply Support Equipment								
144	Materials Handling Equipment	A		18,805			18,805		U
145	Other Supply Support Equipment	A		10,469			10,469		U
146	First Destination Transportation	A		5,720			5,720		U
147	Special Purpose Supply Systems	A		211,714			211,714		U
				-----		-----	-----		
	Total Supply Support Equipment			246,708			246,708		
Budget Activity 07: Personnel & Command Support Equip									

	Training Devices								
148	Training Support Equipment	A		7,468			7,468		U
	Command Support Equipment								
149	Command Support Equipment	A		36,433			36,433		U
150	Education Support Equipment	A		3,180			3,180		U
151	Medical Support Equipment	A		4,790			4,790		U
153	Naval MIP Support Equipment	A		4,608			4,608		U
154	Operating Forces Support Equipment	A		5,655			5,655		U
155	C4ISR Equipment	A		9,929			9,929		U

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Line No	Item Nomenclature	Ident Code	FY 2014 (Base & OCO) Quantity Cost	FY 2015 Base Enacted Quantity Cost	FY 2015 OCO Enacted Quantity Cost	FY 2015 Total Enacted Quantity Cost	S e c
-----	-----	-----	-----	-----	-----	-----	-
156	Environmental Support Equipment	A	18,276	21,001		21,001	U
157	Physical Security Equipment	A	116,577	90,957		90,957	U
159	Enterprise Information Technology	A	186,427	87,214		87,214	U
	Other						
160	Next Generation Enterprise Service	A		106,165		106,165	U
999	Classified Programs		12,140	10,847	2,400	13,247	U
	Total Personnel & Command Support Equip		432,019	379,307		381,707	
	Budget Activity 08: Spares and Repair Parts						
	Spares and Repair Parts						
161	Spares and Repair Parts	A	245,716	325,084		325,084	U
	Total Spares and Repair Parts		245,716	325,084		325,084	
	Total Other Procurement, Navy		5,689,605	5,846,558	123,710	5,970,268	

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Line No	Item Nomenclature	Ident Code	FY 2016 Base Quantity	Cost	FY 2016 OCO Quantity	Cost	FY 2016 Total Quantity	Cost	S e c
-----	-----	-----	-----	-----	-----	-----	-----	-----	-
156	Environmental Support Equipment	A		26,795			26,795		U
157	Physical Security Equipment	A		88,453			88,453		U
159	Enterprise Information Technology	A		99,094			99,094		U
	Other								
160	Next Generation Enterprise Service	A		99,014			99,014		U
999	Classified Programs			21,439		12,000	33,439		U
				-----		-----	-----		
	Total Personnel & Command Support Equip			406,858			418,858		
	Budget Activity 08: Spares and Repair Parts								

	Spares and Repair Parts								
161	Spares and Repair Parts	A		328,043			328,043		U
				-----		-----	-----		
	Total Spares and Repair Parts			328,043			328,043		
				-----		-----	-----		
	Total Other Procurement, Navy			6,614,715		12,186	6,626,901		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 1: Ship Propulsion Equipment								P-1 Line Item Number / Title: 0110 / LM-2500 Gas Turbine				
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:					Other Related Program Elements:				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	130.815	9.022	7.822	4.881	-	4.881	11.783	16.004	15.044	15.349	54.600	265.320
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	130.815	9.022	7.822	4.881	-	4.881	11.783	16.004	15.044	15.349	54.600	265.320
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	130.815	9.022	7.822	4.881	-	4.881	11.783	16.004	15.044	15.349	54.600	265.320
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-
Description: The FY 2016 funding request was reduced by \$3.208 million to account for the availability of prior year execution balances. The LM2500 Marine Gas Turbine and its associated Engineering Control Systems provide main propulsion for the Navy's surface combatants including the FFG 7 OLIVER HAZARD PERRY Class, CG 47 TICONDEROGA Class, DDG 51 ARLEIGH BURKE Class, and LCS Class. The LM2500 is composed of two major sub-assemblies: the gas generator and power turbine sections. It is coupled to the ship drive-train by a high speed coupling shaft. The LM2500+ Marine Gas Turbine and its associated Engineering Control Systems provide main propulsion power for the Navy's amphibious assault ships including the LHD-8 MAKIN ISLAND, LHA-6 and LHA-7. The LM2500+ is composed of two major sub-assemblies: the gas generator and power turbine sections. It is coupled to the ship drive-train by a high speed coupling shaft. The control system for both engines provides for both local and remote engine operations. The budget funds the following: [P40A / GA009 MODIFICATION PROGRAM]: GA009 - MODIFICATION KIT PROGRAM This cost code procures modification kits listed below for the LM2500 Gas Turbine Engine. These modifications increase reliability and fleet readiness through component upgrades which improves the Mean Time Between Failure (MTBF). The modification kits are procured based on historical usage rates, re-packaged into individual kits, and sent to either a depot to be installed during engine overhauls or to Regional Maintenance Centers for installation. No procurement quantities are a result of procuring various kits of various costs. The kits included in the cost code are as follows: --Accelerometers (Vibration Monitor) -- Compressor Rear Frame Mid-flange Fastener installation -- C-Sump Lubrication Supply Line -- Power Turbine Upgraded Speed Sensor -- Improved Drain Shutoff Valve -- Turbine Mid-Frame Modification -- 7B Piping Modification --5-Element to 6-Element Pump Conversion --T5.4 Flexible Thermo Harness --Mid Flange Fastener [P40A / GA010 GAS GENERATOR]: GA010 - GAS GENERATOR												

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 1: Ship Propulsion Equipment		P-1 Line Item Number / Title: 0110 / LM-2500 Gas Turbine
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:
This cost element procures the LM2500 single shank propulsion gas turbine for the DDG-51 & LCS-2 class ships and the LM2500+ single shank propulsion gas turbine for the LHD8 and LHA6-LHA8. The programs projected FY-18 in-service population of single shank propulsion gas turbine engines is estimated to be 382 due to new construction. Breakdown of ship class spare procurement is listed below. The procurement of these engines includes all required shipping/storage containers. LM2500 gas generator procurements are presently scheduled to occur every other year. DDG LM2500 Single Shank Based on experience with 35 years of usage demand data on the LM2500 Engine and IAW 10 USC Sec. 2308, DFAR subpart 207.70 and DoDI 3110.06, a total of 36 spares are required to support the fleet requirements. Current onhand is 28 with a requirement for eight (8) additional gas generator units to be procured IAW projected class population in FY19. LCS 2 LM2500 Single Shank. Based on experience with 35 years of usage demand data on the LM2500 Engine and IAW 10 USC Sec. 2308, DFAR subpart 207.70 and DoDI 3110.06, a total of 3 spares are required to support the fleet requirements. Current onhand is 1 with one (1) procured in May FY12 which leaves the requirement for one (1) additional gas generator unit to be procured IAW projected class population in FY19. LHD8/LHA6-LHA8 LM2500+ Single Shank. Based on experience with 35 years of usage demand data on the LM2500 Engine and IAW 10 USC Sec. 2308, DFAR subpart 207.70 and DoDI 3110.06, a total of 2 spares are required to support the fleet requirements. Current onhand is 1, which leaves the requirement for one (1) additional gas generator to be procured IAW projected class population. The program has budgeted to procure one (1) Power Turbine Assembly in FY18 to meet the baseline requirement. This engine represents a significantly different configuration than the standard LM2500 Single Shank Engine procured in previous fiscal years. LM2500 Hot Section Kits Are procured as required from the below list per quarterly failure analysis and maintained to replace High Pressure Turbine (HPT) components beyond economical repair (BER). Shortages of replacement blades increase engine repair turn-around time (RTAT) during engine refurbishment/repair as a result of material shortages. Procurement quantities are a result of procuring various kits of various costs. The kits included in the cost code are as follows: --HPT Shrouds --HPT Seal Assembly --HPT Blades --HPT Nozzles --Compressor Blades [P40A / GA012 CONTROL SYSTEMS MODIFICATIONS]: GA012 - CONTROL SYSTEM MODIFICATIONS This cost code funds the procurement and installation of the Aft Steering Local Control Unit and Damage Control Hard Drives following control system modifications: Aft steering local control unit single board computers are currently obsolete and require replacement. Installation is required to be completed on 24 ships. Installations do not require CNO availabilities. Installations will be accomplished during pier side availability by NSWCCD Philadelphia. There are 4 kits required per ship. The kits include the following hardware: single board computer, daughter board, transceiver, power cables, and associated software packages. Current Damage Control Workstation hard drives are currently obsolete and require replacement. In order to maintain commonality in configuration a one-time bulk buy in FY12 is required as vendor is phasing-out the production of this unit. Installation is required to be completed on 24 ships. There are seven (7) hard drives required per ship. Installations do not require CNO availabilities. Installations will be accomplished during pier side availability by NSWCCD Philadelphia. [P40A / GA015 LM2500 DIGITAL FUEL CONTROL]: GA015 - DIGITAL FUEL CONTROL (DFC) This cost code procures the Digital Fuel Control (DFC) shipsets, ancillary equipment and install material to support the CG/DDG modernization schedules. Procurement and installations are budgeted to correspond with CNO ship availabilities. One DFC Kit is required to upgrade each of the four LM2500 engines, which makes one DFC shipset.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 1: Ship Propulsion Equipment		P-1 Line Item Number / Title: 0110 / LM-2500 Gas Turbine
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:
The DFC is the most significant change to the LM2500 engine since its inception into the USN that addresses obsolescence components which accounted for approximately 40% of all engine failures. This modification is estimated to be 75% more reliable than the old system. This upgrade replaces the existing Hydro-mechanical main fuel control (MFC) system which was designed for aircraft; with a Digital Fuel Control (DFC) system designed for military marine environment. This modification increases engine reliability, decreases periodic maintenance, enhances operational functions, and provides an automatic stall detection and shutdown capability. [P40A / GA016 MANAGEMENT ENERGY INITIATIVES]: GA016 - MANAGEMENT ENERGY INITIATIVES This cost code procures the materials and funds installation of the LM2500 energy initiatives, which include online waterwash and LM-2500 fuel efficiency improvements: FY15 funds for energy initiatives realigned to Surface Combatant HM&E, Ships Support Equipment and Maritime Energy Initiatives (BLI 0200, L7027) to more effectively meet the Departments energy initiatives goals. FY14 funding is budgeted to support the following two efforts in support of energy initiatives. Online waterwash Shipboard evaluation showed no measurable gains in operating efficiency or operating cost reduction; the project has been cancelled and test installations shall be removed. FY14 has been budgeted to restore the three evaluation hulls to their original configuration. DDG-51 Thermal Management Control System (TMCS) DDG-51 TMCS is considered a key energy conservation measure in the overall TFE Maritime Energy Portfolio. It improves energy efficiency by reducing cooling need from A/C plants and limiting excess heat with electric preheaters. It also allows the redirection from non-vital to vital loads during casualty situations. The DDG-51 TMCS was developed under the Fleet Readiness R&D Program and was successfully tested on the USS Kidd (DDG-100) in FY11-FY13. TMCS includes replacement of 129 thermostats with default temperature set points for each space based on manned/unmanned, day/night, in port/at sea, and summer and winter. Space temperatures are controlled remotely from CCS and the Engineering Log Room. Installations will occur during scheduled CNO approved availabilities. [P40A / GA830 PRODUCTION ENGINEERING]: GA830 - PRODUCTION ENGINEERING The review and approval of any production contract technical documentation, or the separate development of this documentation to include Technical Manuals, Signal Flow Diagrams, Planned Maintenance System (PMS), Level III Production Drawings, Provisioning Technical Documentation (PTD), Program Support Data, Allowance Parts Lists (APL's) and engineering in support of final design reviews. [P3A / GA015 DIGITAL FUEL CONTROL SHIPSET]: GA015 - DIGITAL FUEL CONTROL (DFC) This cost element procures the Digital Fuel Control (DFC) shipsets, ancillary equipment and install material to support the CG/DDG modernization schedules. FY14-FY18 quantity changed due to DDG modernization program schedule change. Reduced FY14 DFC KIT procurement from three (3) ship sets to one (1) ship set; only one (1) ship set [(4) DFC kits] were procured. One DFC Kit is required to upgrade each of the four DDG class LM2500 engines, which makes one DFC shipset. GE has indicated their major sub-vendors have increased material manufacturing time, which increased each shipset lead time from 10 months to 20-22 months for production, assembly and shipping. Adding in the 3-4 month contracting process, the new DFC kit lead time is estimated up to 26 months vice the previous 12 month lead time. The DFC is the most significant change to the LM2500 engine since its inception into the USN that addresses obsolescence components which accounted for approximately 40% of all engine failures. In summary this modification is estimated to be 75% more reliable than the old system.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 1: Ship Propulsion Equipment		P-1 Line Item Number / Title: 0110 / LM-2500 Gas Turbine
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:
This upgrade replaces the existing Hydro-mechanical main fuel control (MFC) system which was designed for aircraft; with a Digital Fuel Control (DFC) system designed for military marine environment. This modification increases engine reliability, decreases periodic maintenance, enhances operational functions, and provides an automatic stall detection and shutdown capability. FY15 DFC ship-set procurement cost updated based on actual prior year contract award prices. GA6IN - INSTALLATION FOR DIGITAL FUEL CONTROL (DFC) GA015 This cost element funds the installation of Cost element GA015-Digital Fuel Control (DFC) shipsets as part of the CG/DDG HM&E modernization program. This includes pre-assembly at NSWCCD Philadelphia, shipping to installation location, shipboard installation, training, post installation operational testing and associated travel cost.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy							Date: February 2015	
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 1: Ship Propulsion Equipment					P-1 Line Item Number / Title: 0110 / LM-2500 Gas Turbine			
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:			Other Related Program Elements:		
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
LM-2500 Gas Turbine	P-40a, P-5a		- / 92.267	- / 4.802	- / 1.907	- / 0.964	- / -	- / 0.964
1 / GA015 - LM2500 GAS TURBINE DIGITAL FUEL CONTROL ()	P-3a		- / 38.548	- / 4.220	- / 5.915	- / 3.917	- / -	- / 3.917
Total Gross/Weapon System Cost			- / 130.815	- / 9.022	- / 7.822	- / 4.881	- / -	- / 4.881
Exhibits Schedule			FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
LM-2500 Gas Turbine	P-40a, P-5a		- / -	- / -	- / -	- / -	- / -	- / -
1 / GA015 - LM2500 GAS TURBINE DIGITAL FUEL CONTROL ()	P-3a		- / 8.449	- / 8.826	- / 13.640	- / 12.042	- / 21.119	- / 116.676
Total Gross/Weapon System Cost			- / 11.783	- / 16.004	- / 15.044	- / 15.349	- / 54.600	- / 265.320
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.								
Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.								

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 1						P-1 Line Item Number / Title: 0110 / LM-2500 Gas Turbine									Aggregated Items Title: LM-2500 Gas Turbine ⁽¹⁾					
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.																				
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) GA009 MODIFICATION PROGRAM																				
1.1) MODIFICATION KIT PROGRAM	A		-	-	28.946	-	-	0.579	-	-	0.483	-	-	0.430	-	-	-	-	-	0.430
Subtotal: 1) GA009 MODIFICATION PROGRAM			-	-	28.946	-	-	0.579	-	-	0.483	-	-	0.430	-	-	-	-	-	0.430
2) GA010 GAS GENERATOR ⁽²⁾																				
2.1) GAS GENERATOR ^(†)	A		13,136K	3	39.407	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2.3) LM 2500 HOT SECTION KITS ⁽³⁾	A		-	-	4.196	-	-	1.580	-	-	1.164	-	-	0.335	-	-	-	-	0.335	
Subtotal: 2) GA010 GAS GENERATOR			-	-	43.603	-	-	1.580	-	-	1.164	-	-	0.335	-	-	-	-	0.335	
3) GA012 CONTROL SYSTEMS MODIFICATIONS																				
3.1) CONTROL SYSTEMS MODIFICATIONS	A		-	-	14.749	-	-	-	-	-	0.110	-	-	-	-	-	-	-	-	
Subtotal: 3) GA012 CONTROL SYSTEMS MODIFICATIONS			-	-	14.749	-	-	-	-	-	0.110	-	-	-	-	-	-	-	-	
4) GA015 LM2500 DIGITAL FUEL CONTROL																				
4.1) ANCILLARY EQUIPMENT/ INSTALLATION MATERIALS	A		-	-	0.168	-	-	0.046	-	-	0.030	-	-	0.067	-	-	-	-	0.067	
Subtotal: 4) GA015 LM2500 DIGITAL FUEL CONTROL			-	-	0.168	-	-	0.046	-	-	0.030	-	-	0.067	-	-	-	-	0.067	
5) GA016 MANAGEMENT ENERGY INITIATIVES ⁽⁴⁾																				
5.1) ONLINE WATERWASH GTM ^(†)	A		424,000.00	2	0.848	-	-	0.087	-	-	-	-	-	-	-	-	-	-	-	
5.2) LM 2500 FUEL EFFICIENCY IMPROVEMENTS	A		-	-	-	-	-	2.318	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 5) GA016 MANAGEMENT ENERGY INITIATIVES			-	-	0.848	-	-	2.405	-	-	-	-	-	-	-	-	-	-	-	
6) GA830 PRODUCTION ENGINEERING																				
6.1) PRODUCTION ENGINEERING	A		-	-	3.953	-	-	0.192	-	-	0.120	-	-	0.132	-	-	-	-	0.132	

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 1								P-1 Line Item Number / Title: 0110 / LM-2500 Gas Turbine							Aggregated Items Title: LM-2500 Gas Turbine ⁽¹⁾				

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Subtotal: 6) GA830 PRODUCTION ENGINEERING			-	-	3.953	-	-	0.192	-	-	0.120	-	-	0.132	-	-	-	-	-	0.132
Total			-	-	92.267	-	-	4.802	-	-	1.907	-	-	0.964	-	-	-	-	-	0.964

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	FY 2017			FY 2018			FY 2019			FY 2020			To Complete			Total Cost		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) GA009 MODIFICATION PROGRAM																				
1.1) MODIFICATION KIT PROGRAM	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 1) GA009 MODIFICATION PROGRAM			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2) GA010 GAS GENERATOR ⁽²⁾																				
2.1) GAS GENERATOR ^(†)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2.3) LM 2500 HOT SECTION KITS ⁽³⁾	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 2) GA010 GAS GENERATOR			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3) GA012 CONTROL SYSTEMS MODIFICATIONS																				
3.1) CONTROL SYSTEMS MODIFICATIONS	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 3) GA012 CONTROL SYSTEMS MODIFICATIONS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4) GA015 LM2500 DIGITAL FUEL CONTROL																				
4.1) ANCILLARY EQUIPMENT/ INSTALLATION MATERIALS	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 4) GA015 LM2500 DIGITAL FUEL CONTROL			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5) GA016 MANAGEMENT ENERGY INITIATIVES ⁽⁴⁾																				
5.1) ONLINE WATERWASH GTM ^(†)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy														Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 1							P-1 Line Item Number / Title: 0110 / LM-2500 Gas Turbine							Aggregated Items Title: LM-2500 Gas Turbine ⁽¹⁾				

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2017			FY 2018			FY 2019			FY 2020			To Complete			Total Cost		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
5.2) LM 2500 FUEL EFFICIENCY IMPROVEMENTS	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 5) GA016 MANAGEMENT ENERGY INITIATIVES			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6) GA830 PRODUCTION ENGINEERING																				
6.1) PRODUCTION ENGINEERING	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 6) GA830 PRODUCTION ENGINEERING			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

(t) indicates the presence of a P-5a

Footnotes:

(1) The FY 2016 funding request was reduced by \$3.208 million to account for the availability of prior year execution balances.

(2) * The cost estimates for all engine procurements between FY14-FY19 are based on the Rough Order of Magnitude pricing provided by General Electric. The program will update the actual costs during the FY the contract is awarded.

(3) GA010 Gas Generator, LM2500 HOT SECTION KITS: Changes between FY15 and FY16 is driven by increased demand for LM2500 Hot Section materials, which must be procured a year in advance due to GE's twelve month lead time. The increase demand is due to the number of LM2500 overhauls, driven by increasing number of engines with high operating hours, along with increased amount of unserviceable hot section material. 50% of 1st stage blades and nozzles are now found to be unserviceable during overhaul, up from historical levels of roughly 20%, due to the higher operating hours and increased engine performance requirements. Each individual LM2500 gas turbine has eighty eight (88) 1st stage turbine blades and thirty two (32) 1st stage nozzles; replacement part costs are on average \$12K a unit for 1st stage blades and \$22K a unit for 1st stage nozzles. The basis for the FY15 hot section material requirement of \$1.164M is 44 1st stage blades and 16 1st stage nozzles replacements during two (2) FY16 overhauls, at a cost of \$880K per overhaul. In FY15 the program is able to offset approximately \$600K of this requirement by using material recovered from decommissioned LM2500 assets, leaving an overall requirement of \$1.16M vice \$1.76M. The basis for the FY16 hot section material requirement of \$335K for FY16, which will buy 27 1st stage blades replacements during FY17 overhauls.

(4) FY15 funds for energy initiatives realigned to Surface Combatant HM&E, Ships Support Equipment and Maritime Energy Initiatives (BLI 0200, L7027) to more effectively meet the Departments energy initiatives goals.

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Exhibit P-5a, Procurement History and Planning: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 1			P-1 Line Item Number / Title: 0110 / LM-2500 Gas Turbine					Aggregated Items: LM-2500 Gas Turbine ⁽¹⁾				
Item Number / Title [DODIC]	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
2) GA010 GAS GENERATOR												
2.1) GAS GENERATOR		2011	GE / CINCINNATI, OH	SS / BOA	NAVSUP WSS, Mechanicsburg PA	Sep 2011	Mar 2013	1	3,601K	Y		
2.1) GAS GENERATOR		2013	GE / CINCINNATI, OH	SS / BOA	NAVSUP WSS, Mechanicsburg PA	May 2013	Nov 2014	1	3,905K	Y		
5) GA016 MANAGEMENT ENERGY INITIATIVES												
5.1) ONLINE WATERWASH GTM		2012	VARIOIUS / VARIOUS	SS / FFP	NSWC, PHILA	May 2012	Jul 2012	2	97,000.00	Y		

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 1	P-1 Line Item Number / Title: 0110 / LM-2500 Gas Turbine	Modification Number / Title: 1 / GA015 - LM2500 GAS TURBINE DIGITAL FUEL CONTROL

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	38.548	4.220	5.915	3.917	-	3.917	8.449	8.826	13.640	12.042	21.119	116.676
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	38.548	4.220	5.915	3.917	-	3.917	8.449	8.826	13.640	12.042	21.119	116.676
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	38.548	4.220	5.915	3.917	-	3.917	8.449	8.826	13.640	12.042	21.119	116.676
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

[GA015 DIGITAL FUEL CONTROL SHIPSET] This cost code procures the Digital Fuel Control (DFC) shipsets, ancillary equipment and install material to support the CG/DDG modernization schedules.

One DFC Kit is required to upgrade each of the four DDG class LM2500 engines, which makes one DFC shipset. GE has indicated their major sub-vendors have increased material manufacturing time, which increased each shipset lead time from 10 months to 20-22 months for production, assembly and shipping. Adding in the 3-4 month contracting process, the new DFC kit lead time is estimated up to 26 months vice the previous 12 month lead time.

The DFC is the most significant change to the LM2500 engine since its inception into the USN that addresses obsolescence components which accounted for approximately 40% of all engine failures. In summary this modification is estimated to be 75% more reliable than old system.

This upgrade replaces the existing Hydro-mechanical main fuel control (MFC) system which was designed for aircraft; with a Digital Fuel Control (DFC) system designed for military marine environment. This modification increases engine reliability, decreases periodic maintenance, enhances operational functions, and provides an automatic stall detection and shutdown capability.

FY15 DFC ship-set procurement cost updated based on actual prior year contract award prices.

FY14-FY18 quantity changed due to DDG modernization program schedule change. Reduced FY14 DFC KIT procurement from three (3) ship sets to one (1) ship set; only one (1) ship set [(4) DFC kits] were procured.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 1				P-1 Line Item Number / Title: 0110 / LM-2500 Gas Turbine					Modification Number / Title: 1 / GA015 - LM2500 GAS TURBINE DIGITAL FUEL CONTROL				
Models of Systems Affected:				Modification Type:					Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: GA015 - LM2500 GAS TURBINE DIGITAL FUEL CONTROL													
B Kits													
Recurring													
1.1.1) GA015 DIGITAL FUEL CONTROL SHIPSET - NonOrganic ⁽⁵⁾		35 / 37.726	1 / 3.862	3 / 5.359	2 / 3.761	- / -	2 / 3.761	4 / 7.914	4 / 8.324	6 / 13.128	5 / 11.518	10 / 16.433	70 / 108.025
Subtotal: Recurring		- / 37.726	- / 3.862	- / 5.359	- / 3.761	- / -	- / 3.761	- / 7.914	- / 8.324	- / 13.128	- / 11.518	- / 16.433	- / 108.025
Subtotal: GA015 - LM2500 GAS TURBINE DIGITAL FUEL CONTROL		35 / 37.726	1 / 3.862	3 / 5.359	2 / 3.761	- / -	2 / 3.761	4 / 7.914	4 / 8.324	6 / 13.128	5 / 11.518	10 / 16.433	70 / 108.025
Subtotal: Procurement, All Modification Items		- / 37.726	- / 3.862	- / 5.359	- / 3.761	- / -	- / 3.761	- / 7.914	- / 8.324	- / 13.128	- / 11.518	- / 16.433	- / 108.025
Installation													
Modification Item 1 of 1: GA015 - LM2500 GAS TURBINE DIGITAL FUEL CONTROL		- / 0.822	- / 0.358	- / 0.556	- / 0.156	- / -	- / 0.156	- / 0.535	- / 0.502	- / 0.512	- / 0.524	- / 4.686	- / 8.651
Subtotal: Installation		- / 0.822	- / 0.358	- / 0.556	- / 0.156	- / -	- / 0.156	- / 0.535	- / 0.502	- / 0.512	- / 0.524	- / 4.686	- / 8.651
Total													
Total Cost (Procurement + Support + Installation)		38.548	4.220	5.915	3.917	-	3.917	8.449	8.826	13.640	12.042	21.119	116.676

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Exhibit P-3a, Individual Modification: PB 2016 Navy				Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 1		P-1 Line Item Number / Title: 0110 / LM-2500 Gas Turbine			Modification Number / Title: 1 / GA015 - LM2500 GAS TURBINE DIGITAL FUEL CONTROL		

Modification Item 1 of 1: GA015 - LM2500 GAS TURBINE DIGITAL FUEL CONTROL

Manufacturer Information							
Manufacturer Name: General Electric ⁽⁶⁾				Manufacturer Location: Cincinnati, OH			
Administrative Leadtime (in Months): 3				Production Leadtime (in Months): 22			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Feb 2014	Feb 2015	Feb 2016	Feb 2017	Feb 2018	Feb 2019	Feb 2020
Delivery Dates	Mar 2016	Mar 2017	Mar 2018	Mar 2019	Mar 2020	Dec 2021	Mar 2022

Installation Information

Method of Implementation: GOVERNMENT:: Installation Name: GA015 DIGITAL FUEL CONTROL SHIPSET

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	33 / 0.822	2 / 0.358	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	35 / 1.180
FY 2014	- / -	- / -	1 / 0.556	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.556
FY 2015	- / -	- / -	- / -	3 / 0.156	- / -	3 / 0.156	- / -	- / -	- / -	- / -	- / -	3 / 0.156
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.535	- / -	- / -	- / -	- / -	2 / 0.535
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 0.502	- / -	- / -	- / -	4 / 0.502
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 0.512	- / -	- / -	4 / 0.512
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 0.524	- / 0.849	6 / 1.373
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / -	5 / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	10 / 3.837	10 / 3.837
Total	33 / 0.822	2 / 0.358	1 / 0.556	3 / 0.156	- / -	3 / 0.156	2 / 0.535	4 / 0.502	4 / 0.512	6 / 0.524	15 / 4.686	70 / 8.651

Installation Schedule																															
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020					
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	33	-	1	1	-	-	-	1	-	-	2	1	-	-	-	2	-	-	-	2	2	-	1	2	1	3	1	1	1	15	70
Out	33	-	1	1	-	-	-	1	-	-	2	1	-	-	-	2	-	-	-	2	2	-	1	2	1	3	1	1	1	15	70

Footnotes:

⁽⁵⁾ DFC ship-set procurement cost updated based on actual prior year contract award prices. FY14-FY18 quantity changed due to DDG modernization program schedule change. Reduced FY14 DFC KIT procurement from three (3) ship sets to one (1) ship set; only one (1) ship set [(4) DFC kits] were procured. Due to DDG modernization program schedule changes, two (2) of the scheduled FY2016 ship sets will be installed using FY15 carryover funding of \$371K.

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 1	P-1 Line Item Number / Title: 0110 / LM-2500 Gas Turbine	Modification Number / Title: 1 / GA015 - LM2500 GAS TURBINE DIGITAL FUEL CONTROL

⁽⁶⁾ GE has indicated their major sub-vendors have increased material manufacturing time, which increased each shipset lead time from 10 months to 20-22 months for production, assembly and shipping. Adding in the 3-4 month contracting process, the new DFC kit lead time is estimated up to 26 months vice the previous 12 month lead time.

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 1: Ship Propulsion Equipment							P-1 Line Item Number / Title: 0120 / Allison 501K Gas Turbine					
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:					Other Related Program Elements:				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	143.203	5.536	2.155	5.814	-	5.814	6.288	28.316	28.796	29.393	25.759	275.260
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	143.203	5.536	2.155	5.814	-	5.814	6.288	28.316	28.796	29.393	25.759	275.260
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	143.203	5.536	2.155	5.814	-	5.814	6.288	28.316	28.796	29.393	25.759	275.260
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-
Description: The FY 2016 funding request was reduced by \$0.329 million to account for the availability of prior year execution balances. This program provides the life-cycle support for the following Marine Gas Turbine systems: The Rolls Royce (Allison) 501-K Series Gas Turbines are used to drive electrical generators in Ship Service Gas Turbine Generators (SSGTG). The 501-K17 is used on the CG-47 Class ships. The 501-K34 is an upgraded version used on the DDG-51 Class ships and is not interchangeable with the 501-K17. The Rolls Royce MT-30 are used on LCS-1 variant for main propulsion and DDG 1000 for electrical generation. Rolls Royce 250-KS4 is used as a starter gas turbine for the 501-K34 on DDG 79 and follow. [P40A / GF001 STOCK ROTATING SPARES]: GF001 - STOCK ROTATING SPARES This cost code procures the MT-30 & MT-5 gas turbines for the Littoral Combat Ship (LCS) and Zumwalt DDG 1000 program, the 250-KS4 SSGTG starter engines for the DDG 79 and follow, and the 501-K34 gas turbines DDG 51 class ships. The procurement of these engines includes all required shipping/storage containers. MT-30 Gas Turbines Based on experience with similar turbines and IAW 10 USC Sec. 2308, DFAR subpart 207.70 and DoDI 3110.06, a total of 5 spares are required to support the fleet. Current MT-30 spares on-hand is two (2), three (3) budgeted procurement in FY18-FY20. The projected FY-20 and beyond in-service population of MT-30 gas turbine engines is fifty (50) due to new construction. MT-5 Gas Turbines Based on experience with similar turbines and IAW 10 USC Sec. 2308, DFAR subpart 207.70 and DoDI 3110.06, a total of 2 spares are required to support the fleet. Current MT-5 spares on-hand is zero (0) with one (1) budgeted procurement in FY18-FY20. The projected FY-20 and beyond in-service popu-lation of MT-5 gas turbine engines is six (6) due to new construction. 250-KS4 SSGTG Starter Engines Based on experience with similar turbines and IAW 10 USC Sec. 2308, DFAR subpart 207.70 and DoDI 3110.06, a total of 12 spares are required to support the fleet requirements. Current spares on-hand is twelve (12) which achieves the baseline sparing requirement. The projected FY-18 in-service population of starter engines is 112 due to new construction. Operation Tomodachi has resulted in the radiological contamination of twelve (12) 250-KS4 Marine Gas Turbines, which created an unplanned requirement to replace the twelve (12) affected engines beginning in FY13. Currently, the program has budgeted for six (6) replacements through FY20 leaving a requirement of six (6) additional replacement assets to be procured. 501-K34 Gas Turbines												

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 1: Ship Propulsion Equipment		P-1 Line Item Number / Title: 0120 / Allison 501K Gas Turbine
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:
Based on experience with similar turbines and IAW 10 USC Sec. 2308, DFAR subpart 207.70 and DoDI 3110.06, a total of 24 spares are required to support the fleet requirements. Current 501-K34 spares on-hand is 20 and 2 procured in FY-12, which leaves a requirement of 2 additional gas generator units to be procured. The projected FY-19 in-service population of gas turbine engines is 192, an increase from 186 in FY-12 due to new construction. [P40A / GF007 MODIFICATION PROGRAM]: GF007 - MODIFICATION PROGRAM This cost code procures modification kits listed below for the Rolls Royce Marine Gas Turbines (MGT). Analysis of Rolls Royce MGT engineering performance data, metrics, the SEA 21 Top Tech Issues and the component improvement program has identified necessary improvements to correct Rolls Royce MGT deficiencies. The modifications addresses the Fleet's top maintenance and reliability issues by reducing failure rates of system components, and improve Rolls Royce MGT readiness. The modification kits are packaged and shipped to the ship for installation during schedule CNO availability by a team of NSWCCD Philadelphia and Alteration Installation Team (AIT) personnel. Number of procurement quantities are a result of procuring various kits of various costs. The kits included in the cost code are as follows: --Engine Vibration Monitor --GTG Intake Filter System Replacement --SSGTG Bleed Air Control Valve Installation and Improvement --SSS Clutch upgrade to Air Turbine Starter (ATS) --SSGTG FADC 2-1 HMI Computer Conversion --SSGTG RIMSS Exhaust Backflow Detection System --Output Quill Shaft Bolt Replacement --RIMSS Tachometer Connector Improvement --Model 139 SSV and Off Mounted fuel Mod --FADC upgrade conversion --MT30 variant conversion kits [P40A / GF018 501 K-34 HOT SECTION REPLACEMENT]: GF018 - HOT SECTION REPLACEMENT This cost code procures High Pressure Turbine (HPT) components to supplement fall-out due to radiological contamination resultant from support of Operational Tomodachi. Number of procurement quantities are a result of procuring various kits of various costs. The kits included in the cost code are as follows: Blade Stage Kits T1, T2, T3 and T4; Vane Stage Kits T1, T2, T3 and T4 [P40A / GF020 MANAGEMENT ENERGY INITIATIVES]: FY15 funds for energy initiatives realigned to Surface Combatant HM&E, Ships Support Equipment and Maritime Energy Initiatives (BLI 0200, L7027) to more effectively meet the Departments energy initiatives goals. FY14 funding budgeted to support the following two efforts in support of energy initiatives. Online waterwash Shipboard evaluation showed no measurable gains in operating efficiency or operating cost reduction; the project has been cancelled and test installations shall be removed. FY14 has been budgeted to restore the three evaluation hulls to their original configuration. DDG-51 Thermal Management Control System (TMCS) DDG-51 TMCS is considered a key energy conservation measure in the overall TFE Maritime Energy Portfolio. It improves energy efficiency by reducing cooling need from A/C plants and limiting excess heat with electric preheaters. It also allows the redirection from non-vital to vital loads during casualty situations. The DDG-51 TMCS was developed under the Fleet Readiness R&D Program and was successfully tested on the USS Kidd (DDG-100) in FY11-FY13. TMCS includes replacement of 129 thermostats with default temperature set points for each space based on manned/unmanned, day/night, in port/at sea, and summer and winter. Space temperatures are controlled remotely from CCS and the Engineering Log Room. Installations will occur during scheduled CNO approved availabilities.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 1: Ship Propulsion Equipment		P-1 Line Item Number / Title: 0120 / Allison 501K Gas Turbine
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:
[P40A / GF830 PRODUCTION ENGINEERING]: GF830 - PRODUCTION ENGINEERING The review and approval of any production contract technical documentation, or the separate development of this documentation to include Technical Manuals, Signal Flow Diagrams, PMS, Level III Production Drawings, Provisioning Technical Documentation (PTD), Program Support Data, Allowance Parts Lists (APL's) and engineering in support of final design reviews. This includes efforts associated with tracking and updating NDE, MGTIS and Weblog to reflect completed installations and ensure consistent documentation for engine configuration management.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy							Date: February 2015	
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 1: Ship Propulsion Equipment					P-1 Line Item Number / Title: 0120 / Allison 501K Gas Turbine			
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:			Other Related Program Elements:		
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
Allison 501K Gas Turbine	P-40a, P-5a, P-21		- / 143.203	- / 5.536	- / 2.155	- / 5.814	- / -	- / 5.814
Total Gross/Weapon System Cost			- / 143.203	- / 5.536	- / 2.155	- / 5.814	- / -	- / 5.814
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.								
Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.								

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 1						P-1 Line Item Number / Title: 0120 / Allison 501K Gas Turbine									Aggregated Items Title: Allison 501K Gas Turbine					
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.																				
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) GF001 STOCK ROTATING SPARES ⁽¹⁾																				
1.1) 501-K34 ^{(2)(†)}	A		1,942K	11	21.362	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.2) 250-KS4 ^{(3)(†)}	A		400,750.00	4	1.603	425,000.00	1	0.425	448,000.00	1	0.448	454,000.00	1	0.454	-	-	-	454,000.00	1	0.454
1.3) MT-30 ^(†)	A		12,500K	1	12.500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 1) GF001 STOCK ROTATING SPARES			-	-	35.465	-	-	0.425	-	-	0.448	-	-	0.454	-	-	-	-	-	0.454
2) GF007 MODIFICATION PROGRAM																				
2.1) PROCURE MODIFICATION KITS ⁽⁴⁾	A		-	-	89.126	-	-	0.744	-	-	1.166	-	-	3.063	-	-	-	-	-	3.063
2.2) INSTALLATION FOR MODIFICATION KITS	A		-	-	1.141	-	-	0.265	-	-	0.405	-	-	1.074	-	-	-	-	-	1.074
Subtotal: 2) GF007 MODIFICATION PROGRAM			-	-	90.267	-	-	1.009	-	-	1.571	-	-	4.137	-	-	-	-	-	4.137
3) GF018 501 K-34 HOT SECTION REPLACEMENT																				
3.1) 501K-34 HOT SECTION REPLACEMENT ⁽⁵⁾	A		278,346.94	49	13.639	-	-	1.036	-	-	-	-	-	1.013	-	-	-	-	-	1.013
Subtotal: 3) GF018 501 K-34 HOT SECTION REPLACEMENT			-	-	13.639	-	-	1.036	-	-	-	-	-	1.013	-	-	-	-	-	1.013
4) GF020 MANAGEMENT ENERGY INITIATIVES ⁽⁶⁾																				
4.1) 501K-17/34 3.5 COMPRESSOR UPGRADE	A		-	-	0.587	-	-	2.722	-	-	-	-	-	-	-	-	-	-	-	-
4.2) ONLINE WATERWASH GTG ^(†)	A		50,000.00	2	0.100	-	-	0.144	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 4) GF020 MANAGEMENT ENERGY INITIATIVES			-	-	0.687	-	-	2.866	-	-	-	-	-	-	-	-	-	-	-	-
5) GF830 PRODUCTION ENGINEERING																				
5.1) PRODUCTION ENGINEERING	A		-	-	3.145	-	-	0.200	-	-	0.136	-	-	0.210	-	-	-	-	-	0.210
Subtotal: 5) GF830 PRODUCTION ENGINEERING			-	-	3.145	-	-	0.200	-	-	0.136	-	-	0.210	-	-	-	-	-	0.210
Total			-	-	143.203	-	-	5.536	-	-	2.155	-	-	5.814	-	-	-	-	-	5.814

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 1	P-1 Line Item Number / Title: 0120 / Allison 501K Gas Turbine	Aggregated Items Title: Allison 501K Gas Turbine

^(†) indicates the presence of a P-5a

Footnotes:

- ⁽¹⁾ As a result of Operation Tomodachi the program currently has four (4) K34 engines that have been quarantined in either a Forward Repairable Inspection Activity (FRIA)-JAPAN or Aviation Radiological Inspection Facility (AVRIF) - San Diego and thus are no longer available to support the RFI sparing pool.
- ⁽²⁾ The cost estimates for the 501-K34 engine procurements between FY19-FY20 are based on the Rough Order of Magnitude pricing provided by Rolls Royce Naval Marine. The program will update the actual costs during the FY the contract is awarded.
- ⁽³⁾ The cost estimates is based on the Rough Order of Magnitude pricing provided by Rolls Royce Naval Marine" which varies between 4.2% to 5.0% across the FYDP. Although greater than OSD inflation rates, this escalation is consistent with the rates seen for other gas turbine OEMs.
- ⁽⁴⁾ "GF007 MODIFICATION PROGRAM: The modification program is designed to procure and install hardware to affect improvements in reliability and maintainability aboard CG-47 and DDG-51 class Ship Service Gas Turbine Generator (SSGTG) units. Each hull has a total of three (3) SSGTG units installed. Each SSGTG is controlled by a Full Authority Digital Control (FADC). CG-47 class uses the 501-K17 and DDG-51 class uses the 501-K34. There are currently three variants of the 501-K34 SSGTG: AG9130, AG9140HF and AG9140RF. The AG9140RF also includes the Remote Independent Mechanical Starting System (RIMSS) consisting of the 250-KS4 engine. The quantity of modification kits procured corresponds to the number of SSGTG units to be upgraded. The type and scope of each modification required will vary from one ship to the next. The number and type of kits installed in any given Fiscal Year (FY) varies depending upon ship availability schedules during that FY. FY2015 budget of \$1,571K funds Ship Change Document (SCD) 4483, Qty 18, \$421K - Bleed Air Control Valve Improvement for DDG-51; SCD 4638-9140HF, Qty 14, \$516K - SSS Clutch Upgrade for AG9140HF; SCD 4368-9140RF, Qty 2, \$68K - SSS Clutch Upgrade for AG9140RF; SCD 5216, Qty 12, \$100K - FADC 2-1 Conversion; SCD 7539, Qty 6, \$127K - RIMSS Backflow Detection System; SCD 8729, Qty 18, \$60K - Quill Shaft Bolt Improvement; SCD 10677, Qty 12, \$276K - Off Engine Fuel Valve Modification for CG-47. The remaining balance is for ancillary materials related to each of the aforementioned SCDs. FY2016 budget of \$4,137K funds SCD 1236, Qty 15, \$2,532K - SSGTG Intake Filter Upgrade for DDG-51; SCD 4483, Qty 18, \$428K - Bleed Air Control Valve Improvement for DDG-51; SCD 4638-9140HF, Qty 6, \$229K - SSS Clutch Upgrade for AG9140HF; SCD 4638-9140RF, Qty 15, \$634K - SSS Clutch Upgrade for AG9140RF; SCD 5216, Qty 12, \$102K - FADC 2-1 Conversion; SCD 12115, Qty 15, \$204K - RIMSS Tachometer Improvement. The remaining balance is for ancillary materials related to each of the aforementioned SCDs. The increase in the GF007 budget from FY15 to FY16 represents a change in the types and quantities of modification kits purchased from one year to the next; these changes are driven by ship availability schedule and include both procurement and installation costs."
- ⁽⁵⁾ FY16 Procurement will support up to seven (7) RADCON engine repairs.
- ⁽⁶⁾ FY15 funds for energy initiatives realigned to Surface Combatant HM&E, Ships Support Equipment and Maritime Energy Initiatives (BLI 0200, L7027) to more effectively meet the Departments energy initiatives goals.

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Exhibit P-5a, Procurement History and Planning: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 1			P-1 Line Item Number / Title: 0120 / Allison 501K Gas Turbine					Aggregated Items: Allison 501K Gas Turbine				
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
1) GF001 STOCK ROTATING SPARES												
1.1) 501-K34 ⁽²⁾		2012	ROLLS ROYCE / WALPOLE, MA	SS / BOA	NAVSUP WSS, Mechanicsburg, PA	Jun 2012	Dec 2013	2	2,154K	Y		
1.2) 250-KS4 ^{(3)(†)}		2011	ROLLS ROYCE / WALEPOLE, MA	SS / BOA	NAVSUP WSS, Mechanicsburg, PA	Jan 2012	Oct 2012	2	399,000.00	Y		
1.2) 250-KS4 ^{(3)(†)}		2012	ROLLS ROYCE / WALEPOLE, MA	SS / BOA	NAVSUP WSS, Mechanicsburg, PA	Apr 2012	Feb 2013	1	399,000.00	Y		
1.2) 250-KS4 ^{(3)(†)}		2013	ROLLS ROYCE / WALEPOLE, MA	SS / BOA	NAVSUP WSS, Mechanicsburg, PA	Mar 2013	Jan 2014	1	406,000.00	Y		
1.2) 250-KS4 ^{(3)(†)}		2014	ROLLS ROYCE / WALEPOLE, MA	SS / FP	NAVSUP WSS, Mechanicsburg, PA	Mar 2014	Jan 2015	1	425,000.00	Y		
1.2) 250-KS4 ⁽³⁾		2015	ROLLS ROYCE / WALEPOLE, MA	SS / FP	NAVSUP	Mar 2015	Jan 2016	1	448,000.00	Y		
1.2) 250-KS4 ⁽³⁾		2016	ROLLS ROYCE / WALEPOLE, MA	SS / FP	NAVSUP	Mar 2016	Jan 2017	1	454,000.00	Y		
1.3) MT-30		2011	ROLLS ROYCE / WALPOLE, MA	SS / FFP	NAVSEA, Washington DC	Sep 2011	Mar 2013	1	12,500K	Y		
4) GF020 MANAGEMENT ENERGY INITIATIVES												
4.2) ONLINE WATERWASH GTG		2012	VARIOIUS / VARIOUS	SS / FFP	NSWC, PHILA	May 2012	May 2012	2	50,000.00	Y		
^(†) indicates the presence of a P-21												

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Exhibit P-21, Production Schedule: PB 2016 Navy																				Date: February 2015													
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 1										P-1 Line Item Number / Title: 0120 / Allison 501K Gas Turbine										Aggregated Items: Allison 501K Gas Turbine													
Items <i>(Units in Each)</i>							Fiscal Year 2011													Fiscal Year 2012													
O C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2010	BAL DUE AS OF 1 OCT	Calendar Year 2011													Calendar Year 2012													B A L
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			
1) GF001 STOCK ROTATING SPARES																																	
1.2) 250-KS4 ⁽³⁾																																	
	1	2011	NAVY	2	-	2																A -	-	-	-	-	-	-	-	-	2		
	1	2012	NAVY	1	-	1																		A -	-	-	-	-	-	-	1		
	1	2013	NAVY	1	-	1																									1		
	1	2014	NAVY	1	-	1																									1		
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L		

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Exhibit P-21, Production Schedule: PB 2016 Navy																							Date: February 2015											
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 1										P-1 Line Item Number / Title: 0120 / Allison 501K Gas Turbine													Aggregated Items: Allison 501K Gas Turbine											
Items <i>(Units in Each)</i>							Fiscal Year 2013													Fiscal Year 2014														
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							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P				
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1.2) 250-KS4 ⁽³⁾																																		
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	1	2014	NAVY	1	-	1																			A	-	-	-	-	-	-	-	1	
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L			

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Exhibit P-21, Production Schedule: PB 2016 Navy																				Date: February 2015																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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Exhibit P-21, Production Schedule: PB 2016 Navy									Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 1					P-1 Line Item Number / Title: 0120 / Allison 501K Gas Turbine					Aggregated Items: Allison 501K Gas Turbine			
		Production Rates (Each / Year)			Procurement Leadtime (Months)								
MFR Ref #	MFR Name - Location	MSR For 2016	1-8-5 For 2016	MAX For 2016	Initial				Reorder				
					ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1	
1	ROLLS ROYCE - WALEPOLE, MA	-	-	-	-	-	-	-	-	-	-	-	

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy										Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 1: Ship Propulsion Equipment							P-1 Line Item Number / Title: 0140 / Hybrid Electric Drive (HED)					
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items: 0708017N					Other Related Program Elements: 0604567N, 0204228N				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	0.000	-	12.638	32.906	-	32.906	40.494	41.427	42.402	43.256	136.871	349.994
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	0.000	-	12.638	32.906	-	32.906	40.494	41.427	42.402	43.256	136.871	349.994
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	0.000	-	12.638	32.906	-	32.906	40.494	41.427	42.402	43.256	136.871	349.994
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	0.581	-	0.581	0.580	-	0.484	0.200	Continuing	Continuing
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: The Secretary of the Navy has made fuel conservation and reducing fuel consumption leading to energy independence a leading priority for the Navy. DDG 51 Class ships account for over 40% of Non-Nuclear Surface Navy fuel consumption. The large class numbers and remaining service life of the DDG 51 Class Ships, in comparison to other classes of ships, provide the best opportunity for long term payoff for the Navy in addressing the Secretary's priority. The Hybrid Electric Drive (HED) consists of an electric motor which can be coupled to the propulsion reduction gear to provide propulsion power from the ship service gas turbine generators (SSGTGs) during low speed operations. This will permit the securing of one or more propulsion gas turbines and allow higher power loading resulting in more efficient operation of the SSGTGs, which will be generating electric power for the HED as well as ship service power. In addition to reducing fuel consumption and the associated costs, HED results in the additional benefits of increasing the ship's range, increased time on station performing its mission, and reducing the frequency of fuel replenishment. The HED shipsets will include the propulsion motors, motor drives and the associated controls, interfaces, and mounting equipment that will be required to install the HED on DDG 51 Class Ships. This budget supports the HED for installation on DDG 51 Class in-service ships beginning in FY16. [P3A / TD001 - Hybrid Electric Drive]: Procure Hybrid Electric Drive (HED) for the DDG 51 Flight IIA Ships including equipment procurement, recurring equipment engineering, equipment integration, and ILS [P3A / Equipment Modification]: Equipment Modifications will be performed to correct deficiencies and engineering change proposals.												

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy						Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 1: Ship Propulsion Equipment				P-1 Line Item Number / Title: 0140 / Hybrid Electric Drive (HED)				
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items: 0708017N			Other Related Program Elements: 0604567N, 0204228N		
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
1 / TD001 - Hybrid Electric Drive ()	P-3a		- / 0.000	- / -	- / 12.638	- / 32.906	- / -	- / 32.906
Total Gross/Weapon System Cost			- / 0.000	- / -	- / 12.638	- / 32.906	- / -	- / 32.906
Exhibits Schedule			FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
1 / TD001 - Hybrid Electric Drive ()	P-3a		- / 40.494	- / 41.427	- / 42.402	- / 43.256	- / 136.871	- / 349.994
Total Gross/Weapon System Cost			- / 40.494	- / 41.427	- / 42.402	- / 43.256	- / 136.871	- / 349.994
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.								
Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.								

Justification:

This Item covers all HED procurement requirements for the DDG 51 Hybrid Electric Drive Backfit Program to be installed on Flight IIA ships. (DDG 79 through DDG 112; 34 ships).

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Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 1				P-1 Line Item Number / Title: 0140 / Hybrid Electric Drive (HED)					Modification Number / Title: 1 / TD001 - Hybrid Electric Drive			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	0.000	-	12.638	32.906	-	32.906	40.494	41.427	42.402	43.256	136.871	349.994
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	0.000	-	12.638	32.906	-	32.906	40.494	41.427	42.402	43.256	136.871	349.994
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	0.000	-	12.638	32.906	-	32.906	40.494	41.427	42.402	43.256	136.871	349.994
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: The Hybrid Electric Drive (HED) consists of an electric motor which can be coupled to the propulsion reduction gear to provide propulsion power from the ship service gas turbine generators (SSGTGs) during low speed operations. This will permit the securing of one or more propulsion gas turbines and allow higher power loading resulting in more efficient operation of the SSGTGs, which will be generating electric power for the HED as well as ship service power. Administrative lead time includes receipt of funds, document development, contracts review, and vendor concurrence. Production lead times are based on contractual requirements.												

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LI 0140 - Hybrid Electric Drive (HED)
Navy

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Exhibit P-3a, Individual Modification: PB 2016 Navy							Date: February 2015																									
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 1				P-1 Line Item Number / Title: 0140 / Hybrid Electric Drive (HED)				Modification Number / Title: 1 / TD001 - Hybrid Electric Drive																								
Modification Item 1 of 1: TD001 - Hybrid Electric Drive																																
Manufacturer Information																																
Manufacturer Name: L3 Maritime Systems							Manufacturer Location: Various																									
Administrative Leadtime (in Months): 3							Production Leadtime (in Months): 18																									
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020																									
Contract Dates		Dec 2014	Dec 2015	Dec 2016	Dec 2017	Dec 2018	Dec 2019																									
Delivery Dates		Jun 2016	Jun 2017	Jun 2018	Jun 2019	Jun 2020	Jun 2021																									
Installation Information																																
Method of Implementation: [none specified]:: Installation Name: Hybrid Electric Drive (Units)																																
Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total																				
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)																				
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																				
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																				
FY 2015	- / -	- / -	- / 3.850	2 / 7.678	- / -	2 / 7.678	- / -	- / -	- / -	- / -	- / -	2 / 11.528																				
FY 2016	- / -	- / -	- / -	- / 5.410	- / -	- / 5.410	4 / 15.352	- / -	- / -	- / -	- / -	4 / 20.762																				
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / 7.212	4 / 15.413	- / -	- / -	- / -	4 / 22.625																				
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 7.241	4 / 15.445	- / -	- / -	4 / 22.686																				
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 7.256	4 / 15.423	- / -	4 / 22.679																				
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 7.246	4 / 15.428	4 / 22.674																				
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	12 / 68.007	12 / 68.007																				
Total	- / -	- / -	- / 3.850	2 / 13.088	- / -	2 / 13.088	4 / 22.564	4 / 22.654	4 / 22.701	4 / 22.669	16 / 83.435	34 / 190.961																				
Installation Schedule																																
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
In	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	4	-	-	-	4	-	-	-	4	-	-	-	4	16	34	
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	4	-	-	-	4	-	-	-	4	-	-	-	20	34	
Footnotes:																																
(1) HED will be installed on Flight IIA ships beginning in Q4 of FY16. Installation/DSA/AIT - Provides Planning Yard Design Services (DSA) (design, advance planning, and kitted material), Master Ship Repair (MSR) installations and Alteration Installation Team (AIT) Support. Design Services Allocation (DSA) - Planning Yard design and ship checks required for mandatory design tasks that must be completed within the year prior to the actual shipyard installations. Total lead time is 18 months																																
(2) Equipment Modifications will be performed to correct deficiencies and engineering change proposals.																																

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy **Date:** February 2015

Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 2: Generators	P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E

ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:					Other Related Program Elements:				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	0.000	16.129	26.664	36.860	-	36.860	35.592	63.911	36.388	37.730	165.309	418.583
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	0.000	16.129	26.664	36.860	-	36.860	35.592	63.911	36.388	37.730	165.309	418.583
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	0.000	16.129	26.664	36.860	-	36.860	35.592	63.911	36.388	37.730	165.309	418.583
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (\$ in Millions)	-	-	-	0.188	-	0.188	0.192	-	0.178	-	-	0.558
Flyaway Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

This program initiated in FY14 as a transfer of funding from BLI 5246, to allow the Navy to better align and identify Hull, Mechanical & Electrical (HM&E) requirements, shipboard upgrades and equipment in support of the in-service Surface Combatants to include Class Common Equipment to support shorter Regular Overhauls and Selected Restricted Availabilities, including Ship System Components that require long repair turn-around; CG/DDG - Machinery Control Systems (MCS) COTS Refresh; Ship Control Systems and installation in support of the Ship Control System.

[P40A / GB001 - CG/DDG COTS Tech Refresh]: Due to Diminishing Manufacturing Sources and Material Shortages (DMSMS), Commercial Off The Shelf (COTS) equipment must be periodically refreshed to ensure supportability to the Fleet. This cost code is used to fund solutions for HM&E systems that have parts with oncoming DMSMS impacts. DMSMS solutions, including after-market manufacturing (reverse engineering), bridge-buys, life-of-type buys, modernization through replacement, modification / redesign, and reclamation are implemented to ensure that in-service ships are operational and sustainable throughout the life of the system. DMSMS issues and planned resolutions are implemented outside of standard CNO availabilities (WOO or CMAV) and are impacted by pending fact-of-life influences, including shifting availabilities, modified vendor End of Sale dates, and unforeseen material shortages.

[P40A / GB002 - Class Common Equipment]: The CCE program is to provide Ready-For-Issue (RFI) systems and equipment in support of Surface Combatant ship industrial availabilities, and to replace major system equipment which sustains battle damage or major failure. CCE Availability Assets (AAs) ensure warfighting capability, readiness, and on-time deployment by providing RFI long lead time material (LLTM) in case of possible catastrophic damage or major failure on Aegis ships. CCE AAs are procured and stored to support backfit upgrades and emergent maintenance within brief availability windows. The ready accessibility of these assets avoids delays in availability completion caused by lengthy equipment repair turn-around time or acquisition lead time. In addition to availability assets, the CCE program also provides for Insurance Assets. These are the major long lead time HM&E equipment/systems which, due to major damage or battle damage, would prevent a ship from being able to be quickly repaired in order to accomplish its mission. The CCE program provides for both CG and DDG assets.

[P40A / GB003 - Ship Control Systems (Installed under GB6IN)]: Funds provided support the procurement of Ship Control Systems (SCS) upgrades to be installed under GB6IN on both cruisers and destroyers in support of the Fleet Modernization Program. Ship Control Systems provide lifecycle support for legacy and modernized engineering controls. SCS equipment and components are procured for various ship changes and engineering change proposals for in-service surface combatants and are installed outside of standard CNO availabilities. This effort includes maintaining Land Based Engineering Sites (LBES), CG / DDG system refresh, SCD design engineering, CG / DDG equipment procurement, and CG / DDG ISEA/ILS support. This cost code also provides for funding the necessary software licenses in support of the HM&E COTS systems/equipment for both CG and DDG class ships. Examples of systems requiring software licenses are: Machinery Control System components, Voyage Management System, Integrated Bridge System, Integrated Bridge and Navigation System, and Digital Video Surveillance System.

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 2: Generators		P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:
[P40A / GB004 - Maritime Energy Initiatives (Procured in BLI 0110 and BLI 0120)]: Maritime Energy Initiatives provide surface combatants with technologies/tools that reduce energy usage. This will enhance operational capabilities, allowing for longer time on-station and fewer refuelings. These initiatives will also help meet the CNO's 2020 goal of reducing the surface fleet's fuel usage by 15%. The initiatives consist of: 1) Hull and Hydrodynamics - These initiatives focus on the dynamic forces where the ship contacts the water. They include, but are not limited to hull appendages that reduce drag, thus improving speed and fuel efficiency; 2) Power Generation and Transmission Systems - These initiatives focus on, but are not limited to improving the efficiency of ships' prime movers, generators, main reduction gears, propulsion motors/drives, and shaft-line components; 3) Combat and Ship Systems Support Services - These initiatives focus on, but are not limited to improving systems that use electricity when providing support services (e.g. cooling, heating, air, lube oil) to combat machinery, or life support systems; and 4) Decision Aids - These initiatives will inform the sailor of decisions they can make to save energy and improve operational efficiency by consolidating and manipulating ship data and providing it back as actionable information. [P40A / GB6IN - HM&E Installation (Procured under GB003)]: Funds provided support the installation of ship control systems upgrades (procured in GB003 CG/DDG) on both cruisers and destroyers in support of the Fleet Modernization Program. Installation funding supports expected service life and maintains the surface combatant's machinery and ship control systems. This functional code is also utilized to execute Maritime Energy Initiative installation tasks displayed on the P-3a exhibits. [P3A / GB004 - Maritime Energy Initiatives (TMCS)]: The Heating, Ventilation, and Air Conditioning (HVAC) system is the largest distributed system on a Surface Combatant and typically consumes between 25% and 40% of all energy used. Surveys on several DDG-class ships indicate that average space temperatures across the ship were being maintained well below the design temperature. Thermal Management Control System (TMCS) provides centralized control and monitoring of space temperatures at design set-points for each compartment throughout the ship. This technology enables improved operational efficiency of the HVAC system, thereby lowering AC loads and reducing electrical demand. [P3A - 2 / GB004 - Maritime Energy Initiatives (Bow Bulb)]: Bow bulb is a near surface, small volume design for installation on the destroyer's bow in combination with the existing sonar dome. Modification of bow shape reduces hull wave drag without an increase in hull resistance, reducing fuel consumption. [P3A - 3 / GB004 - Maritime Energy Initiatives (FEIP)]: LM2500 Fuel Efficiency Improvement Program (FEIP) modifies the hardware on the LM2500 Marine Gas Turbine and also modifies the internal software in the LM2500 Engine Controller. The first modification consists of altering the High Pressure Power Turbine (HPT) cooling tubing by introducing 4 solenoid valves into the path of the bleed/cooling airflow from the Gas Generator (GG) to the HPT. The solenoid valves will control the amount of bleed/cooling air provided to the HPT from IDLE to 12000 HP thereby increasing the fuel efficiency of the LM2500 through that Horsepower range. The second modification consists of altering the Variable Stator Vane (VSV) schedule throughout the power band of the LM2500. The new VSV schedule once implemented will be closer to the stall margin thereby increasing the airflow to the HPT and increasing the fuel efficiency of the LM2500 without adversely affecting the life/MTBF of the LM2500. The change would increase the fuel efficiency of the LM2500. [P3A - 4 / GB004 - Maritime Energy Initiatives (VSD for CPS)]: The Collective Protective System (CPS) is a full time air filtration system integrated into the ship's HVAC system. The amount of outside supply air delivered to CPS zones varies with filter loading over time and is almost always higher than needed, resulting in above average HVAC loads. Variable Speed Drive (VSD) will be installed as an airflow control component to optimize supply air flow, realizing energy savings from fan motor and reduced HVAC loads. [P3A - 5 / GB004 - Maritime Energy Initiatives (SSL)]: Solid State Lighting (SSL) lamps consist of individual Light Emitting Diodes (LEDs), which serve as replacements for incandescent and fluorescent lighting fixtures. SSL replacements are engineered to meet military specifications. SSL replacements for incandescent and fluorescent fixtures reduce energy usage by approximately 85% and 50%, respectively. Additionally, this install will drastically reduce the electrical lighting load, maintenance actions, and the space needed for spare parts. [P3A - 6 / GB004 - Maritime Energy Initiatives (Shipboard Energy Dashboard FLT IIA)]: The Shipboard Energy Dashboard FLT IIA technology is a shipboard tool providing real time situational awareness of the energy demand associated with equipment lineup and mission. Technology raises operator awareness of how certain engineering plant lineups and equipment affect fuel consumption rates. Energy savings will be realized through energy usage culture change. [P3A - 7 / GB004 - Maritime Energy Initiatives (Shipboard Energy Dashboard FLT I)]: The Shipboard Energy Dashboard FLT I technology is a shipboard tool providing real time situational awareness of the energy demand associated with equipment lineup and mission. Technology raises operator awareness of how certain engineering plant lineups and equipment affect fuel consumption rates. Energy savings will be realized through energy usage culture change.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 2: Generators		P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:
[P3A - 8 / GB004 - Maritime Energy Initiatives (Triton Fuel Penalty)]: Triton Fuel Penalty is a system capable of reporting in real time when a ship's powering condition has degraded due to increased drag from bio fouling. Personnel will be able to schedule ship cleanings utilizing feedback taken from actual measurements of drag while in service. This capability will reduce the current penalty paid by the fleet to overcome the negative effects of biological fouling on ship performance and fuel expenditure.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy	Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 2: Generators	P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E

ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:

Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
Surface Combatant HM&E	P-40a, P-5a		- / 0.000	- / 16.129	- / 14.193	- / 16.010	- / -	- / 16.010
1 / GB004 - Maritime Energy Initiatives (TMCS) ()	P-3a		- / 0.000	- / -	- / 4.946	- / 11.656	- / -	- / 11.656
2 / GB004 - Maritime Energy Initiatives (Bow Bulb) ()	P-3a		- / 0.000	- / -	- / -	- / 1.317	- / -	- / 1.317
3 / GB004 - Maritime Energy Initiatives (FEIP) ()	P-3a		- / 0.000	- / -	- / -	- / -	- / -	- / -
4 / GB004 - Maritime Energy Initiatives (VSD for CPS) ()	P-3a		- / 0.000	- / -	- / 2.017	- / 4.417	- / -	- / 4.417
5 / GB004 - Maritime Energy Initiatives (SSL) ()	P-3a		- / 0.000	- / -	- / 5.262	- / 2.848	- / -	- / 2.848
6 / GB004 - Maritime Energy Initiatives (Shipboard Energy Dashboard FLT IIA) ()	P-3a		- / 0.000	- / -	- / 0.246	- / 0.612	- / -	- / 0.612
7 / GB004 - Maritime Energy Initiatives (Shipboard Energy Dashboard FLT I) ()	P-3a		- / 0.000	- / -	- / -	- / -	- / -	- / -
8 / GB004 - Maritime Energy Initiatives (Triton Fuel Penalty) ()	P-3a		- / 0.000	- / -	- / -	- / -	- / -	- / -
Total Gross/Weapon System Cost			- / 0.000	- / 16.129	- / 26.664	- / 36.860	- / -	- / 36.860

Exhibits Schedule			FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
Surface Combatant HM&E	P-40a, P-5a		- / -	- / -	- / -	- / -	- / -	- / -
1 / GB004 - Maritime Energy Initiatives (TMCS) ()	P-3a		- / 9.244	- / 6.042	- / 6.150	- / 6.260	- / 23.404	- / 67.702
2 / GB004 - Maritime Energy Initiatives (Bow Bulb) ()	P-3a		- / 2.995	- / 3.050	- / 3.104	- / 3.760	- / 43.668	- / 57.894
3 / GB004 - Maritime Energy Initiatives (FEIP) ()	P-3a		- / -	- / 1.395	- / 0.964	- / 2.376	- / 26.604	- / 31.339
4 / GB004 - Maritime Energy Initiatives (VSD for CPS) ()	P-3a		- / 4.267	- / 3.548	- / 3.612	- / 3.676	- / 46.822	- / 68.359
5 / GB004 - Maritime Energy Initiatives (SSL) ()	P-3a		- / 3.663	- / 3.729	- / 3.689	- / 3.755	- / 2.342	- / 25.288
6 / GB004 - Maritime Energy Initiatives (Shipboard Energy Dashboard FLT IIA) ()	P-3a		- / 0.309	- / 0.174	- / -	- / -	- / -	- / 1.341
7 / GB004 - Maritime Energy Initiatives (Shipboard Energy Dashboard FLT I) ()	P-3a		- / -	- / 1.039	- / 1.392	- / 1.870	- / 11.966	- / 16.267
8 / GB004 - Maritime Energy Initiatives (Triton Fuel Penalty) ()	P-3a		- / -	- / 0.894	- / 1.745	- / 2.060	- / 10.503	- / 15.202
Total Gross/Weapon System Cost			- / 35.592	- / 63.911	- / 36.388	- / 37.730	- / 165.309	- / 418.583

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 2						P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E						Aggregated Items Title: Surface Combatant HM&E								
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.																				
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) GB001 - CG/DDG COTS Tech Refresh																				
1.1) GB001 - CG/DDG COTS Tech Refresh (1)	A		-	-	-	-	-	6.058	-	-	5.231	-	-	6.457	-	-	-	-	-	6.457
Subtotal: 1) GB001 - CG/DDG COTS Tech Refresh			-	-	0.000	-	-	6.058	-	-	5.231	-	-	6.457	-	-	-	-	-	6.457
2) GB002 - Class Common Equipment																				
2.1) GB002 - Class Common Equipment	A		-	-	-	-	-	1.995	-	-	1.900	-	-	2.020	-	-	-	-	-	2.020
Subtotal: 2) GB002 - Class Common Equipment			-	-	0.000	-	-	1.995	-	-	1.900	-	-	2.020	-	-	-	-	-	2.020
3) GB003 - Ship Control Systems (Installed under GB6IN) ⁽²⁾																				
3.1) GB003 - CG 47 Class (Installed under GB6IN 5.1) ^{(3)(f)}	A		-	-	-	1,232K	1	1.232	-	-	-	1,373K	1	1.373	-	-	-	1,373K	1	1.373
3.2) GB003 - DDG 51 Class (Installed under GB6IN 5.2) ^{(4)(f)}	A		-	-	-	3,695K	1	3.695	4,368K	1	4.368	4,273K	1	4.273	-	-	-	4,273K	1	4.273
3.3) GB003 - Ship Control Systems Software Licenses	A		-	-	-	-	-	3.149	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 3) GB003 - Ship Control Systems (Installed under GB6IN)			-	-	0.000	-	-	8.076	-	-	4.368	-	-	5.646	-	-	-	-	-	5.646
4) GB004 - Maritime Energy Initiatives (Procured in BLI 0110 and BLI 0120) ⁽⁵⁾																				
4.1) GB004 - Maritime Energy Initiative Install (Procured prior to transfer) ⁽⁶⁾	A		-	-	-	-	-	-	-	-	2.694	-	-	0.084	-	-	-	-	-	0.084
Subtotal: 4) GB004 - Maritime Energy Initiatives (Procured in BLI 0110 and BLI 0120)			-	-	0.000	-	-	-	-	-	2.694	-	-	0.084	-	-	-	-	-	0.084
5) GB6IN - HM&E Installation (Procured under GB003)																				
5.2) GB6IN - DDG 51 Class Install (Procured under GB003 3.2) ⁽⁷⁾	A		-	-	-	-	-	-	-	-	-	-	-	1.803	-	-	-	-	-	1.803
Subtotal: 5) GB6IN - HM&E Installation (Procured under GB003)			-	-	0.000	-	-	-	-	-	-	-	-	1.803	-	-	-	-	-	1.803

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy														Date: February 2015						
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 2						P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E								Aggregated Items Title: Surface Combatant HM&E						
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.																				
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Total			-	-	0.000	-	-	16.129	-	-	14.193	-	-	16.010	-	-	-	-	-	16.010
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2017			FY 2018			FY 2019			FY 2020			To Complete			Total Cost		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) GB001 - CG/DDG COTS Tech Refresh																				
1.1) GB001 - CG/DDG COTS Tech Refresh (1)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 1) GB001 - CG/DDG COTS Tech Refresh			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2) GB002 - Class Common Equipment																				
2.1) GB002 - Class Common Equipment	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 2) GB002 - Class Common Equipment			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3) GB003 - Ship Control Systems (Installed under GB6IN) ⁽²⁾																				
3.1) GB003 - CG 47 Class (Installed under GB6IN 5.1) ^{(3)(†)}	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3.2) GB003 - DDG 51 Class (Installed under GB6IN 5.2) ^{(4)(†)}	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3.3) GB003 - Ship Control Systems Software Licenses	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 3) GB003 - Ship Control Systems (Installed under GB6IN)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4) GB004 - Maritime Energy Initiatives (Procured in BLI 0110 and BLI 0120) ⁽⁵⁾																				
4.1) GB004 - Maritime Energy Initiative Install (Procured prior to transfer) ⁽⁶⁾	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 4) GB004 - Maritime Energy Initiatives (Procured in BLI 0110 and BLI 0120)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5) GB6IN - HM&E Installation (Procured under GB003)																				

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 2							P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E							Aggregated Items Title: Surface Combatant HM&E						
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2017			FY 2018			FY 2019			FY 2020			To Complete			Total Cost		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
5.2) GB6IN - DDG 51 Class Install (Procured under GB003 3.2) ⁽⁷⁾	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 5) GB6IN - HM&E Installation (Procured under GB003)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(t) indicates the presence of a P-5a

Footnotes:

(1) FY16 increase attributed to Ship Control Systems DMS requirements.

(2) Procurements in cost code GB003 are dependent upon the specific alterations to be accomplished and an individual ship's configuration. Shipsets of equipment vary in quantities and types of components each fiscal year and within a fiscal year. Quantity of "1" represents the total value of multiple shipsets purchased on multiple contracts for multiple ships. Unit costs for specific alterations are not associated with cost code GB003 due to the varying degree of engineering changes required per ship (ship configuration dependent) and the installation normally occurs outside of CNO availabilities, in either a WOO or CMAV.

(3) GB003 Scheduled Procurements for CG 47 Class (To be installed under GB6IN 5.1): FY15: No procurements; FY16: 14 different kits procured for 3 ships (CG 53, CG 56, and CG 61) to be installed in FY17 under GB6IN; FY17: 9 different kits procured for 4 ships (CG 54, CG 59, CG 62, and CG 71) to be installed in FY18 under GB6IN; FY18: 7 different kits procured for 3 ships; FY19: 7 different kits procured for 3 ships; FY20: 10 different kits procured for 2 ships

(4) GB003 Scheduled Procurements for DDG 51 Class (To be installed under GB6IN 5.2): FY15: 5 different kits procured for 5 ships (DDG 52, DDG 53, DDG 59, DDG 61, and DDG 65) to be installed in FY16 under GB6IN; FY16: 24 different kits procured for 10 ships (DDG 51, DDG 55, DDG 57, DDG 58, DDG 61, DDG 65, DDG 88, DDG 89, DDG 90, and DDG 111) to be installed in FY17 under GB6IN; FY17: 19 different kits procured for 9 ships (DDG 52, DDG 53, DDG 58, DDG 65, DDG 69, DDG 79, DDG 84, DDG 86, and DDG 112) to be installed in FY18 under GB6IN; FY18: 12 different kits procured for 3 ships; FY19: 15 different kits procured for 3 ships; FY20: 15 different kits procured for 4 ships

(5) Maritime Energy Initiative funding transferred from BLI 0110 and BLI 0120 to BLI 0200 in FY15. FY15/FY16 installations tied to prior year procurements under different BLI's cannot be properly displayed in BLI 0200 P-3a exhibits. The purpose of this P-40a is to display this installation data. All installations tied to BLI 0200 Maritime Energy Initiative procurements are displayed on P-3a exhibits.

(6) FY15 Installs: FY15 installs correspond to FY14 procurements made under BLI 0110 and BLI 0120 prior to transfer to BLI 0200. \$2.209M installs 2 procurements for Thermal Management Control System and \$0.485M installs 6 procurements for Shipboard Energy Dashboard FLT IIA. FY16 Installs: \$0.084M installs 1 additional FY14 procurement for Shipboard Energy Dashboard FLT IIA.

(7) GB6IN Scheduled Installs for DDG 51 Class (Procured under GB003 3.2): FY15: No installations; FY16: 5 different kits installed on 5 ships (DDG 52, DDG 53, DDG 59, DDG 61, and DDG 65) procured in FY15 under GB003; FY17: 24 different kits installed on 10 ships (DDG 51, DDG 55, DDG 57, DDG 58, DDG 61, DDG 65, DDG 88, DDG 89, DDG 90, and DDG 111) procured in FY16 under GB003; FY18: 19 different kits installed on 9 ships; FY19: 12 different kits installed on 3 ships; FY20: 15 different kits installed on 3 ships

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Exhibit P-5a, Procurement History and Planning: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 2				P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E				Aggregated Items: Surface Combatant HM&E				
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
3) GB003 - Ship Control Systems (Installed under GB6IN)												
3.1) GB003 - CG 47 Class (Installed under GB6IN 5.1) ⁽³⁾		2014 (8)	Various / Various	Various	NAVSSSES	Apr 2014	Apr 2015	1	1,232K	Y		
3.1) GB003 - CG 47 Class (Installed under GB6IN 5.1) ⁽³⁾		2016 (9)	Various / Various	Various	NAVSSSES	Dec 2015	Dec 2016	1	1,373K	Y		
3.2) GB003 - DDG 51 Class (Installed under GB6IN 5.2) ⁽⁴⁾		2014 (10)	Various / Various	Various	NAVSESS	Apr 2014	Apr 2015	1	3,695K	Y		
3.2) GB003 - DDG 51 Class (Installed under GB6IN 5.2) ⁽⁴⁾		2015 (11)	Various / Various	Various	NAVSSSES	Dec 2014	Dec 2015	1	4,368K	Y		
3.2) GB003 - DDG 51 Class (Installed under GB6IN 5.2) ⁽⁴⁾		2016 (12)	Various / Various	Various	NAVSSSES	Dec 2015	Dec 2016	1	4,273K	Y		
Footnotes: ⁽⁸⁾ The unit cost accounts for 11 different kits procured for 1 ship (CG 64) over multiple contracts. FY14 procurements are dependent upon the specific alterations required for each ship. Ship set costs and quantities vary based on the individual ship's configuration. ⁽⁹⁾ The unit cost accounts for 14 different kits procured for 3 ships (CG 53, CG 56, and CG 61) over multiple contracts. FY16 procurements are dependent upon the specific alterations required for each ship. Ship set costs and quantities vary based on the individual ship's configuration. ⁽¹⁰⁾ The unit cost accounts for 4 kits procured for 4 ships (DDG 51, DDG 57, DDG 58, and DDG 69) over multiple contracts. FY14 procurements are dependent upon the specific alterations required for each ship. Ship set costs and quantities vary based on the individual ship's configuration. ⁽¹¹⁾ The unit cost accounts for 5 kits procured for 5 ships (DDG 52, DDG 53, DDG 59, DDG 61, and DDG 65) over multiple contracts. FY15 procurements are dependent upon the specific alterations required for each ship. Ship set costs and quantities vary based on the individual ship's configuration. ⁽¹²⁾ The unit cost accounts for 24 different kits procured for 10 ships (DDG 51, DDG 55, DDG 57, DDG 58, DDG 61, DDG 65, DDG 88, DDG 89, DDG 90, and DDG 111) over multiple contracts. FY16 procurements are dependent upon the specific alterations required for each ship. Ship set costs and quantities vary based on the individual ship's configuration.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 2	P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E	Modification Number / Title: 1 / GB004 - Maritime Energy Initiatives (TMCS)

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ <i>in Millions</i>)	0.000	-	4.946	11.656	-	11.656	9.244	6.042	6.150	6.260	23.404	67.702
Less PY Advance Procurement (\$ <i>in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ <i>in Millions</i>)	0.000	-	4.946	11.656	-	11.656	9.244	6.042	6.150	6.260	23.404	67.702
Plus CY Advance Procurement (\$ <i>in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ <i>in Millions</i>)	0.000	-	4.946	11.656	-	11.656	9.244	6.042	6.150	6.260	23.404	67.702
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ <i>in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ <i>in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Heating, Ventilation, and Air Conditioning (HVAC) system is the largest distributed system on a Surface Combatant and typically consumes between 25% and 40% of all energy used. Surveys on several DDG-class ships indicate that average space temperatures across the ship were being maintained well below the design temperature. Thermal Management Control System (TMCS) provides centralized control and monitoring of space temperatures at design set-points for each compartment throughout the ship. This technology enables improved operational efficiency of the HVAC system, thereby lowering AC loads and reducing electrical demand.

Engineering Services:

It includes five (5) elements that are related to the production and delivery of a usable end-item: Production Engineering, Quality Assurance, Product Improvement, Acceptance Test and Evaluation, and Contractor Engineering and Technical Services (CETS).

Five (5) elements and approximate breakdown is as follows:

Production Engineering includes preparation, test and technical evaluation of engineering changes to correct deficiencies in the production items; production configuration control; review and evaluation of production design data and documentation; and logistic supportability efforts.

Quality Assurance includes the preparation of procedures and the conduct of inspections, examinations and test during production that are necessary to deliver an item of the required quality as specified by the terms of the contract.

Product Improvement includes improving reliability/maintainability/availability, and the correction of deficiencies exclusive of contractual specifications.

Acceptance Test and Evaluation of a production item includes preparation of test plans, testing, data analysis, and data evaluation.

Contractor Engineering and Technical Services (CETS) includes the furnishing of advice, instruction, and training by commercial or industrial companies.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 2				P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E				Modification Number / Title: 1 / GB004 - Maritime Energy Initiatives (TMCS)					
Models of Systems Affected:				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: GB004 - Maritime Energy Initiatives (TMCS)													
B Kits													
Recurring													
1.1.1) Thermal Management Control System Equipment - NonOrganic ⁽¹³⁾	- / -	- / -	4 / 3.964	4 / 4.035	- / -	4 / 4.035	2 / 2.054	2 / 2.091	2 / 2.129	2 / 2.167	6 / 6.498	22 / 22.938	
Subtotal: Recurring	- / 0.000	- / -	- / 3.964	- / 4.035	- / -	- / 4.035	- / 2.054	- / 2.091	- / 2.129	- / 2.167	- / 6.498	- / 22.938	
Subtotal: GB004 - Maritime Energy Initiatives (TMCS)	- / -	- / -	4 / 3.964	4 / 4.035	- / -	4 / 4.035	2 / 2.054	2 / 2.091	2 / 2.129	2 / 2.167	6 / 6.498	22 / 22.938	
Subtotal: Procurement, All Modification Items	- / 0.000	- / -	- / 3.964	- / 4.035	- / -	- / 4.035	- / 2.054	- / 2.091	- / 2.129	- / 2.167	- / 6.498	- / 22.938	
Support (All Modification Items)													
2.1) TMCS Engineering Services	- / -	- / -	- / 0.082	- / 0.202	- / -	- / 0.202	- / 0.104	- / 0.106	- / 0.108	- / 0.109	- / 0.970	- / 1.681	
Subtotal: Support	- / 0.000	- / -	- / 0.082	- / 0.202	- / -	- / 0.202	- / 0.104	- / 0.106	- / 0.108	- / 0.109	- / 0.970	- / 1.681	
Installation													
Modification Item 1 of 1: GB004 - Maritime Energy Initiatives (TMCS)	- / 0.000	- / -	- / 0.900	- / 7.419	- / -	- / 7.419	- / 7.086	- / 3.845	- / 3.913	- / 3.984	- / 15.936	- / 43.083	
Subtotal: Installation	- / 0.000	- / -	- / 0.900	- / 7.419	- / -	- / 7.419	- / 7.086	- / 3.845	- / 3.913	- / 3.984	- / 15.936	- / 43.083	
Total													
Total Cost (Procurement + Support + Installation)	0.000	-	4.946	11.656	-	11.656	9.244	6.042	6.150	6.260	23.404	67.702	

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Exhibit P-3a, Individual Modification: PB 2016 Navy				Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 2		P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E			Modification Number / Title: 1 / GB004 - Maritime Energy Initiatives (TMCS)		

Modification Item 1 of 1: GB004 - Maritime Energy Initiatives (TMCS)

Manufacturer Information

Manufacturer Name: Rocky Research				Manufacturer Location: Boulder City, NV			
Administrative Leadtime (in Months): 6				Production Leadtime (in Months): 12			

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates		Dec 2014	Dec 2015	Dec 2016	Dec 2017	Dec 2018	Dec 2019
Delivery Dates		Dec 2015	Dec 2016	Dec 2017	Dec 2018	Dec 2019	Dec 2020

Installation Information

Method of Implementation: AIT INSTALLATION FOR TMCS:: Installation Name: Thermal Management Control System Equipment

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / 0.900	4 / 6.503	- / -	4 / 6.503	- / -	- / -	- / -	- / -	- / -	4 / 7.403
FY 2016	- / -	- / -	- / -	- / 0.916	- / -	- / 0.916	4 / 6.620	- / -	- / -	- / -	- / -	4 / 7.536
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.466	2 / 3.370	- / -	- / -	- / -	2 / 3.836
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.475	2 / 3.430	- / -	- / -	2 / 3.905
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.483	2 / 3.492	- / -	2 / 3.975
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.492	2 / 3.555	2 / 4.047
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 12.381	6 / 12.381
Total	- / -	- / -	- / 0.900	4 / 7.419	- / -	4 / 7.419	4 / 7.086	2 / 3.845	2 / 3.913	2 / 3.984	8 / 15.936	22 / 43.083

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	2	-	2	-	2	2	-	-	2	-	-	-	2	-	-	-	2	-	-	8	22
Out	-	-	-	-	-	-	-	-	-	-	-	-	2	-	2	2	2	-	-	-	2	-	-	-	2	-	-	-	2	8	22

Footnotes:

(13) Installation costs include planning support that is conducted the year prior to installation (i.e., \$0.900M installation cost in FY15 refers to the prior year planning for FY16 installation). \$2.209M for 2 TMCS installations in FY15 is captured in the P-40a Exhibit (GB004 4.1). This is due to the fact that installations tied to prior year procurements made under different BLIs cannot be properly captured on the BLI 0200 P-3a Exhibit. To capture the total FY15 installation requirement for TMCS you would combine the \$0.900M in planning support (shown on the P-3a Exhibit) with the \$2.209M for TMCS installations (shown on the P-40a Exhibit) for a total installation cost of \$3.109M. Installation schedules vary due to ships entering different types of availabilities for different lengths of time.

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 2	P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E	Modification Number / Title: 2 / GB004 - Maritime Energy Initiatives (Bow Bulb)

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	0.000	-	-	1.317	-	1.317	2.995	3.050	3.104	3.760	43.668	57.894
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	0.000	-	-	1.317	-	1.317	2.995	3.050	3.104	3.760	43.668	57.894
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	0.000	-	-	1.317	-	1.317	2.995	3.050	3.104	3.760	43.668	57.894
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Bow bulb is a near surface, small volume design for installation on the destroyer's bow in combination with the existing sonar dome. Modification of bow shape reduces hull wave drag without an increase in hull resistance, reducing fuel consumption.

Unit costs for the PB15 submission were based on preliminary ROM cost estimates, and the initiative is still progressing through the R&D phase under the Fleet Readiness R&D Program (FRRDP) located within NAVSEA 05T. Based on the ship check and Ship Installation Drawings (SIDs) provided for the planned FY15 prototype installation, unit costs have been adjusted for DON16 to reflect the most up-to-date cost data.

Engineering Services:

It includes five (5) elements that are related to the production and delivery of a usable end-item: Production Engineering, Quality Assurance, Product Improvement, Acceptance Test and Evaluation, and Contractor Engineering and Technical Services (CETS).

Five (5) elements and approximate breakdown is as follows:

Production Engineering includes preparation, test and technical evaluation of engineering changes to correct deficiencies in the production items; production configuration control; review and evaluation of production design data and documentation; and logistic supportability efforts.

Quality Assurance includes the preparation of procedures and the conduct of inspections, examinations and test during production that are necessary to deliver an item of the required quality as specified by the terms of the contract.

Product Improvement includes improving reliability/maintainability/availability, and the correction of deficiencies exclusive of contractual specifications.

Acceptance Test and Evaluation of a production item includes preparation of test plans, testing, data analysis, and data evaluation.

Contractor Engineering and Technical Services (CETS) includes the furnishing of advice, instruction, and training by commercial or industrial companies.

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 2	P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E	Modification Number / Title: 2 / GB004 - Maritime Energy Initiatives (Bow Bulb)

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 2				P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E					Modification Number / Title: 2 / GB004 - Maritime Energy Initiatives (Bow Bulb)				
Models of Systems Affected:				Modification Type:					Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: GB004 - Maritime Energy Initiatives (Bow Bulb)													
B Kits													
Recurring													
1.1.1) Bow Bulb Equipment - NonOrganic		- / -	- / -	- / -	2 / 1.118	- / -	2 / 1.118	2 / 1.138	2 / 1.159	2 / 1.179	3 / 1.801	26 / 15.599	37 / 21.994
Subtotal: Recurring		- / 0.000	- / -	- / -	- / 1.118	- / -	- / 1.118	- / 1.138	- / 1.159	- / 1.179	- / 1.801	- / 15.599	- / 21.994
Subtotal: GB004 - Maritime Energy Initiatives (Bow Bulb)		- / -	- / -	- / -	2 / 1.118	- / -	2 / 1.118	2 / 1.138	2 / 1.159	2 / 1.179	3 / 1.801	26 / 15.599	37 / 21.994
Subtotal: Procurement, All Modification Items		- / 0.000	- / -	- / -	- / 1.118	- / -	- / 1.118	- / 1.138	- / 1.159	- / 1.179	- / 1.801	- / 15.599	- / 21.994
Support (All Modification Items)													
2.1) Bow Bulb Engineering Services		- / -	- / -	- / -	- / 0.199	- / -	- / 0.199	- / 0.051	- / 0.052	- / 0.053	- / 0.054	- / 0.432	- / 0.841
Subtotal: Support		- / 0.000	- / -	- / -	- / 0.199	- / -	- / 0.199	- / 0.051	- / 0.052	- / 0.053	- / 0.054	- / 0.432	- / 0.841
Installation													
Modification Item 1 of 1: GB004 - Maritime Energy Initiatives (Bow Bulb)		- / 0.000	- / -	- / -	- / -	- / -	- / -	- / 1.806	- / 1.839	- / 1.872	- / 1.905	- / 27.637	- / 35.059
Subtotal: Installation		- / 0.000	- / -	- / -	- / -	- / -	- / -	- / 1.806	- / 1.839	- / 1.872	- / 1.905	- / 27.637	- / 35.059
Total													
Total Cost (Procurement + Support + Installation)		0.000	-	-	1.317	-	1.317	2.995	3.050	3.104	3.760	43.668	57.894

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 2	P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E	Modification Number / Title: 2 / GB004 - Maritime Energy Initiatives (Bow Bulb)

Modification Item 1 of 1: GB004 - Maritime Energy Initiatives (Bow Bulb)

Manufacturer Information

Manufacturer Name: Bath Iron Works (BIW)	Manufacturer Location: Bath, ME
Administrative Leadtime (in Months): 6	Production Leadtime (in Months): 12

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates			Dec 2015	Dec 2016	Dec 2017	Dec 2018	Dec 2019
Delivery Dates			Dec 2016	Dec 2017	Dec 2018	Dec 2019	Dec 2020

Installation Information

Method of Implementation: Shipyard:: Installation Name: Bow Bulb Equipment

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	2 / 1.806	- / -	- / -	- / -	- / -	2 / 1.806
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 1.839	- / -	- / -	- / -	2 / 1.839
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 1.872	- / -	- / -	2 / 1.872
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 1.905	- / -	2 / 1.905
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 2.909	3 / 2.909
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	26 / 24.728	26 / 24.728
Total	- / -	- / -	- / -	- / -	- / -	- / -	2 / 1.806	2 / 1.839	2 / 1.872	2 / 1.905	29 / 27.637	37 / 35.059

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	2	-	-	-	2	-	-	-	2	-	-	29	37
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	2	-	-	-	2	-	-	-	2	29	37

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 2	P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E	Modification Number / Title: 3 / GB004 - Maritime Energy Initiatives (FEIP)

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	0.000	-	-	-	-	-	-	1.395	0.964	2.376	26.604	31.339
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	0.000	-	-	-	-	-	-	1.395	0.964	2.376	26.604	31.339
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	0.000	-	-	-	-	-	-	1.395	0.964	2.376	26.604	31.339
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

LM2500 Fuel Efficiency Improvement Program (FEIP) modifies the hardware on the LM2500 Marine Gas Turbine and also modifies the internal software in the LM2500 Engine Controller. The first modification consists of altering the High Pressure Power Turbine (HPT) cooling tubing by introducing 4 solenoid valves into the path of the bleed/cooling airflow from the Gas Generator (GG) to the HPT. The solenoid valves will control the amount of bleed/cooling air provided to the HPT from IDLE to 12000 HP thereby increasing the fuel efficiency of the LM2500 through that Horsepower range. The second modification consists of altering the Variable Stator Vane (VSV) schedule throughout the power band of the LM2500. The new VSV schedule once implemented will be closer to the stall margin thereby increasing the airflow to the HPT and increasing the fuel efficiency of the LM2500 without adversely affecting the life/MTBF of the LM2500. The change would increase the fuel efficiency of the LM2500.

Engineering Services:

It includes five (5) elements that are related to the production and delivery of a usable end-item: Production Engineering, Quality Assurance, Product Improvement, Acceptance Test and Evaluation, and Contractor Engineering and Technical Services (CETS).

Five (5) elements and approximate breakdown is as follows:

Production Engineering includes preparation, test and technical evaluation of engineering changes to correct deficiencies in the production items; production configuration control; review and evaluation of production design data and documentation; and logistic supportability efforts.

Quality Assurance includes the preparation of procedures and the conduct of inspections, examinations and test during production that are necessary to deliver an item of the required quality as specified by the terms of the contract.

Product Improvement includes improving reliability/maintainability/availability, and the correction of deficiencies exclusive of contractual specifications.

Acceptance Test and Evaluation of a production item includes preparation of test plans, testing, data analysis, and data evaluation.

Contractor Engineering and Technical Services (CETS) includes the furnishing of advice, instruction, and training by commercial or industrial companies.

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 2	P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E	Modification Number / Title: 3 / GB004 - Maritime Energy Initiatives (FEIP)

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 2				P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E				Modification Number / Title: 3 / GB004 - Maritime Energy Initiatives (FEIP)					
Models of Systems Affected:				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: GB004 - Maritime Energy Initiatives (FEIP)													
B Kits													
Recurring													
1.1.1) Fuel Efficiency Improvement Program Equipment - NonOrganic	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.791	2 / 0.537	5 / 1.367	56 / 15.286	66 / 17.981	
Subtotal: Recurring	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.791	- / 0.537	- / 1.367	- / 15.286	- / 17.981	
Subtotal: GB004 - Maritime Energy Initiatives (FEIP)	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.791	2 / 0.537	5 / 1.367	56 / 15.286	66 / 17.981	
Subtotal: Procurement, All Modification Items	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.791	- / 0.537	- / 1.367	- / 15.286	- / 17.981	
Support (All Modification Items)													
2.1) Fuel Efficiency Improvement Program Engineering Services	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.050	- / 0.051	- / 0.052	- / 0.624	- / 0.777	
Subtotal: Support	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.050	- / 0.051	- / 0.052	- / 0.624	- / 0.777	
Installation													
Modification Item 1 of 1: GB004 - Maritime Energy Initiatives (FEIP)	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.554	- / 0.376	- / 0.957	- / 10.694	- / 12.581	
Subtotal: Installation	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.554	- / 0.376	- / 0.957	- / 10.694	- / 12.581	
Total													
Total Cost (Procurement + Support + Installation)	0.000	-	-	-	-	-	-	1.395	0.964	2.376	26.604	31.339	

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 2	P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E	Modification Number / Title: 3 / GB004 - Maritime Energy Initiatives (FEIP)

Modification Item 1 of 1: GB004 - Maritime Energy Initiatives (FEIP)

Manufacturer Information

Manufacturer Name: GE Aviation	Manufacturer Location: Cincinnati, OH
Administrative Leadtime (in Months): 6	Production Leadtime (in Months): 6

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates					Oct 2017	Oct 2018	Oct 2019
Delivery Dates					Mar 2018	Mar 2019	Mar 2020

Installation Information

Method of Implementation: AIT:: Installation Name: Fuel Efficiency Improvement Program Equipment

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.554	- / -	- / -	- / -	3 / 0.554
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.376	- / -	- / -	2 / 0.376
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.957	- / -	5 / 0.957
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	56 / 10.694	56 / 10.694
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.554	2 / 0.376	5 / 0.957	56 / 10.694	66 / 12.581

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	-	-	1	1	-	-	3	2	56	66	
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	-	-	1	1	-	-	3	2	56	66	

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Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 2				P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E					Modification Number / Title: 4 / GB004 - Maritime Energy Initiatives (VSD for CPS)			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	0.000	-	2.017	4.417	-	4.417	4.267	3.548	3.612	3.676	46.822	68.359
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	0.000	-	2.017	4.417	-	4.417	4.267	3.548	3.612	3.676	46.822	68.359
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	0.000	-	2.017	4.417	-	4.417	4.267	3.548	3.612	3.676	46.822	68.359
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: The Collective Protective System (CPS) is a full time air filtration system integrated into the ship's HVAC system. The amount of outside supply air delivered to CPS zones varies with filter loading over time and is almost always higher than needed, resulting in above average HVAC loads. Variable Speed Drive (VSD) will be installed as an airflow control component to optimize supply air flow, realizing energy savings from fan motor and reduced HVAC loads. Engineering Services: It includes five (5) elements that are related to the production and delivery of a usable end-item: Production Engineering, Quality Assurance, Product Improvement, Acceptance Test and Evaluation, and Contractor Engineering and Technical Services (CETS). Five (5) elements and approximate breakdown is as follows: Production Engineering includes preparation, test and technical evaluation of engineering changes to correct deficiencies in the production items; production configuration control; review and evaluation of production design data and documentation; and logistic supportability efforts. Quality Assurance includes the preparation of procedures and the conduct of inspections, examinations and test during production that are necessary to deliver an item of the required quality as specified by the terms of the contract. Product Improvement includes improving reliability/maintainability/availability, and the correction of deficiencies exclusive of contractual specifications. Acceptance Test and Evaluation of a production item includes preparation of test plans, testing, data analysis, and data evaluation. Contractor Engineering and Technical Services (CETS) includes the furnishing of advice, instruction, and training by commercial or industrial companies.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 2				P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E				Modification Number / Title: 4 / GB004 - Maritime Energy Initiatives (VSD for CPS)					
Models of Systems Affected:				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>
Procurement													
<i>Modification Item 1 of 1:</i> GB004 - Maritime Energy Initiatives (VSD for CPS)													
B Kits													
Recurring													
1.1.1) Variable Speed Drive Equipment - NonOrganic (14)	- / -	- / -	2 / 1.599	3 / 2.166	- / -	3 / 2.166	2 / 1.470	2 / 1.496	2 / 1.523	2 / 1.551	24 / 18.618	37 / 28.423	
<i>Subtotal: Recurring</i>	- / 0.000	- / -	- / 1.599	- / 2.166	- / -	- / 2.166	- / 1.470	- / 1.496	- / 1.523	- / 1.551	- / 18.618	- / 28.423	
<i>Subtotal: GB004 - Maritime Energy Initiatives (VSD for CPS)</i>	- / -	- / -	2 / 1.599	3 / 2.166	- / -	3 / 2.166	2 / 1.470	2 / 1.496	2 / 1.523	2 / 1.551	24 / 18.618	37 / 28.423	
<i>Subtotal: Procurement, All Modification Items</i>	- / 0.000	- / -	- / 1.599	- / 2.166	- / -	- / 2.166	- / 1.470	- / 1.496	- / 1.523	- / 1.551	- / 18.618	- / 28.423	
Support (All Modification Items)													
2.1) Variable Speed Drive Engineering Services	- / -	- / -	- / 0.082	- / 0.202	- / -	- / 0.202	- / 0.104	- / 0.106	- / 0.108	- / 0.109	- / 1.634	- / 2.345	
<i>Subtotal: Support</i>	- / 0.000	- / -	- / 0.082	- / 0.202	- / -	- / 0.202	- / 0.104	- / 0.106	- / 0.108	- / 0.109	- / 1.634	- / 2.345	
Installation													
<i>Modification Item 1 of 1:</i> GB004 - Maritime Energy Initiatives (VSD for CPS)	- / 0.000	- / -	- / 0.336	- / 2.049	- / -	- / 2.049	- / 2.693	- / 1.946	- / 1.981	- / 2.016	- / 26.570	- / 37.591	
<i>Subtotal: Installation</i>	- / 0.000	- / -	- / 0.336	- / 2.049	- / -	- / 2.049	- / 2.693	- / 1.946	- / 1.981	- / 2.016	- / 26.570	- / 37.591	
Total													
Total Cost (Procurement + Support + Installation)	0.000	-	2.017	4.417	-	4.417	4.267	3.548	3.612	3.676	46.822	68.359	

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Exhibit P-3a, Individual Modification: PB 2016 Navy				Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 2		P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E			Modification Number / Title: 4 / GB004 - Maritime Energy Initiatives (VSD for CPS)		

Modification Item 1 of 1: GB004 - Maritime Energy Initiatives (VSD for CPS)

Manufacturer Information

Manufacturer Name: Rockwell Automation				Manufacturer Location: Cleveland, OH			
Administrative Leadtime (in Months): 6				Production Leadtime (in Months): 12			

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates		Aug 2015	Dec 2015	Dec 2016	Dec 2017	Dec 2018	Dec 2019
Delivery Dates		Aug 2016	Dec 2016	Dec 2017	Dec 2018	Dec 2019	Dec 2020

Installation Information

Method of Implementation: AIT:: Installation Name: Variable Speed Drive Equipment

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / 0.336	2 / 1.536	- / -	2 / 1.536	- / -	- / -	- / -	- / -	- / -	2 / 1.872
FY 2016	- / -	- / -	- / -	- / 0.513	- / -	- / 0.513	3 / 2.345	- / -	- / -	- / -	- / -	3 / 2.858
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.348	2 / 1.592	- / -	- / -	- / -	2 / 1.940
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.354	2 / 1.620	- / -	- / -	2 / 1.974
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.361	2 / 1.649	- / -	2 / 2.010
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.367	2 / 1.679	2 / 2.046
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	24 / 24.891	24 / 24.891
Total	- / -	- / -	- / 0.336	2 / 2.049	- / -	2 / 2.049	3 / 2.693	2 / 1.946	2 / 1.981	2 / 2.016	26 / 26.570	37 / 37.591

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	2	-	2	1	-	-	2	-	-	-	2	-	-	-	2	-	-	26	37
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	2	1	-	-	2	-	-	-	2	-	-	-	2	26	37

Footnotes:

⁽¹⁴⁾ August 2016 delivery date was established to support the two ships targeted for installation in September 2016. Installation costs include planning support that is conducted the year prior to installation (i.e., \$0.336M installation cost in FY15 refers to the prior year planning for FY16 installation).

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 2				P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E						Modification Number / Title: 5 / GB004 - Maritime Energy Initiatives (SSL)		
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	0.000	-	5.262	2.848	-	2.848	3.663	3.729	3.689	3.755	2.342	25.288
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	0.000	-	5.262	2.848	-	2.848	3.663	3.729	3.689	3.755	2.342	25.288
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	0.000	-	5.262	2.848	-	2.848	3.663	3.729	3.689	3.755	2.342	25.288
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: Solid State Lighting (SSL) lamps consist of individual Light Emitting Diodes (LEDs), which serve as replacements for incandescent and fluorescent lighting fixtures. SSL replacements are engineered to meet military specifications. SSL replacements for incandescent and fluorescent fixtures reduce energy usage by approximately 85% and 50%, respectively. Additionally, this install will drastically reduce the electrical lighting load, maintenance actions, and the space needed for spare parts. Engineering Services: It includes five (5) elements that are related to the production and delivery of a usable end-item: Production Engineering, Quality Assurance, Product Improvement, Acceptance Test and Evaluation, and Contractor Engineering and Technical Services (CETS). Five (5) elements and approximate breakdown is as follows: Production Engineering includes preparation, test and technical evaluation of engineering changes to correct deficiencies in the production items; production configuration control; review and evaluation of production design data and documentation; and logistic supportability efforts. Quality Assurance includes the preparation of procedures and the conduct of inspections, examinations and test during production that are necessary to deliver an item of the required quality as specified by the terms of the contract. Product Improvement includes improving reliability/maintainability/availability, and the correction of deficiencies exclusive of contractual specifications. Acceptance Test and Evaluation of a production item includes preparation of test plans, testing, data analysis, and data evaluation. Contractor Engineering and Technical Services (CETS) includes the furnishing of advice, instruction, and training by commercial or industrial companies.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 2				P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E					Modification Number / Title: 5 / GB004 - Maritime Energy Initiatives (SSL)				
Models of Systems Affected:				Modification Type:					Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: GB004 - Maritime Energy Initiatives (SSL)													
B Kits													
Recurring													
1.1.1) Solid State Lighting Equipment - NonOrganic	- / -	- / -	6 / 2.978	3 / 1.494	- / -	3 / 1.494	4 / 2.002	4 / 2.038	4 / 2.075	4 / 2.112	2 / 1.075	27 / 13.774	
Subtotal: Recurring	- / 0.000	- / -	- / 2.978	- / 1.494	- / -	- / 1.494	- / 2.002	- / 2.038	- / 2.075	- / 2.112	- / 1.075	- / 13.774	
Subtotal: GB004 - Maritime Energy Initiatives (SSL)	- / -	- / -	6 / 2.978	3 / 1.494	- / -	3 / 1.494	4 / 2.002	4 / 2.038	4 / 2.075	4 / 2.112	2 / 1.075	27 / 13.774	
Subtotal: Procurement, All Modification Items	- / 0.000	- / -	- / 2.978	- / 1.494	- / -	- / 1.494	- / 2.002	- / 2.038	- / 2.075	- / 2.112	- / 1.075	- / 13.774	
Support (All Modification Items)													
2.1) Solid State Lighting Engineering Services	- / -	- / -	- / 0.039	- / 0.090	- / -	- / 0.090	- / 0.049	- / 0.050	- / 0.050	- / 0.051	- / 0.052	- / 0.381	
Subtotal: Support	- / 0.000	- / -	- / 0.039	- / 0.090	- / -	- / 0.090	- / 0.049	- / 0.050	- / 0.050	- / 0.051	- / 0.052	- / 0.381	
Installation													
Modification Item 1 of 1: GB004 - Maritime Energy Initiatives (SSL)	- / 0.000	- / -	- / 2.245	- / 1.264	- / -	- / 1.264	- / 1.612	- / 1.641	- / 1.564	- / 1.592	- / 1.215	- / 11.133	
Subtotal: Installation	- / 0.000	- / -	- / 2.245	- / 1.264	- / -	- / 1.264	- / 1.612	- / 1.641	- / 1.564	- / 1.592	- / 1.215	- / 11.133	
Total													
Total Cost (Procurement + Support + Installation)	0.000	-	5.262	2.848	-	2.848	3.663	3.729	3.689	3.755	2.342	25.288	

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Exhibit P-3a, Individual Modification: PB 2016 Navy				Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 2		P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E			Modification Number / Title: 5 / GB004 - Maritime Energy Initiatives (SSL)		

Modification Item 1 of 1: GB004 - Maritime Energy Initiatives (SSL)

Manufacturer Information

Manufacturer Name: Energy Focus Inc.				Manufacturer Location: Solon, OH			
Administrative Leadtime (in Months): 3				Production Leadtime (in Months): 6			

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates		Nov 2014	Nov 2015	Nov 2016	Nov 2017	Nov 2018	Nov 2019
Delivery Dates		May 2015	May 2016	May 2017	May 2018	May 2019	May 2020

Installation Information

Method of Implementation: AIT:: Installation Name: Solid State Lighting Equipment

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	6 / 2.245	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 2.245
FY 2016	- / -	- / -	- / -	3 / 1.264	- / -	3 / 1.264	- / -	- / -	- / -	- / -	- / -	3 / 1.264
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	4 / 1.612	- / -	- / -	- / -	- / -	4 / 1.612
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 1.641	- / -	- / -	- / -	4 / 1.641
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 1.564	- / -	- / -	4 / 1.564
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 1.592	- / -	4 / 1.592
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 1.215	2 / 1.215
Total	- / -	- / -	6 / 2.245	3 / 1.264	- / -	3 / 1.264	4 / 1.612	4 / 1.641	4 / 1.564	4 / 1.592	2 / 1.215	27 / 11.133

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	3	3	-	-	3	-	-	-	4	-	-	-	4	-	-	-	4	-	-	-	4	-	2	27
Out	-	-	-	-	-	-	-	-	-	3	3	-	-	3	-	-	-	4	-	-	-	4	-	-	-	4	-	-	-	6	27

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 2	P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E	Modification Number / Title: 6 / GB004 - Maritime Energy Initiatives (Shipboard Energy Dashboard FLT IIA)

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ <i>in Millions</i>)	0.000	-	0.246	0.612	-	0.612	0.309	0.174	-	-	-	1.341
Less PY Advance Procurement (\$ <i>in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ <i>in Millions</i>)	0.000	-	0.246	0.612	-	0.612	0.309	0.174	-	-	-	1.341
Plus CY Advance Procurement (\$ <i>in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ <i>in Millions</i>)	0.000	-	0.246	0.612	-	0.612	0.309	0.174	-	-	-	1.341
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (\$ <i>in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ <i>in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Shipboard Energy Dashboard FLT IIA technology is a shipboard tool providing real time situational awareness of the energy demand associated with equipment lineup and mission. Technology raises operator awareness of how certain engineering plant lineups and equipment affect fuel consumption rates. Energy savings will be realized through energy usage culture change.

Engineering Services:

It includes five (5) elements that are related to the production and delivery of a usable end-item: Production Engineering, Quality Assurance, Product Improvement, Acceptance Test and Evaluation, and Contractor Engineering and Technical Services (CETS).

Five (5) elements and approximate breakdown is as follows:

Production Engineering includes preparation, test and technical evaluation of engineering changes to correct deficiencies in the production items; production configuration control; review and evaluation of production design data and documentation; and logistic supportability efforts.

Quality Assurance includes the preparation of procedures and the conduct of inspections, examinations and test during production that are necessary to deliver an item of the required quality as specified by the terms of the contract.

Product Improvement includes improving reliability/maintainability/availability, and the correction of deficiencies exclusive of contractual specifications.

Acceptance Test and Evaluation of a production item includes preparation of test plans, testing, data analysis, and data evaluation.

Contractor Engineering and Technical Services (CETS) includes the furnishing of advice, instruction, and training by commercial or industrial companies.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 2				P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E				Modification Number / Title: 6 / GB004 - Maritime Energy Initiatives (Shipboard Energy Dashboard FLT IIA)				
Models of Systems Affected:				Modification Type:				Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>
Procurement												
<i>Modification Item 1 of 1:</i> GB004 - Maritime Energy Initiatives (Shipboard Energy Dashboard FLT IIA)												
B Kits												
Recurring												
1.1.1) Shipboard Energy Dashboard FLT IIA Equipment - NonOrganic ⁽¹⁵⁾	- / -	- / -	5 / 0.205	2 / 0.083	- / -	2 / 0.083	2 / 0.085	- / -	- / -	- / -	- / -	9 / 0.373
<i>Subtotal: Recurring</i>	- / 0.000	- / -	- / 0.205	- / 0.083	- / -	- / 0.083	- / 0.085	- / -	- / -	- / -	- / -	- / 0.373
<i>Subtotal: GB004 - Maritime Energy Initiatives (Shipboard Energy Dashboard FLT IIA)</i>	- / -	- / -	5 / 0.205	2 / 0.083	- / -	2 / 0.083	2 / 0.085	- / -	- / -	- / -	- / -	9 / 0.373
<i>Subtotal: Procurement, All Modification Items</i>	- / 0.000	- / -	- / 0.205	- / 0.083	- / -	- / 0.083	- / 0.085	- / -	- / -	- / -	- / -	- / 0.373
Support (All Modification Items)												
2.1) Shipboard Energy Dashboard FLT IIA Engineering Services	- / -	- / -	- / 0.041	- / 0.110	- / -	- / 0.110	- / 0.053	- / -	- / -	- / -	- / -	- / 0.204
<i>Subtotal: Support</i>	- / 0.000	- / -	- / 0.041	- / 0.110	- / -	- / 0.110	- / 0.053	- / -	- / -	- / -	- / -	- / 0.204
Installation												
<i>Modification Item 1 of 1:</i> GB004 - Maritime Energy Initiatives (Shipboard Energy Dashboard FLT IIA)	- / 0.000	- / -	- / -	- / 0.419	- / -	- / 0.419	- / 0.171	- / 0.174	- / -	- / -	- / -	- / 0.764
<i>Subtotal: Installation</i>	- / 0.000	- / -	- / -	- / 0.419	- / -	- / 0.419	- / 0.171	- / 0.174	- / -	- / -	- / -	- / 0.764
Total												
Total Cost (Procurement + Support + Installation)	0.000	-	0.246	0.612	-	0.612	0.309	0.174	-	-	-	1.341

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Exhibit P-3a, Individual Modification: PB 2016 Navy				Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 2				P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E			
				Modification Number / Title: 6 / GB004 - Maritime Energy Initiatives (Shipboard Energy Dashboard FLT IIA)			

Modification Item 1 of 1: GB004 - Maritime Energy Initiatives (Shipboard Energy Dashboard FLT IIA)

Manufacturer Information

Manufacturer Name: Hoffer Flow Controls, Inc.				Manufacturer Location: Elizabeth City, NC			
Administrative Leadtime (in Months): 6				Production Leadtime (in Months): 12			

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates		Mar 2015	Jan 2016	Feb 2017			
Delivery Dates		Mar 2016	Jan 2017	Feb 2018			

Installation Information

Method of Implementation: AIT:: Installation Name: Shipboard Energy Dashboard FLT IIA Equipment

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	5 / 0.419	- / -	5 / 0.419	- / -	- / -	- / -	- / -	- / -	5 / 0.419
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.171	- / -	- / -	- / -	- / -	2 / 0.171
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.174	- / -	- / -	- / -	2 / 0.174
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	5 / 0.419	- / -	5 / 0.419	2 / 0.171	2 / 0.174	- / -	- / -	- / -	9 / 0.764

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	3	2	-	1	1	-	-	1	1	-	-	-	-	-	-	-	-	-	-	9
Out	-	-	-	-	-	-	-	-	-	-	-	3	2	-	1	1	-	-	1	1	-	-	-	-	-	-	-	-	-	-	9

Footnotes:

(15) \$0.485M for 6 Shipboard Energy Dashboard Flt IIA installations in FY15 is captured in the P-40a Exhibit (GB004 4.1). This is due to the fact that installations tied to prior year procurements made under different BLIs cannot be properly captured on the BLI 0200 P-3a Exhibit.

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 2	P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E	Modification Number / Title: 7 / GB004 - Maritime Energy Initiatives (Shipboard Energy Dashboard FLT I)

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	0.000	-	-	-	-	-	-	1.039	1.392	1.870	11.966	16.267
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	0.000	-	-	-	-	-	-	1.039	1.392	1.870	11.966	16.267
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	0.000	-	-	-	-	-	-	1.039	1.392	1.870	11.966	16.267
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Shipboard Energy Dashboard FLT I technology is a shipboard tool providing real time situational awareness of the energy demand associated with equipment lineup and mission. Technology raises operator awareness of how certain engineering plant lineups and equipment affect fuel consumption rates. Energy savings will be realized through energy usage culture change.

Engineering Services:

It includes five (5) elements that are related to the production and delivery of a usable end-item: Production Engineering, Quality Assurance, Product Improvement, Acceptance Test and Evaluation, and Contractor Engineering and Technical Services (CETS).

Five (5) elements and approximate breakdown is as follows:

Production Engineering includes preparation, test and technical evaluation of engineering changes to correct deficiencies in the production items; production configuration control; review and evaluation of production design data and documentation; and logistic supportability efforts.

Quality Assurance includes the preparation of procedures and the conduct of inspections, examinations and test during production that are necessary to deliver an item of the required quality as specified by the terms of the contract.

Product Improvement includes improving reliability/maintainability/availability, and the correction of deficiencies exclusive of contractual specifications.

Acceptance Test and Evaluation of a production item includes preparation of test plans, testing, data analysis, and data evaluation.

Contractor Engineering and Technical Services (CETS) includes the furnishing of advice, instruction, and training by commercial or industrial companies.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 2				P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E				Modification Number / Title: 7 / GB004 - Maritime Energy Initiatives (Shipboard Energy Dashboard FLT I)					
Models of Systems Affected:				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: GB004 - Maritime Energy Initiatives (Shipboard Energy Dashboard FLT I)													
B Kits													
Recurring													
1.1.1) Shipboard Energy Dashboard FLT I Equipment - NonOrganic	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.984	2 / 0.668	4 / 1.360	19 / 6.460	28 / 9.472	
Subtotal: Recurring	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.984	- / 0.668	- / 1.360	- / 6.460	- / 9.472	
Subtotal: GB004 - Maritime Energy Initiatives (Shipboard Energy Dashboard FLT I)	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.984	2 / 0.668	4 / 1.360	19 / 6.460	28 / 9.472	
Subtotal: Procurement, All Modification Items	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.984	- / 0.668	- / 1.360	- / 6.460	- / 9.472	
Support (All Modification Items)													
2.1) Shipboard Energy Dashboard FLT I Engineering Services	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.055	- / 0.056	- / 0.057	- / 0.285	- / 0.453	
Subtotal: Support	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.055	- / 0.056	- / 0.057	- / 0.285	- / 0.453	
Installation													
Modification Item 1 of 1: GB004 - Maritime Energy Initiatives (Shipboard Energy Dashboard FLT I)	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.668	- / 0.453	- / 5.221	- / 6.342	
Subtotal: Installation	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.668	- / 0.453	- / 5.221	- / 6.342	
Total													
Total Cost (Procurement + Support + Installation)	0.000	-	-	-	-	-	-	1.039	1.392	1.870	11.966	16.267	

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Exhibit P-3a, Individual Modification: PB 2016 Navy				Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 2		P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E			Modification Number / Title: 7 / GB004 - Maritime Energy Initiatives (Shipboard Energy Dashboard FLT I)		

Modification Item 1 of 1: GB004 - Maritime Energy Initiatives (Shipboard Energy Dashboard FLT I)

Manufacturer Information

Manufacturer Name: TBD				Manufacturer Location: TBD			
Administrative Leadtime (in Months): 6				Production Leadtime (in Months): 12			

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates					Dec 2017	Dec 2018	Dec 2019
Delivery Dates					Dec 2018	Dec 2019	Dec 2020

Installation Information

Method of Implementation: [none specified]:: Installation Name: Shipboard Energy Dashboard FLT I Equipment

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.668	- / -	- / -	3 / 0.668
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.453	- / -	2 / 0.453
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 0.923	4 / 0.923
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	19 / 4.298	19 / 4.298
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.668	2 / 0.453	23 / 5.221	28 / 6.342

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	-	-	1	1	-	23	28	
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	-	-	1	1	-	23	28	

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 2				P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E						Modification Number / Title: 8 / GB004 - Maritime Energy Initiatives (Triton Fuel Penalty)		
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ <i>in Millions</i>)	0.000	-	-	-	-	-	-	0.894	1.745	2.060	10.503	15.202
Less PY Advance Procurement (\$ <i>in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ <i>in Millions</i>)	0.000	-	-	-	-	-	-	0.894	1.745	2.060	10.503	15.202
Plus CY Advance Procurement (\$ <i>in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ <i>in Millions</i>)	0.000	-	-	-	-	-	-	0.894	1.745	2.060	10.503	15.202
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (\$ <i>in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ <i>in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: Triton Fuel Penalty is a system capable of reporting in real time when a ship's powering condition has degraded due to increased drag from bio fouling. Personnel will be able to schedule ship cleanings utilizing feedback taken from actual measurements of drag while in service. This capability will reduce the current penalty paid by the fleet to overcome the negative effects of biological fouling on ship performance and fuel expenditure. Engineering Services: It includes five (5) elements that are related to the production and delivery of a usable end-item: Production Engineering, Quality Assurance, Product Improvement, Acceptance Test and Evaluation, and Contractor Engineering and Technical Services (CETS). Five (5) elements and approximate breakdown is as follows: Production Engineering includes preparation, test and technical evaluation of engineering changes to correct deficiencies in the production items; production configuration control; review and evaluation of production design data and documentation; and logistic supportability efforts. Quality Assurance includes the preparation of procedures and the conduct of inspections, examinations and test during production that are necessary to deliver an item of the required quality as specified by the terms of the contract. Product Improvement includes improving reliability/maintainability/availability, and the correction of deficiencies exclusive of contractual specifications. Acceptance Test and Evaluation of a production item includes preparation of test plans, testing, data analysis, and data evaluation. Contractor Engineering and Technical Services (CETS) includes the furnishing of advice, instruction, and training by commercial or industrial companies.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 2				P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E				Modification Number / Title: 8 / GB004 - Maritime Energy Initiatives (Triton Fuel Penalty)				
Models of Systems Affected:				Modification Type:				Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>
Procurement												
<i>Modification Item 1 of 1:</i> GB004 - Maritime Energy Initiatives (Triton Fuel Penalty)												
B Kits												
Recurring												
1.1.1) Triton Fuel Penalty Equipment - NonOrganic	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.820	3 / 0.835	4 / 1.133	16 / 4.527	26 / 7.315
<i>Subtotal: Recurring</i>	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.820	- / 0.835	- / 1.133	- / 4.527	- / 7.315
<i>Subtotal: GB004 - Maritime Energy Initiatives (Triton Fuel Penalty)</i>	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.820	3 / 0.835	4 / 1.133	16 / 4.527	26 / 7.315
<i>Subtotal: Procurement, All Modification Items</i>	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.820	- / 0.835	- / 1.133	- / 4.527	- / 7.315
Support (All Modification Items)												
2.1) Triton Fuel Penalty Engineering Services	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.074	- / 0.075	- / 0.077	- / 0.316	- / 0.542
<i>Subtotal: Support</i>	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.074	- / 0.075	- / 0.077	- / 0.316	- / 0.542
Installation												
<i>Modification Item 1 of 1:</i> GB004 - Maritime Energy Initiatives (Triton Fuel Penalty)	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.835	- / 0.850	- / 5.660	- / 7.345
<i>Subtotal: Installation</i>	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.835	- / 0.850	- / 5.660	- / 7.345
Total												
Total Cost (Procurement + Support + Installation)	0.000	-	-	-	-	-	-	0.894	1.745	2.060	10.503	15.202

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Exhibit P-3a, Individual Modification: PB 2016 Navy				Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 2		P-1 Line Item Number / Title: 0200 / Surface Combatant HM&E			Modification Number / Title: 8 / GB004 - Maritime Energy Initiatives (Triton Fuel Penalty)		

Modification Item 1 of 1: GB004 - Maritime Energy Initiatives (Triton Fuel Penalty)

Manufacturer Information

Manufacturer Name: RDI Instruments				Manufacturer Location: Poway, CA			
Administrative Leadtime (in Months): 6				Production Leadtime (in Months): 12			

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates					Dec 2017	Dec 2018	Dec 2019
Delivery Dates					Dec 2018	Dec 2019	Dec 2020

Installation Information

Method of Implementation: AIT:: Installation Name: Triton Fuel Penalty Equipment

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.835	- / -	- / -	3 / 0.835
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.850	- / -	3 / 0.850
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 1.153	4 / 1.153
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	16 / 4.507	16 / 4.507
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.835	3 / 0.850	20 / 5.660	26 / 7.345

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	-	-	1	2	-	-	20	26
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	-	-	1	2	-	-	20	26

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 6: Navigation Equipment							P-1 Line Item Number / Title: 0670 / Other Navigation Equipment					
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:					Other Related Program Elements:				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	233.405	33.386	39.298	87.481	-	87.481	67.181	58.298	104.240	122.593	-	745.882
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	233.405	33.386	39.298	87.481	-	87.481	67.181	58.298	104.240	122.593	-	745.882
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	233.405	33.386	39.298	87.481	-	87.481	67.181	58.298	104.240	122.593	-	745.882
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	0.019	-	-	-	-	-	-	0.191	-	-	0.210
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:
 The FY 2016 funding request was reduced by \$2.415 million to account for the availability of prior year execution balances.

This program provides procurement and improvements of navigation equipment to include Inertial Navigation equipment for Ballistic Missile Defense such as gyrocompasses, speed sensors, radars, Electronic Chart Display and Information System - Navy (ECDIS-N) and major components for other navigation systems. ECDIS-N provides Fleet-wide electronic charting capability, increases navigation and situational awareness, improves safety at sea, and eliminates reliance on paper charts. These systems provide mission critical navigation data to Ballistic Missile Defense, shipboard, combat, and gun and missile systems.

[P40A / GW013: CONVENTIONAL NAVIGATION FIELD CHANGE KITS]: These funds are required to procure Navigation Field Change Kits for reliability and maintainability improvements and corrections for various conventional navigation equipment including the Dead Reckoning Equipment (DRE), Computer Aided Dead Reckoning Tracer (CADRT), plotters, gyrocompasses, Electromagnetic Log (EM Log), Doppler Sonar Velocity Log (DSVL), Digital Flux Gate Magnetic Compass, Digital Depth Detector and Synchronization Signal Amplifier. These improvements are required to keep Fleet-installed equipment operating to a basic level. This cost code funds multiple Field Changes of various quantities, costs, and fielding plans.

[P40A / GW029: INERTIAL NAVIGATION SYSTEMS FIELD CHANGE KITS]: These funds are required in order to support procurement and implementation of Engineering Change Proposals (ECPs)/ Field Change (FC) Kits, alterations and update of associated technical documentation which provide reliability and maintainability improvements, corrections and upgrades for various Inertial Navigation Systems (INS), (AN/WSN-7/7A/7B), the associated IP-1747 Control Display Unit (CDU), and IP-1747 Enhanced Control Display Unit (ECDU) and Aircraft Inertial Alignment System (AIAS) (AN/SRC-40, OU-174, TS-3543A). Funds also support procurement of hardware and software changes to the navigation suite required to integrate with Ring Laser Gyro Navigator (AN/WSN-7/7A), and Ring Laser Gyrocompass (AN/WSN-7B) and Test & Integration. Funds will support technology refresh to replace parts obsolescence and keep pace with technology. Funds required to perform navigation certification required as prerequisite to TOMAHAWK certification. This cost code funds multiple Field Changes of various quantities, costs, and fielding plans.

- Field Change #1 to the AN/WSN-7/7A provides product improvement changes and additions to the basic system equipment to correct problems and provide enhancements to ship specific missions.
- Field Change #2 to the AN/WSN-7 provides interface between WSN-7 and Battle Force Tactical Trainer (BFTT) product improvement changes and additions to the basic system equipment to correct problems and provide enhancements to ship specific missions.
- Field Change #3 to the AN/WSN-7 provides hardware and software updates.

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 6: Navigation Equipment		P-1 Line Item Number / Title: 0670 / Other Navigation Equipment
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:
- Field Change #4 to the AN/WSN-7 provides firmware changes to correct interfaces with Cooperative Engagement Capability (CEC) and Command & Decision (C&D) and provides short-term accuracy improvements for Ticonderoga Class Guided Missile Cruiser (AEGIS-CG) and Ballistic Defense Missile System (BDMS). Field Change #4 to the AN/WSN-7A provides ECDU hardware and software to correct Integral of Velocity rollover problem and provide an interface to the AN/BYG-1 Combat Control System (CCS). - Field Change #5 to the AN/WSN-7/7A provides firmware changes to add capability for inertial damping and for indexing control to improve navigation accuracy for combat systems. Also provides functionality to support AN/BYG-1 CCS. - AIAS product improvements to AN/SRC-40, OU-174, TS-3543A due to obsolescence. - Field Change #6 to the AN/WSN-7/7A provides upgraded MX-11681A Inertial Measuring Unit (IMU) for structure-borne noise reduction. - Field Change #7 to the AN/WSN-7/7A provides CDU software version 3.0.0 to include Information Assurance (IA) and the Linux Operating System. (Surface and Submersible Ship Nuclear (SSN) 776/77 only) - Field Change #8 to the AN/WSN-7A provides Naval Tactical Data System (NTDS) Type A for Tactical TOMAHAWK Weapons Control Systems (TTWCS). (Submersible Ship Guided Nuclear (SSGN) Class only) - Field Change #9 to the AN/WSN-7 converts AN/WSN-7(V)2 to AN/WSN-7(V)3. Landing Helicopter Dock (LHD) 1 and 2 only). - Field Change #10 to the AN/WSN-7A provides CDU upgrades to include IA and the Linux Operating System. (SSN 688 Class, SSGN, and SSN 21/22) - Field Change #11 to the AN/WSN-7 provides Ethernet cable connection, upgrades software in the CDU to version 2.0.6 to enable Integrated Bridge System (IBS) interface with Ring Laser Gyro Navigator (RLGN) and Global Positioning System (GPS), AEGIS CG's only. - Field Change #12 to the AN/WSN-7A provides Unit 8, IP-1747 CDU with Windows Program (WINP) Software version 2.0.0, Run Time Program (RTP) version 4/2/0, and Enhanced SABTECH Review Board (ESRB) version 2.2.5. (SSN 23 only) - Field Change #13 to the AN/WSN-7A provides Unit 6, IP-1747 CDU (72213) with IP-1747 CDU (501300). ECDU architecture with dual Global Positioning System Versa Module Eurocard Receiver Card (GVRC) replaces Navigation Data Distribution and Display (ND3) functionality. (SSN 774 Class only) - Field Change #14 to the AN/WSN-7A provides Technical Insertion (TI-06): Adds Vertical Deflection Compensation, BQN-17A Interface, and Health Monitoring. - Field Change #15 to the AN/WSN-7A provides Technical Insertion (TI-08): Replaces ECDU GVRC cards with Selective Availability Anti Spoofing Module (SAASM) Receiver, adds Internet Protocol Version 6 (IPV) compliance, and reliability improvements. - Field Change #16 to the AN/WSN-7A provides Technical Insertion (TI-10): Incorporates Precision Underwater Mapping (PUMA) and Correlation Navigation. - Field Change #17 to the AN/WSN-7A provides Technical Insertion (TI-12): Incorporates ECDU GPS (M-Code). - Field Change #18 to the AN/WSN-7A provides firmware upgrades: Navigation processor Revision AE and Input/output (I/O) processor Revision AA (SSN & SSGN only). - Field Change #19 to the AN/WSN-7A provides power circuitry modifications in AN/WSN-7A(V)1,2 to meet the requirements of Military Standard (MIL-STD)-1399B/300A. (SSN 774 Class only) - Field Change #20 to the AN/WSN-7/7A provides firmware upgrades: Navigation processor Revision AF and I/O processor Revision AB. -Field Change #21 to the AN/WSN-7A provides Technical Insertion (TI-14): Incorporates TBD changes. -Field Change #22 to the AN/WSN-7/7A provides firmware upgrades: Navigation Processor Revision AG and I/O Processor revision AC will enhance BMD performance and provide improved at sea diagnostic capability. -Field Change #23 to the AN/WSN-7A provides Technical Insertion (TI-16): Incorporates TBD changes. -Field Change #24 to the AN/WSN-7A provides Technical Insertion (TI-18): Incorporates TBD changes. - Other AN/WSN-7 operational improvements include Navigation Sensor System Interface (NAVSSI) integration, Lever Arm definition, vertical deflection compensation, Asynchronous Transfer Mode (ATM) implementation, Tactical Integrated Distribution System (TIDS) integration, and WSN-7A BYG-1 CCS Field Change Kits. [P40A / GW038: BPS ECDIS-N/VMS FC KITS:]: These funds are required to provide AN/BPS-15/16 - Voyage Management System (VMS) Field Changes to provide ECDIS-N capability and to support obsolescence replacement on submarines. [P40A / GW051: SCALABLE ECDIS-N ECP/FIELD CHANGE KITS:]: These funds are required for the procurement and installation of ECDIS-N ECP/Field Change Kits to support hardware tech refresh, software upgrades to incorporate latest functions and safety enhancements, obsolescence replacement, and for engineering services associated with interfacing systems on multiple platforms. [P40A / GW054: NAVIGATION TRAINING EQUIPMENT]: Funds are required for the procurement of training equipment for multiple Navigation classrooms in support of Navigation System Technician pipeline training and ECDIS-N Operator Training. This includes computer upgrades and software licenses. These upgrades are critical to maintaining Fleet proficiency on operation and maintenance of		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 6: Navigation Equipment		P-1 Line Item Number / Title: 0670 / Other Navigation Equipment
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:
navigation systems. Field Changes include ECDIS-N Operator Course Classroom Tech Refresh and additional seats and licenses and upgrade/update Mariner Skills Simulator (MSS) to support Fleet Training Requirements (Radar/Data bases/Models).		
[P40A / GW056 ECDIS-N MODERNIZATION]: These funds are required to provide centralized and cost effective lifecycle sustainment and modernization of ECDIS-N solutions. Funding is required to manage and execute ECDIS-N hardware and software upgrades and competitive efforts for follow-on ECDIS-N solution.		
[P40A / GW057 INERTIAL NAVIGATION SYSTEM MODERNIZATION]: Funding is for modernization of Inertial Navigation Systems (INS) to address obsolescence and provide improved performance in support of submarine missions. Costs include analyses, delta testing, documentation, and logistics efforts.		
[P40A / GW830: PRODUCTION ENGINEERING]: These funds are required for production engineering for the AN/WSN-7/7A, AN/WSN-7B, CDU, ECDU, AIAS Scalable ECDIS-N Systems, and BPS ECDIS-N/VMS Systems hardware/software procurements and system test and integration.		
[P40A / GW063: NAVIGATION CERTIFICATION]: These funds are required for conducting Navigation Certification (NAVCERT) on amphibious and surface platforms as part of fielded upgrades and tech refresh.		
[P40A / GW064: OWN SHIP SPEED (OSS) AND COURSE REPEATERS]: These funds are required for the fielding of Own Ship Speed (OSS) and Course Repeaters.		
[P40A / GW065: NAVIGATION SHORESITE EQUIPMENT]: These funds are required for the procurement and NRE/ILS/Support of navigation system shoresite equipment. Shoresite equipment does not have any associated installation costs. FY16 funding is for the procurement of 3 AN/WSN-7B Ring Laser Gyrocompass to support LSD shoresites.		
[P3A / GW036: RING LASER GYRO COMPASS (AN/WSN-7B)]: These funds are required for the procurement and installation of the AN/WSN-7B Ring Laser Gyrocompass (RLG) for SSN, MCM, and LSD platforms. System peripherals include Sync Amps, BIT Cables, and installation kits. MCM ships require quantity (2) AN/WSN-7B per ship.		
[P3A - 2 / GW050: SCALABLE ECDIS-N]: These funds are required for procurement of Scalable ECDIS-N systems for surface and amphibious platforms. All installations completed in FY14.		
[P3A - 3 / GW053: INERTIAL NAVIGATION SYSTEM (INS) MODERNIZATION]: These funds are required for modernization of Inertial Navigation Systems (INS) to address obsolescence and provide improved performance in support of Ballistic Missile Defense (BMD) and amphibious platforms. Current INS-R development schedule is targeting production procurement and installation beginning in FY19.		
[P3A - 4 / GW055: AN/WSN-9 SPEED LOG PROCUREMENT]: These funds are for the procurement of AN/WSN-9 Speed Log upgrades on amphibious and surface platforms.		
[P3A - 5 / GW058: NAVSSI CAPSTONE]: These funds are required for the procurement, installation, and NRE/ILS/Support of NAVSSI Capstone upgrades on LHD platforms to support Ship Self Defense System (SSDS) upgrades.		
[P3A - 6 / GW059: EMERGENCY NAVIGATION LAPTOP]: These funds are required for the procurement, installation, and NRE/ILS/support of Emergency Navigation Laptops (ENL) on amphibious and surface platforms.		
[P3A - 7 / GW060: NEXT GENERATION FATHOMETER]: These funds are required for the procurement, installation, and NRE/ILS/support of Next Generation Fathometers to replace legacy AN/UQN-4/4A systems on amphibious and surface platforms.		
[P3A - 8 / GW061: MK 27 REPLACEMENT]: These funds are required for the procurement, installation, and NRE/ILS/support of replacement for legacy MK27 Backup Heading References on amphibious and surface platforms.		
[P3A - 9 / GW062: AN/WSN-7 CDU TECH REFRESH]: These funds are required for the procurement, installation, and NRE/ILS/support of replacement for legacy AN/WSN-7 Control Display Units on amphibious and surface platforms.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 6: Navigation Equipment		P-1 Line Item Number / Title: 0670 / Other Navigation Equipment
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy						Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 6: Navigation Equipment				P-1 Line Item Number / Title: 0670 / Other Navigation Equipment				
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:			Other Related Program Elements:		
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
Other Navigation Equipment	P-40a, P-5a		- / 140.140	- / 26.391	- / 34.605	- / 56.432	- / -	- / 56.432
1 / GW036: RING LASER GYRO COMPASS (AN/WSN-7B) (AN/WSN-7B)	P-3a		- / 58.797	- / 3.100	- / 2.654	- / 5.100	- / -	- / 5.100
2 / GW050: SCALABLE ECDIS-N (SCALABLE ECDIS-N)	P-3a		- / 34.468	- / 1.995	- / -	- / -	- / -	- / -
3 / GW053: INERTIAL NAVIGATION SYSTEM (INS) MODERNIZATION (INERTIAL NAVIGATION SYSTEM (INS) MODERNIZATION)	P-3a		- / 0.000	- / -	- / -	- / -	- / -	- / -
4 / GW055: AN/WSN-9 SPEED LOG PROCUREMENT (AN/WSN-9 SPEED LOG PROCUREMENT)	P-3a		- / 0.000	- / 1.900	- / 2.039	- / 8.988	- / -	- / 8.988
5 / GW058: NAVSSI CAPSTONE (NAVSSI CAPSTONE)	P-3a		- / 0.000	- / -	- / -	- / 1.613	- / -	- / 1.613
6 / GW059: EMERGENCY NAVIGATION LAPTOP (EMERGENCY NAVIGATION LAPTOP)	P-3a		- / 0.000	- / -	- / -	- / 5.654	- / -	- / 5.654
7 / GW060: NEXT GENERATION FATHOMETER (NEXT GENERATION FATHOMETER)	P-3a		- / 0.000	- / -	- / -	- / 5.333	- / -	- / 5.333
8 / GW061: MK 27 REPLACEMENT (MK 27 REPLACEMENT)	P-3a		- / 0.000	- / -	- / -	- / 2.088	- / -	- / 2.088
9 / GW062: AN/WSN-7 CDU TECH REFRESH (AN/WSN-7 CDU TECH REFRESH)	P-3a		- / 0.000	- / -	- / -	- / 2.273	- / -	- / 2.273
Total Gross/Weapon System Cost			- / 233.405	- / 33.386	- / 39.298	- / 87.481	- / -	- / 87.481
Exhibits Schedule			FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
Other Navigation Equipment	P-40a, P-5a		- / -	- / -	- / -	- / -	- / -	- / -
1 / GW036: RING LASER GYRO COMPASS (AN/WSN-7B) (AN/WSN-7B)	P-3a		- / 4.367	- / 0.840	- / -	- / -	- / -	- / 74.858
2 / GW050: SCALABLE ECDIS-N (SCALABLE ECDIS-N)	P-3a		- / -	- / -	- / -	- / -	- / -	- / 36.463
3 / GW053: INERTIAL NAVIGATION SYSTEM (INS) MODERNIZATION (INERTIAL NAVIGATION SYSTEM (INS) MODERNIZATION)	P-3a		- / -	- / -	- / 45.233	- / 67.841	- / -	- / 113.074
4 / GW055: AN/WSN-9 SPEED LOG PROCUREMENT (AN/WSN-9 SPEED LOG PROCUREMENT)	P-3a		- / 6.920	- / 3.532	- / 3.299	- / 0.692	- / -	- / 27.370
5 / GW058: NAVSSI CAPSTONE (NAVSSI CAPSTONE)	P-3a		- / 1.314	- / 3.010	- / 1.702	- / 1.387	- / -	- / 9.026
6 / GW059: EMERGENCY NAVIGATION LAPTOP (EMERGENCY NAVIGATION LAPTOP)	P-3a		- / 2.440	- / 0.858	- / 0.176	- / -	- / -	- / 9.128
7 / GW060: NEXT GENERATION FATHOMETER (NEXT GENERATION FATHOMETER)	P-3a		- / 7.459	- / -	- / -	- / -	- / -	- / 12.792
8 / GW061: MK 27 REPLACEMENT (MK 27 REPLACEMENT)	P-3a		- / 2.094	- / -	- / -	- / -	- / -	- / 4.182
9 / GW062: AN/WSN-7 CDU TECH REFRESH (AN/WSN-7 CDU TECH REFRESH)	P-3a		- / -	- / 0.630	- / 2.640	- / 2.079	- / -	- / 7.622
Total Gross/Weapon System Cost			- / 67.181	- / 58.298	- / 104.240	- / 122.593	- / -	- / 745.882
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.								
Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.								

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6									P-1 Line Item Number / Title: 0670 / Other Navigation Equipment						Aggregated Items Title: Other Navigation Equipment				

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) GW013: CONVENTIONAL NAVIGATION FIELD CHANGE KITS																				
1.1) SURFACE CONVENTIONAL NAVIGATION FC KITS	A		-	-	5.539	-	-	0.811	-	-	0.818	-	-	0.829	-	-	-	-	-	0.829
1.2) SUBMARINE CONVENTIONAL NAVIGATION FC KITS	A		-	-	14.009	-	-	2.911	-	-	2.915	-	-	2.893	-	-	-	-	-	2.893
Subtotal: 1) GW013: CONVENTIONAL NAVIGATION FIELD CHANGE KITS			-	-	19.548	-	-	3.722	-	-	3.733	-	-	3.722	-	-	-	-	-	3.722
2) GW029: INERTIAL NAVIGATION SYSTEMS FIELD CHANGE KITS																				
2.1) SURFACE INERTIAL NAV SYS ECP/FC KITS ⁽¹⁾	A		-	-	9.565	-	-	3.919	-	-	3.986	-	-	4.725	-	-	-	-	-	4.725
2.2) SUBMARINE INERTIAL NAV SYS ECP/FC KITS	A		-	-	26.259	-	-	3.869	-	-	3.962	-	-	3.098	-	-	-	-	-	3.098
2.3) CARRIER INERTIAL NAV SYS ECP/FC KITS	A		-	-	13.029	-	-	1.445	-	-	1.475	-	-	1.352	-	-	-	-	-	1.352
Subtotal: 2) GW029: INERTIAL NAVIGATION SYSTEMS FIELD CHANGE KITS			-	-	48.853	-	-	9.233	-	-	9.423	-	-	9.175	-	-	-	-	-	9.175
3) GW038: BPS ECDIS-N/VMS FC KITS:																				
3.1) SUBMARINE BPS ECDIS-N/VMS FC KITS:	A		-	-	37.336	-	-	4.061	-	-	2.995	-	-	-	-	-	-	-	-	-
Subtotal: 3) GW038: BPS ECDIS-N/VMS FC KITS:			-	-	37.336	-	-	4.061	-	-	2.995	-	-	-	-	-	-	-	-	-
4) GW051: SCALABLE ECDIS-N ECP/FIELD CHANGE KITS:																				
4.1) SURFACE SCALABLE ECDIS-N ECP/ FIELD CHANGE KITS ⁽²⁾	A		-	-	12.839	-	-	7.231	-	-	12.257	-	-	19.297	-	-	-	-	-	19.297
4.2) CARRIER SCALABLE ECDIS-N ECP/FIELD CHANGE KITS:	A		-	-	5.831	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 4) GW051: SCALABLE ECDIS-N ECP/FIELD CHANGE KITS:			-	-	18.670	-	-	7.231	-	-	12.257	-	-	19.297	-	-	-	-	-	19.297

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6									P-1 Line Item Number / Title: 0670 / Other Navigation Equipment						Aggregated Items Title: Other Navigation Equipment					
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.																				
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
5) GW054: NAVIGATION TRAINING EQUIPMENT																				
5.1) SURFACE NAVIGATION TRAINING EQUIPMENT	A		-	-	1.202	-	-	0.605	-	-	0.601	-	-	0.598	-	-	-	-	-	0.598
Subtotal: 5) GW054: NAVIGATION TRAINING EQUIPMENT			-	-	1.202	-	-	0.605	-	-	0.601	-	-	0.598	-	-	-	-	-	0.598
6) GW056 ECDIS-N MODERNIZATION																				
6.1) SURFACE ECDIS-N MODERNIZATION	A		-	-	-	-	-	-	-	-	3.970	-	-	1.792	-	-	-	-	-	1.792
Subtotal: 6) GW056 ECDIS-N MODERNIZATION			-	-	0.000	-	-	-	-	-	3.970	-	-	1.792	-	-	-	-	-	1.792
8) GW830: PRODUCTION ENGINEERING																				
8.1) SURFACE PRODUCTION ENGINEERING (3)	A		-	-	7.222	-	-	0.614	-	-	0.783	-	-	0.749	-	-	-	-	-	0.749
8.2) SUBMARINE PRODUCTION ENGINEERING	A		-	-	4.855	-	-	0.683	-	-	0.605	-	-	0.585	-	-	-	-	-	0.585
8.3) CARRIER PRODUCTION ENGINEERING	A		-	-	2.454	-	-	0.242	-	-	0.238	-	-	0.236	-	-	-	-	-	0.236
Subtotal: 8) GW830: PRODUCTION ENGINEERING			-	-	14.531	-	-	1.539	-	-	1.626	-	-	1.570	-	-	-	-	-	1.570
9) GW063: NAVIGATION CERTIFICATION																				
9.1) AMPHIB NAVIGATION CERTIFICATION (4)	A		-	-	-	-	-	-	-	-	-	-	-	5.281	-	-	-	-	-	5.281
9.2) SURFACE NAVIGATION CERTIFICATION (5)	A		-	-	-	-	-	-	-	-	-	-	-	10.453	-	-	-	-	-	10.453
Subtotal: 9) GW063: NAVIGATION CERTIFICATION			-	-	0.000	-	-	-	-	-	-	-	-	15.734	-	-	-	-	-	15.734
10) GW064: OWN SHIP SPEED (OSS) AND COURSE REPEATERS																				
10.1) SURFACE OSS AND COURSE REPEATERS	A		-	-	-	-	-	-	-	-	-	-	-	0.200	-	-	-	-	-	0.200
Subtotal: 10) GW064: OWN SHIP SPEED			-	-	0.000	-	-	-	-	-	-	-	-	0.200	-	-	-	-	-	0.200

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6						P-1 Line Item Number / Title: 0670 / Other Navigation Equipment									Aggregated Items Title: Other Navigation Equipment					
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.																				
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
(OSS) AND COURSE REPEATERS																				
11) GW065: NAVIGATION SHORESITE EQUIPMENT																				
11.1) NAVIGATION SHORESITE EQUIPMENT ⁽¹⁾	A		-	-	-	-	-	-	-	-	-	1,448K	3	4.344	-	-	-	1,448K	3	4.344
Subtotal: 11) GW065: NAVIGATION SHORESITE EQUIPMENT			-	-	0.000	-	-	-	-	-	-	-	-	4.344	-	-	-	-	-	4.344
Total			-	-	140.140	-	-	26.391	-	-	34.605	-	-	56.432	-	-	-	-	-	56.432
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2017			FY 2018			FY 2019			FY 2020			To Complete			Total Cost		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) GW013: CONVENTIONAL NAVIGATION FIELD CHANGE KITS																				
1.1) SURFACE CONVENTIONAL NAVIGATION FC KITS	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.2) SUBMARINE CONVENTIONAL NAVIGATION FC KITS	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 1) GW013: CONVENTIONAL NAVIGATION FIELD CHANGE KITS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2) GW029: INERTIAL NAVIGATION SYSTEMS FIELD CHANGE KITS																				
2.1) SURFACE INERTIAL NAV SYS ECP/FC KITS ⁽¹⁾	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.2) SUBMARINE INERTIAL NAV SYS ECP/FC KITS	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.3) CARRIER INERTIAL NAV SYS ECP/FC KITS	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 2) GW029: INERTIAL NAVIGATION SYSTEMS FIELD CHANGE KITS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3) GW038: BPS ECDIS-N/VMS FC KITS:																				

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6									P-1 Line Item Number / Title: 0670 / Other Navigation Equipment						Aggregated Items Title: Other Navigation Equipment					
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2017			FY 2018			FY 2019			FY 2020			To Complete			Total Cost		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
3.1) SUBMARINE BPS ECDIS-N/VMS FC KITS:	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 3) GW038: BPS ECDIS-N/VMS FC KITS:			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4) GW051: SCALABLE ECDIS-N ECP/FIELD CHANGE KITS:																				
4.1) SURFACE SCALABLE ECDIS-N ECP/ FIELD CHANGE KITS ⁽²⁾	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.2) CARRIER SCALABLE ECDIS-N ECP/FIELD CHANGE KITS:	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 4) GW051: SCALABLE ECDIS-N ECP/FIELD CHANGE KITS:			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5) GW054: NAVIGATION TRAINING EQUIPMENT																				
5.1) SURFACE NAVIGATION TRAINING EQUIPMENT	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 5) GW054: NAVIGATION TRAINING EQUIPMENT			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6) GW056 ECDIS-N MODERNIZATION																				
6.1) SURFACE ECDIS-N MODERNIZATION	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 6) GW056 ECDIS-N MODERNIZATION			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8) GW830: PRODUCTION ENGINEERING																				
8.1) SURFACE PRODUCTION ENGINEERING ⁽³⁾	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8.2) SUBMARINE PRODUCTION ENGINEERING	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8.3) CARRIER PRODUCTION ENGINEERING	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 8) GW830: PRODUCTION ENGINEERING			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6						P-1 Line Item Number / Title: 0670 / Other Navigation Equipment									Aggregated Items Title: Other Navigation Equipment					
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2017			FY 2018			FY 2019			FY 2020			To Complete			Total Cost		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
9) GW063: NAVIGATION CERTIFICATION																				
9.1) AMPHIB NAVIGATION CERTIFICATION ⁽⁴⁾	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.2) SURFACE NAVIGATION CERTIFICATION ⁽⁵⁾	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 9) GW063: NAVIGATION CERTIFICATION			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10) GW064: OWN SHIP SPEED (OSS) AND COURSE REPEATERS																				
10.1) SURFACE OSS AND COURSE REPEATERS	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 10) GW064: OWN SHIP SPEED (OSS) AND COURSE REPEATERS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11) GW065: NAVIGATION SHORESITE EQUIPMENT																				
11.1) NAVIGATION SHORESITE EQUIPMENT ^(†)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 11) GW065: NAVIGATION SHORESITE EQUIPMENT			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6	P-1 Line Item Number / Title: 0670 / Other Navigation Equipment	Aggregated Items Title: Other Navigation Equipment

(†) indicates the presence of a P-5a

Footnotes:

- (1) The FY15 control of \$3.986M is based on procuring and installing 20 AN/WSN-7 CDU Field Change Kits (\$63K Procurement/\$33K DSA/installation) and 20 AN/WSN-77 FC22 Firmware Kits (\$82K Procurement/\$5K DSA/\$15K installation). The FY16 control of \$4.725M is based on procuring and installing 24 AN/WSN-7 CDU Field Change Kits (\$63K Procurement/\$33K DSA/installation) and 24 AN/WSN-77 FC22 Firmware Kits (\$82K Procurement/\$5K DSA/\$15K installation)
- (2) The FY15 control of \$12.257M is based on procuring and installing 6 Scalable ECDIS-N ECP/Field Change Kits (\$97K Procurement/\$13K DSA/\$41K installation), 3 Scalable ECDIS-N Tech refresh Kits (\$763K Procurement/\$72K DSA/\$217K installation), 1 LPD Scalable ECDIS-N Tech Refresh Kit (\$541K Procurement/\$90K DSA/\$270K Installation), and 12 Surface Scalable ECDIS-N Tech Refresh Kits (\$472K Procurement/\$33K DSA/\$96K Installation). The FY16 control of \$19.297M is based on procuring and installing 7 Scalable ECDIS-N ECP/Field Change Kits (\$97K Procurement/\$13K DSA/\$41K installation), 4 Scalable ECDIS-N Tech refresh Kits (\$763K Procurement/\$72K DSA/\$217K installation), 1 LPD Scalable ECDIS-N Tech Refresh Kit (\$541K Procurement/\$90K DSA/\$270K Installation), and 22 Surface Scalable ECDIS-N Tech Refresh Kits (\$472K Procurement/\$33K DSA/\$96K Installation)
- (3) GW830 amount reflects an increase in FY15 and FY16 to support additional production quantity requirements.
- (4) The cost to conduct each certification varies from ship to ship based on travel costs to specific ship location, complexity of navigation suite on each platform, cost to develop new test procedures, etc. For Amphibious ships, average cost is \$80K for quantity of 46 navigation certifications which are associated with the installations of equipment procured under GW055, GW059, GW060, GW061, and GW062. The remaining \$1.6M is for program support costs for amphibious ships since this is the first time some of the amphibious ships will be undergoing navigation certification.
- (5) The cost to conduct each certification varies from ship to ship based on travel costs to specific ship location, complexity of navigation suite on each platform, cost to develop new test procedures, etc. For surface ships, average cost is \$67K for quantity of 157 navigation certifications which are associated with the installations of equipment procured under GW055, GW059, GW060, GW061, and GW062.

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Exhibit P-5a, Procurement History and Planning: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6				P-1 Line Item Number / Title: 0670 / Other Navigation Equipment				Aggregated Items: Other Navigation Equipment				
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
11) GW065: NAVIGATION SHORESITE EQUIPMENT												
11.1) NAVIGATION SHORESITE EQUIPMENT		2016	NORTHROP GRUMMAN / CHARLOTTESVILLE	SS / FFP	WASHINGTON, DC	Jan 2016	Feb 2017	3	1,448K	Y		

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6	P-1 Line Item Number / Title: 0670 / Other Navigation Equipment	Modification Number / Title: 1 / GW036: RING LASER GYRO COMPASS (AN/WSN-7B)

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	58.797	3.100	2.654	5.100	-	5.100	4.367	0.840	-	-	-	74.858
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	58.797	3.100	2.654	5.100	-	5.100	4.367	0.840	-	-	-	74.858
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	58.797	3.100	2.654	5.100	-	5.100	4.367	0.840	-	-	-	74.858
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

These funds are required for the procurement and installation of the AN/WSN-7B Ring Laser Gyrocompass (RLG) for SSN, MCM, and LSD platforms. System peripherals include Sync Amps, BIT Cables, and installation kits. MCM ships require quantity (2) AN/WSN-7B per ship.

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6				P-1 Line Item Number / Title: 0670 / Other Navigation Equipment						Modification Number / Title: 1 / GW036: RING LASER GYRO COMPASS (AN/WSN-7B)			
Models of Systems Affected: GW036 RING LASER GYRO NAVIGATION RING LASER GYROCOMPASS (AN/WSN-7B)				Modification Type: AN/WSN-7B				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
Modification Item 1 of 1: GW036: RING LASER GYRO COMPASS (AN/WSN-7B)													
B Kits													
Recurring													
1.1.1) AMPHIB AN/WSN-7B - NonOrganic ⁽⁶⁾	82 / 31.311	2 / 3.100	1 / 1.828	3 / 4.344	- / -	3 / 4.344	2 / 3.040	- / -	- / -	- / -	- / -	90 / 43.623	
<i>Subtotal: Recurring</i>	- / 31.311	- / 3.100	- / 1.828	- / 4.344	- / -	- / 4.344	- / 3.040	- / -	- / -	- / -	- / -	- / 43.623	
<i>Subtotal: GW036: RING LASER GYRO COMPASS (AN/WSN-7B)</i>	82 / 31.311	2 / 3.100	1 / 1.828	3 / 4.344	- / -	3 / 4.344	2 / 3.040	- / -	- / -	- / -	- / -	90 / 43.623	
<i>Subtotal: Procurement, All Modification Items</i>	- / 31.311	- / 3.100	- / 1.828	- / 4.344	- / -	- / 4.344	- / 3.040	- / -	- / -	- / -	- / -	- / 43.623	
Installation													
Modification Item 1 of 1: GW036: RING LASER GYRO COMPASS (AN/WSN-7B)	- / 27.486	- / -	- / 0.826	- / 0.756	- / -	- / 0.756	- / 1.327	- / 0.840	- / -	- / -	- / -	- / 31.235	
<i>Subtotal: Installation</i>	- / 27.486	- / -	- / 0.826	- / 0.756	- / -	- / 0.756	- / 1.327	- / 0.840	- / -	- / -	- / -	- / 31.235	
Total													
Total Cost (Procurement + Support + Installation)	58.797	3.100	2.654	5.100	-	5.100	4.367	0.840	-	-	-	74.858	

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6	P-1 Line Item Number / Title: 0670 / Other Navigation Equipment	Modification Number / Title: 1 / GW036: RING LASER GYRO COMPASS (AN/WSN-7B)

Modification Item 1 of 1: GW036: RING LASER GYRO COMPASS (AN/WSN-7B)

Manufacturer Information

Manufacturer Name: NORTHROP GRUMMAN SYSTEMS CORP.	Manufacturer Location: CHARLOTTESVILLE, VA
Administrative Leadtime (in Months): 3	Production Leadtime (in Months): 13

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Mar 2014	Dec 2014	Dec 2015	Dec 2016			
Delivery Dates	Apr 2015	Jan 2016	Jan 2017	Jan 2018			

Installation Information

Method of Implementation: AIT:: Installation Name: AMPHIB AN/WSN-7B

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	82 / 27.486	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	82 / 27.486
FY 2014	- / -	- / -	2 / 0.826	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.826
FY 2015	- / -	- / -	- / -	1 / 0.405	- / -	1 / 0.405	- / -	- / -	- / -	- / -	- / -	1 / 0.405
FY 2016	- / -	- / -	- / -	- / 0.351	- / -	- / 0.351	3 / 0.995	- / -	- / -	- / -	- / -	3 / 1.346
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.332	2 / 0.840	- / -	- / -	- / -	2 / 1.172
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	82 / 27.486	- / -	2 / 0.826	1 / 0.756	- / -	1 / 0.756	3 / 1.327	2 / 0.840	- / -	- / -	- / -	90 / 31.235

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	82	-	-	-	-	-	-	2	-	-	-	1	-	-	-	3	-	-	-	2	-	-	-	-	-	-	-	-	-	-	90
Out	82	-	-	-	-	-	-	2	-	-	-	1	-	-	-	3	-	-	-	2	-	-	-	-	-	-	-	-	-	-	90

Footnotes:

⁽⁶⁾ GW036: Funding provides for procurement and installation of 8 systems for LSD platforms. FY16 installation funding (\$0.351M) is for DSA activities to support FY17 AIT installation (qty 3).

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Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6				P-1 Line Item Number / Title: 0670 / Other Navigation Equipment					Modification Number / Title: 2 / GW050: SCALABLE ECDIS-N			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	34.468	1.995	-	-	-	-	-	-	-	-	-	36.463
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	34.468	1.995	-	-	-	-	-	-	-	-	-	36.463
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	34.468	1.995	-	-	-	-	-	-	-	-	-	36.463
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: These funds are required for procurement of Scalable ECDIS-N systems for surface and amphibious platforms. All installations completed in FY14.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6				P-1 Line Item Number / Title: 0670 / Other Navigation Equipment				Modification Number / Title: 2 / GW050: SCALABLE ECDIS-N					
Models of Systems Affected: GW050 SCALABLE ECDIS-N				Modification Type: SCALABLE ECDIS-N				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: GW050: SCALABLE ECDIS-N													
B Kits													
Recurring													
1.1.1) AMPHIB SCALABLE ECDIS-N - NonOrganic	59 / 15.930	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	59 / 15.930	
1.1.2) TRAINING EQUIPMENT - NonOrganic	5 / 1.500	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 1.500	
Subtotal: Recurring	- / 17.430	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 17.430	
Subtotal: GW050: SCALABLE ECDIS-N	64 / 17.430	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	64 / 17.430	
Subtotal: Procurement, All Modification Items	- / 17.430	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 17.430	
Installation													
Modification Item 1 of 1: GW050: SCALABLE ECDIS-N	- / 17.038	- / 1.995	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 19.033	
Subtotal: Installation	- / 17.038	- / 1.995	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 19.033	
Total													
Total Cost (Procurement + Support + Installation)	34.468	1.995	-	-	-	-	-	-	-	-	-	36.463	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015																					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6										P-1 Line Item Number / Title: 0670 / Other Navigation Equipment										Modification Number / Title: 2 / GW050: SCALABLE ECDIS-N											
Modification Item 1 of 1: GW050: SCALABLE ECDIS-N																															
Manufacturer Information																															
Manufacturer Name: NORTHROP GRUMMAN SYSTEMS CORP.															Manufacturer Location: CHARLOTTESVILLE, VA																
Administrative Leadtime (in Months): 4															Production Leadtime (in Months): 6																
Dates		FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020					
Contract Dates		Jan 2014																													
Delivery Dates		Jul 2014																													
Installation Information																															
Method of Implementation: AIT:: Installation Name: AMPHIB SCALABLE ECDIS-N																															
Installation Cost		Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total																		
		Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)																		
Prior Years		57 / 16.999	2 / 1.995	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	59 / 18.994																		
FY 2014		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2015		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2016		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2017		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2018		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2019		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2020		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
To Complete		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
Total		57 / 16.999	2 / 1.995	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	59 / 18.994																		
Installation Schedule																															
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020					
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	57	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	59
Out	57	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	59
Method of Implementation: [none specified]:: Installation Name: TRAINING EQUIPMENT																															
Installation Cost		Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total																		
		Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)																		
Prior Years		5 / 0.039	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.039																		
FY 2014		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6	P-1 Line Item Number / Title: 0670 / Other Navigation Equipment	Modification Number / Title: 2 / GW050: SCALABLE ECDIS-N

Modification Item 1 of 1: GW050: SCALABLE ECDIS-N

Installation Information

Method of Implementation: [none specified]:: Installation Name: TRAINING EQUIPMENT

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	5 / 0.039	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.039

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5
Out	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6	P-1 Line Item Number / Title: 0670 / Other Navigation Equipment	Modification Number / Title: 3 / GW053: INERTIAL NAVIGATION SYSTEM (INS) MODERNIZATION

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	0.000	-	-	-	-	-	-	-	45.233	67.841	-	113.074
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	0.000	-	-	-	-	-	-	-	45.233	67.841	-	113.074
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	0.000	-	-	-	-	-	-	-	45.233	67.841	-	113.074
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

These funds are required for modernization of Inertial Navigation Systems (INS) to address obsolescence and provide improved performance in support of Ballistic Missile Defense (BMD) and amphibious platforms. Current INS-R development schedule is targeting production procurement and installation beginning in FY19.

Installation Cost tables are shown separately in this P-3A for Amphibious and Surface platforms due to different installation plans and costs.

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6				P-1 Line Item Number / Title: 0670 / Other Navigation Equipment				Modification Number / Title: 3 / GW053: INERTIAL NAVIGATION SYSTEM (INS) MODERNIZATION					
Models of Systems Affected: GW053 INERTIAL NAVIGATION SYSTEM (INS) MODERNIZATION				Modification Type: INERTIAL NAVIGATION SYSTEM (INS) MODERNIZATION				Related RDT&E PEs: 0204228N					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: GW053: INERTIAL NAVIGATION SYSTEM (INS) MODERNIZATION													
B Kits													
Recurring													
1.1.1) AMPHIB INS MODERNIZATION - NonOrganic (7)	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 22.122	- / -	6 / 22.122	
1.1.2) SURFACE INS MODERNIZATION - NonOrganic (8)	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	17 / 36.918	18 / 34.257	- / -	35 / 71.175	
Subtotal: Recurring	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 36.918	- / 56.379	- / -	- / 93.297	
Subtotal: GW053: INERTIAL NAVIGATION SYSTEM (INS) MODERNIZATION	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	17 / 36.918	24 / 56.379	- / -	41 / 93.297	
Subtotal: Procurement, All Modification Items	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 36.918	- / 56.379	- / -	- / 93.297	
Installation													
Modification Item 1 of 1: GW053: INERTIAL NAVIGATION SYSTEM (INS) MODERNIZATION	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 8.315	- / 11.462	- / -	- / 19.777	
Subtotal: Installation	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 8.315	- / 11.462	- / -	- / 19.777	
Total													
Total Cost (Procurement + Support + Installation)	0.000	-	-	-	-	-	-	-	45.233	67.841	-	113.074	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6	P-1 Line Item Number / Title: 0670 / Other Navigation Equipment	Modification Number / Title: 3 / GW053: INERTIAL NAVIGATION SYSTEM (INS) MODERNIZATION

Modification Item 1 of 1: GW053: INERTIAL NAVIGATION SYSTEM (INS) MODERNIZATION

Manufacturer Information							
Manufacturer Name: TBD				Manufacturer Location: TBD			
Administrative Leadtime (in Months): 3				Production Leadtime (in Months): 6			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates						Dec 2018	Dec 2019
Delivery Dates						Jun 2019	Jun 2020

Installation Information

Method of Implementation: AIT:: Installation Name: AMPHIB INS MODERNIZATION

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 2.700	- / -	6 / 2.700
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 2.700	- / -	6 / 2.700

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	6	
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	6	

Method of Implementation: AIT:: Installation Name: SURFACE INS MODERNIZATION

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

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Exhibit P-3a, Individual Modification: PB 2016 Navy			Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6		P-1 Line Item Number / Title: 0670 / Other Navigation Equipment			Modification Number / Title: 3 / GW053: INERTIAL NAVIGATION SYSTEM (INS) MODERNIZATION

Modification Item 1 of 1: GW053: INERTIAL NAVIGATION SYSTEM (INS) MODERNIZATION

Installation Information

Method of Implementation: AIT:: Installation Name: SURFACE INS MODERNIZATION

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	17 / 8.315	- / -	- / -	17 / 8.315
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	18 / 8.762	- / -	18 / 8.762
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	17 / 8.315	18 / 8.762	- / -	35 / 17.077

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17	-	-	-	18	-	35	
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17	-	-	-	18	-	35	

Footnotes:

⁽⁷⁾ GW053: Funding provides for procurement and installation of 6 systems, LHD (3) and LPD (3).

⁽⁸⁾ GW053: Funding provides for procurement and installation of 35 additional systems on DDG.

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6	P-1 Line Item Number / Title: 0670 / Other Navigation Equipment	Modification Number / Title: 4 / GW055: AN/WSN-9 SPEED LOG PROCUREMENT

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	0.000	1.900	2.039	8.988	-	8.988	6.920	3.532	3.299	0.692	-	27.370
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	0.000	1.900	2.039	8.988	-	8.988	6.920	3.532	3.299	0.692	-	27.370
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	0.000	1.900	2.039	8.988	-	8.988	6.920	3.532	3.299	0.692	-	27.370
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

These funds are for the procurement of AN/WSN-9 Speed Log upgrades on amphibious and surface platforms.

Installation Cost tables are shown separately in this P-3A for Amphibious and Surface platforms due to different installation plans and costs.

UNCLASSIFIED

LI 0670 - Other Navigation Equipment
Navy

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6	P-1 Line Item Number / Title: 0670 / Other Navigation Equipment	Modification Number / Title: 4 / GW055: AN/WSN-9 SPEED LOG PROCUREMENT

Modification Item 1 of 1: GW055: AN/WSN-9 SPEED LOG PROCUREMENT

Manufacturer Information

Manufacturer Name: WR Systems	Manufacturer Location: Norfolk, VA
Administrative Leadtime (in Months): 3	Production Leadtime (in Months): 5

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Dec 2013	Dec 2014	Dec 2015	Dec 2016	Dec 2017	Dec 2018	Dec 2019
Delivery Dates	May 2014	May 2015	May 2016	May 2017	May 2018	May 2019	May 2020

Installation Information

Method of Implementation: AIT:: Installation Name: AMPHIB AN/WSN-9

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	1 / 0.225	3 / 0.687	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 0.912
FY 2015	- / -	- / -	1 / 0.232	1 / 0.219	- / -	1 / 0.219	- / -	- / -	- / -	- / -	- / -	2 / 0.451
FY 2016	- / -	- / -	- / -	3 / 0.150	- / -	3 / 0.150	10 / 2.272	- / -	- / -	- / -	- / -	13 / 2.422
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.100	- / -	- / -	- / -	- / -	2 / 0.100
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	1 / 0.225	4 / 0.919	4 / 0.369	- / -	4 / 0.369	12 / 2.372	- / -	- / -	- / -	- / -	21 / 3.885

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	1	3	-	-	1	1	-	-	3	5	5	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21
Out	-	-	-	-	1	3	-	-	1	1	-	-	3	5	5	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21

Method of Implementation: AIT:: Installation Name: SURFACE AN/WSN-9

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6	P-1 Line Item Number / Title: 0670 / Other Navigation Equipment	Modification Number / Title: 4 / GW055: AN/WSN-9 SPEED LOG PROCUREMENT

Modification Item 1 of 1: GW055: AN/WSN-9 SPEED LOG PROCUREMENT

Installation Information

Method of Implementation: AIT:: Installation Name: SURFACE AN/WSN-9

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	9 / 0.444	- / -	9 / 0.444	6 / 1.398	- / -	- / -	- / -	- / -	15 / 1.842
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	8 / 0.400	4 / 0.932	- / -	- / -	- / -	12 / 1.332
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	8 / 0.400	3 / 0.699	- / -	- / -	11 / 1.099
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	8 / 0.400	3 / 0.692	- / -	11 / 1.092
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	9 / 0.444	- / -	9 / 0.444	14 / 1.798	12 / 1.332	11 / 1.099	3 / 0.692	- / -	49 / 5.365

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	9	3	3	-	8	1	3	-	8	-	3	-	8	-	3	-	-	-	49
Out	-	-	-	-	-	-	-	-	-	-	-	-	9	3	3	-	8	1	3	-	8	-	3	-	8	-	3	-	-	-	49

Footnotes:

⁽⁹⁾ GW055: Funding provides for procurement and installation of 21 systems, LSD (10) LHD (6) and LPD (5). LPD configuration is less complex than the LHD, therefore, unit costs are less and systems can be installed in the same year as procurement. FY16 installation funding (\$0.219M) is for AIT installation on LSD (qty 1) procured in FY15. Remaining FY16 installation funding (\$0.150M) is for both DSA and AIT LPD installations procured in FY16 (qty 3).

⁽¹⁰⁾ GW055: Funding provides for procurement and installation of 49 systems, CG (4), DDG (33), and MCM (12). CG configuration consists of additional hardware than other surface configurations; therefore, unit costs are higher. MCM complexity is between CG and DDG; therefore, unit costs are greater than DDG, but less than CG. Installation costs for CG and MCM are the same. Installation costs for DDG are lower than CG and MCM and can be installed in the same year as procurement. FY16 installation funding (\$0.444M) is for both DSA and AIT DDG installation procured in FY16 (qty 9).

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6				P-1 Line Item Number / Title: 0670 / Other Navigation Equipment					Modification Number / Title: 5 / GW058: NAVSSI CAPSTONE			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	0.000	-	-	1.613	-	1.613	1.314	3.010	1.702	1.387	-	9.026
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	0.000	-	-	1.613	-	1.613	1.314	3.010	1.702	1.387	-	9.026
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	0.000	-	-	1.613	-	1.613	1.314	3.010	1.702	1.387	-	9.026
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: These funds are required for the procurement, installation, and NRE/ILS/Support of NAVSSI Capstone upgrades on LHD platforms to support Ship Self Defense System (SSDS) upgrades.												

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6				P-1 Line Item Number / Title: 0670 / Other Navigation Equipment				Modification Number / Title: 5 / GW058: NAVSSI CAPSTONE					
Models of Systems Affected: GW058: NAVSSI CAPSTONE				Modification Type: NAVSSI CAPSTONE				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: GW058: NAVSSI CAPSTONE													
B Kits													
Recurring													
1.1) AMPHIB NAVSSI CAPSTONE - NonOrganic ⁽¹¹⁾	- / -	- / -	- / -	1 / 1.398	- / -	1 / 1.398	- / -	1 / 1.449	1 / 1.475	- / -	- / -	3 / 4.322	
Subtotal: Recurring	- / 0.000	- / -	- / -	- / 1.398	- / -	- / 1.398	- / -	- / 1.449	- / 1.475	- / -	- / -	- / 4.322	
Subtotal: GW058: NAVSSI CAPSTONE	- / -	- / -	- / -	1 / 1.398	- / -	1 / 1.398	- / -	1 / 1.449	1 / 1.475	- / -	- / -	3 / 4.322	
Subtotal: Procurement, All Modification Items	- / 0.000	- / -	- / -	- / 1.398	- / -	- / 1.398	- / -	- / 1.449	- / 1.475	- / -	- / -	- / 4.322	
Installation													
Modification Item 1 of 1: GW058: NAVSSI CAPSTONE	- / 0.000	- / -	- / -	- / 0.215	- / -	- / 0.215	- / 1.314	- / 1.561	- / 0.227	- / 1.387	- / -	- / 4.704	
Subtotal: Installation	- / 0.000	- / -	- / -	- / 0.215	- / -	- / 0.215	- / 1.314	- / 1.561	- / 0.227	- / 1.387	- / -	- / 4.704	
Total													
Total Cost (Procurement + Support + Installation)	0.000	-	-	1.613	-	1.613	1.314	3.010	1.702	1.387	-	9.026	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015																						
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6										P-1 Line Item Number / Title: 0670 / Other Navigation Equipment										Modification Number / Title: 5 / GW058: NAVSSI CAPSTONE												
Modification Item 1 of 1: GW058: NAVSSI CAPSTONE																																
Manufacturer Information																																
Manufacturer Name: TBD															Manufacturer Location: TBD																	
Administrative Leadtime (in Months): 3															Production Leadtime (in Months): 8																	
Dates		FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020						
Contract Dates										Dec 2015								Dec 2017				Dec 2018										
Delivery Dates										Aug 2016								Aug 2018				Aug 2019										
Installation Information																																
Method of Implementation: AIT:: Installation Name: AMPHIB NAVSSI CAPSTONE																																
Installation Cost		Prior Years		FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total		FY 2017		FY 2018		FY 2019		FY 2020		To Complete		Total								
		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)								
Prior Years		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -						
FY 2014		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -						
FY 2015		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -						
FY 2016		- / -		- / -		- / -		- / 0.215		- / -		- / 0.215		1 / 1.314		- / -		- / -		- / -		- / -		- / -		1 / 1.529						
FY 2017		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -						
FY 2018		- / -		- / -		- / -		- / -		- / -		- / -		- / -		1 / 1.561		- / -		- / -		- / -		- / -		1 / 1.561						
FY 2019		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / 0.227		1 / 1.387		- / -		- / -		1 / 1.614						
FY 2020		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -						
To Complete		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -						
Total		- / -		- / -		- / -		- / 0.215		- / -		- / 0.215		1 / 1.314		1 / 1.561		- / 0.227		1 / 1.387		- / -		- / -		3 / 4.704						
Installation Schedule																																
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
In	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-	3
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-	3
Footnotes:																																
⁽¹¹⁾ GW058: Funding provides for procurement and installation of 3 upgrades on LHD. FY16 installation funding (\$0.215M) is for DSA activities to support FY17 AIT installation (qty 1).																																

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6	P-1 Line Item Number / Title: 0670 / Other Navigation Equipment	Modification Number / Title: 6 / GW059: EMERGENCY NAVIGATION LAPTOP

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	0.000	-	-	5.654	-	5.654	2.440	0.858	0.176	-	-	9.128
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	0.000	-	-	5.654	-	5.654	2.440	0.858	0.176	-	-	9.128
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	0.000	-	-	5.654	-	5.654	2.440	0.858	0.176	-	-	9.128
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

These funds are required for the procurement, installation, and NRE/ILS/support of Emergency Navigation Laptops (ENL) on amphibious and surface platforms.

Installation Cost tables are shown separately in this P-3A for Amphib and Surface platforms due to different installation plans and costs.

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6				P-1 Line Item Number / Title: 0670 / Other Navigation Equipment						Modification Number / Title: 6 / GW059: EMERGENCY NAVIGATION LAPTOP			
Models of Systems Affected: GW059: EMERGENCY NAVIGATION LAPTOP				Modification Type: EMERGENCY NAVIGATION LAPTOP				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
<i>Modification Item 1 of 1:</i> GW059: EMERGENCY NAVIGATION LAPTOP													
B Kits													
Recurring													
1.1) AMPHIB EMERGENCY NAVIGATION LAPTOP - NonOrganic ⁽¹²⁾	- / -	- / -	- / -	20 / 0.993	- / -	20 / 0.993	- / -	- / -	- / -	- / -	- / -	20 / 0.993	
1.2) SURFACE EMERGENCY NAVIGATION LAPTOP - NonOrganic ⁽¹³⁾	- / -	- / -	- / -	88 / 3.955	- / -	88 / 3.955	19 / 0.875	12 / 0.584	- / -	- / -	- / -	119 / 5.414	
<i>Subtotal: Recurring</i>	- / 0.000	- / -	- / -	- / 4.948	- / -	- / 4.948	- / 0.875	- / 0.584	- / -	- / -	- / -	- / 6.407	
<i>Subtotal: GW059: EMERGENCY NAVIGATION LAPTOP</i>	- / -	- / -	- / -	108 / 4.948	- / -	108 / 4.948	19 / 0.875	12 / 0.584	- / -	- / -	- / -	139 / 6.407	
<i>Subtotal: Procurement, All Modification Items</i>	- / 0.000	- / -	- / -	- / 4.948	- / -	- / 4.948	- / 0.875	- / 0.584	- / -	- / -	- / -	- / 6.407	
Installation													
<i>Modification Item 1 of 1:</i> GW059: EMERGENCY NAVIGATION LAPTOP	- / 0.000	- / -	- / -	- / 0.706	- / -	- / 0.706	- / 1.565	- / 0.274	- / 0.176	- / -	- / -	- / 2.721	
<i>Subtotal: Installation</i>	- / 0.000	- / -	- / -	- / 0.706	- / -	- / 0.706	- / 1.565	- / 0.274	- / 0.176	- / -	- / -	- / 2.721	
Total													
Total Cost (Procurement + Support + Installation)	0.000	-	-	5.654	-	5.654	2.440	0.858	0.176	-	-	9.128	

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6	P-1 Line Item Number / Title: 0670 / Other Navigation Equipment	Modification Number / Title: 6 / GW059: EMERGENCY NAVIGATION LAPTOP

Modification Item 1 of 1: GW059: EMERGENCY NAVIGATION LAPTOP

Manufacturer Information

Manufacturer Name: TBD	Manufacturer Location: TBD
Administrative Leadtime (in Months): 4	Production Leadtime (in Months): 6

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates			Jan 2016	Jan 2017	Jan 2018		
Delivery Dates			Jul 2016	Jul 2017	Jul 2018		

Installation Information

Method of Implementation: AIT:: Installation Name: AMPHIB EMERGENCY NAVIGATION LAPTOP

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / 0.106	- / -	- / 0.106	20 / 0.319	- / -	- / -	- / -	- / -	20 / 0.425
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	- / 0.106	- / -	- / 0.106	20 / 0.319	- / -	- / -	- / -	- / -	20 / 0.425

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	5	5	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	20
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	5	5	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	20

Method of Implementation: AIT:: Installation Name: SURFACE EMERGENCY NAVIGATION LAPTOP

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6	P-1 Line Item Number / Title: 0670 / Other Navigation Equipment	Modification Number / Title: 6 / GW059: EMERGENCY NAVIGATION LAPTOP

Modification Item 1 of 1: GW059: EMERGENCY NAVIGATION LAPTOP

Installation Information

Method of Implementation: AIT:: Installation Name: SURFACE EMERGENCY NAVIGATION LAPTOP

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / 0.600	- / -	- / 0.600	88 / 1.246	- / -	- / -	- / -	- / -	88 / 1.846
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	19 / 0.274	- / -	- / -	- / -	19 / 0.274
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	12 / 0.176	- / -	- / -	12 / 0.176
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	- / 0.600	- / -	- / 0.600	88 / 1.246	19 / 0.274	12 / 0.176	- / -	- / -	119 / 2.296

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	22	22	22	22	4	5	5	5	3	3	3	3	-	-	-	-	-	119
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	22	22	22	22	4	5	5	5	3	3	3	3	-	-	-	-	-	119

Footnotes:

(12) GW059: Funding provides for procurement and installation of 20 systems, LHA (2), LHD (8), and LPD (10). FY16 installation funding (\$0.106M) is for DSA activities to support FY17 AIT installation (qty 20).

(13) GW059: Funding provides for procurement and installation of 119 systems for surface platforms, CG (14), DDG (64), LCS (16), MCM (12), and PC (13). FY16 installation funding (\$0.600M) is for DSA activities to support FY17-19 AIT installation (qty 119).

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6				P-1 Line Item Number / Title: 0670 / Other Navigation Equipment				Modification Number / Title: 7 / GW060: NEXT GENERATION FATHOMETER				

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	0.000	-	-	5.333	-	5.333	7.459	-	-	-	-	12.792
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	0.000	-	-	5.333	-	5.333	7.459	-	-	-	-	12.792
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	0.000	-	-	5.333	-	5.333	7.459	-	-	-	-	12.792
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

These funds are required for the procurement, installation, and NRE/ILS/support of Next Generation Fathometers to replace legacy AN/UQN-4/4A systems on amphibious and surface platforms.

Installation Cost tables are shown separately in this P-3A for Amphib and Surface platforms due to different installation plans and costs.

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6				P-1 Line Item Number / Title: 0670 / Other Navigation Equipment						Modification Number / Title: 7 / GW060: NEXT GENERATION FATHOMETER			
Models of Systems Affected: GW060: NEXT GENERATION FATHOMETER				Modification Type: NEXT GENERATION FATHOMETER				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
Modification Item 1 of 1: GW060: NEXT GENERATION FATHOMETER													
B Kits													
Recurring													
1.1) AMPHIB NEXT GENERATION FATHOMETER - NonOrganic ⁽¹⁴⁾	- / -	- / -	- / -	11 / 1.329	- / -	11 / 1.329	16 / 1.989	- / -	- / -	- / -	- / -	27 / 3.318	
1.2) SURFACE NEXT GENERATION FATHOMETER - NonOrganic ⁽¹⁵⁾	- / -	- / -	- / -	20 / 2.414	- / -	20 / 2.414	26 / 3.232	- / -	- / -	- / -	- / -	46 / 5.646	
<i>Subtotal: Recurring</i>	- / 0.000	- / -	- / -	- / 3.743	- / -	- / 3.743	- / 5.221	- / -	- / -	- / -	- / -	- / 8.964	
<i>Subtotal: GW060: NEXT GENERATION FATHOMETER</i>	- / -	- / -	- / -	31 / 3.743	- / -	31 / 3.743	42 / 5.221	- / -	- / -	- / -	- / -	73 / 8.964	
<i>Subtotal: Procurement, All Modification Items</i>	- / 0.000	- / -	- / -	- / 3.743	- / -	- / 3.743	- / 5.221	- / -	- / -	- / -	- / -	- / 8.964	
Installation													
Modification Item 1 of 1: GW060: NEXT GENERATION FATHOMETER	- / 0.000	- / -	- / -	- / 1.590	- / -	- / 1.590	- / 2.238	- / -	- / -	- / -	- / -	- / 3.828	
<i>Subtotal: Installation</i>	- / 0.000	- / -	- / -	- / 1.590	- / -	- / 1.590	- / 2.238	- / -	- / -	- / -	- / -	- / 3.828	
Total													
Total Cost (Procurement + Support + Installation)	0.000	-	-	5.333	-	5.333	7.459	-	-	-	-	12.792	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6	P-1 Line Item Number / Title: 0670 / Other Navigation Equipment	Modification Number / Title: 7 / GW060: NEXT GENERATION FATHOMETER

Modification Item 1 of 1: GW060: NEXT GENERATION FATHOMETER

Manufacturer Information

Manufacturer Name: TBD				Manufacturer Location: TBD			
Administrative Leadtime (in Months): 3				Production Leadtime (in Months): 3			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates			Dec 2015	Dec 2016			
Delivery Dates			Mar 2016	Mar 2017			

Installation Information

Method of Implementation: AIT:: Installation Name: AMPHIB NEXT GENERATION FATHOMETER

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	11 / 0.569	- / -	11 / 0.569	- / -	- / -	- / -	- / -	- / -	11 / 0.569
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	16 / 0.853	- / -	- / -	- / -	- / -	16 / 0.853
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	11 / 0.569	- / -	11 / 0.569	16 / 0.853	- / -	- / -	- / -	- / -	27 / 1.422

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	5	6	-	-	8	8	-	-	-	-	-	-	-	-	-	-	-	-	-	27
Out	-	-	-	-	-	-	-	-	-	-	-	5	6	-	-	8	8	-	-	-	-	-	-	-	-	-	-	-	-	-	27

Method of Implementation: AIT:: Installation Name: SURFACE NEXT GENERATION FATHOMETER

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6	P-1 Line Item Number / Title: 0670 / Other Navigation Equipment	Modification Number / Title: 7 / GW060: NEXT GENERATION FATHOMETER

Modification Item 1 of 1: GW060: NEXT GENERATION FATHOMETER

Installation Information

Method of Implementation: AIT:: Installation Name: SURFACE NEXT GENERATION FATHOMETER

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	20 / 1.021	- / -	20 / 1.021	- / -	- / -	- / -	- / -	- / -	20 / 1.021
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	26 / 1.385	- / -	- / -	- / -	- / -	26 / 1.385
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	20 / 1.021	- / -	20 / 1.021	26 / 1.385	- / -	- / -	- / -	- / -	46 / 2.406

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	10	10	-	-	13	13	-	-	-	-	-	-	-	-	-	-	-	-	-	46
Out	-	-	-	-	-	-	-	-	-	-	-	10	10	-	-	13	13	-	-	-	-	-	-	-	-	-	-	-	-	-	46

Footnotes:

(14) GW060: Funding provides for procurement and installation of 27 systems, LHD (7), LPD (10), and LSD (10). FY16 installation funding is for both DSA (\$0.142M) and AIT installation (\$0.427M) of systems procured in FY16 (qty 11).

(15) GW060: Funding provides for procurement and installation of 46 systems, CG (9), LCC (2), and DDG (35). FY16 installation funding is for both DSA (\$0.255M) and AIT installation (\$0.766M) of systems procured in FY16 (qty 20).

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6	P-1 Line Item Number / Title: 0670 / Other Navigation Equipment	Modification Number / Title: 8 / GW061: MK 27 REPLACEMENT

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	0.000	-	-	2.088	-	2.088	2.094	-	-	-	-	4.182
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	0.000	-	-	2.088	-	2.088	2.094	-	-	-	-	4.182
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	0.000	-	-	2.088	-	2.088	2.094	-	-	-	-	4.182
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

These funds are required for the procurement, installation, and NRE/ILS/support of replacement for legacy MK27 Backup Heading References on amphibious and surface platforms.

Installation Cost tables are shown separately in this P-3A for Amphibious and Surface platforms due to different installation plans and costs.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6				P-1 Line Item Number / Title: 0670 / Other Navigation Equipment				Modification Number / Title: 8 / GW061: MK 27 REPLACEMENT					
Models of Systems Affected: GW061: MK 27 REPLACEMENT				Modification Type: MK 27 REPLACEMENT				Related RDT&E PEs: 0204228N					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: GW061: MK 27 REPLACEMENT													
B Kits													
Recurring													
1.1) AMPHIB MK 27 REPLACEMENT - NonOrganic ⁽¹⁶⁾		- / -	- / -	- / -	5 / 0.619	- / -	5 / 0.619	5 / 0.619	- / -	- / -	- / -	- / -	10 / 1.238
1.2) SURFACE MK 27 REPLACEMENT - NonOrganic ⁽¹⁷⁾		- / -	- / -	- / -	6 / 0.650	- / -	6 / 0.650	6 / 0.650	- / -	- / -	- / -	- / -	12 / 1.300
Subtotal: Recurring		- / 0.000	- / -	- / -	- / 1.269	- / -	- / 1.269	- / 1.269	- / -	- / -	- / -	- / -	- / 2.538
Subtotal: GW061: MK 27 REPLACEMENT		- / -	- / -	- / -	11 / 1.269	- / -	11 / 1.269	11 / 1.269	- / -	- / -	- / -	- / -	22 / 2.538
Subtotal: Procurement, All Modification Items		- / 0.000	- / -	- / -	- / 1.269	- / -	- / 1.269	- / 1.269	- / -	- / -	- / -	- / -	- / 2.538
Installation													
Modification Item 1 of 1: GW061: MK 27 REPLACEMENT		- / 0.000	- / -	- / -	- / 0.819	- / -	- / 0.819	- / 0.825	- / -	- / -	- / -	- / -	- / 1.644
Subtotal: Installation		- / 0.000	- / -	- / -	- / 0.819	- / -	- / 0.819	- / 0.825	- / -	- / -	- / -	- / -	- / 1.644
Total													
Total Cost (Procurement + Support + Installation)		0.000	-	-	2.088	-	2.088	2.094	-	-	-	-	4.182

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015																					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6										P-1 Line Item Number / Title: 0670 / Other Navigation Equipment										Modification Number / Title: 8 / GW061: MK 27 REPLACEMENT											
Modification Item 1 of 1: GW061: MK 27 REPLACEMENT																															
Manufacturer Information																															
Manufacturer Name: TBD															Manufacturer Location: TBD																
Administrative Leadtime (in Months): 3															Production Leadtime (in Months): 3																
Dates		FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020					
Contract Dates										Dec 2015				Dec 2016																	
Delivery Dates										Mar 2016				Mar 2017																	
Installation Information																															
Method of Implementation: AIT:: Installation Name: AMPHIB MK 27 REPLACEMENT																															
Installation Cost		Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total																		
		Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)																		
Prior Years		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2014		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2015		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2016		- / -	- / -	- / -	5 / 0.375	- / -	5 / 0.375	- / -	- / -	- / -	- / -	- / -	5 / 0.375																		
FY 2017		- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.375	- / -	- / -	- / -	- / -	5 / 0.375																		
FY 2018		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2019		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2020		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
To Complete		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
Total		- / -	- / -	- / -	5 / 0.375	- / -	5 / 0.375	5 / 0.375	- / -	- / -	- / -	- / -	10 / 0.750																		
Installation Schedule																															
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020					
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	-	-	-	-	-	-	-	-	-	-	-	3	2	-	-	3	2	-	-	-	-	-	-	-	-	-	-	-	-	-	10
Out	-	-	-	-	-	-	-	-	-	-	-	3	2	-	-	3	2	-	-	-	-	-	-	-	-	-	-	-	-	-	10
Method of Implementation: AIT:: Installation Name: SURFACE MK 27 REPLACEMENT																															
Installation Cost		Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total																		
		Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)																		
Prior Years		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2014		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		

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Exhibit P-3a, Individual Modification: PB 2016 Navy			Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6		P-1 Line Item Number / Title: 0670 / Other Navigation Equipment			Modification Number / Title: 8 / GW061: MK 27 REPLACEMENT

Modification Item 1 of 1: GW061: MK 27 REPLACEMENT

Installation Information

Method of Implementation: AIT:: Installation Name: SURFACE MK 27 REPLACEMENT

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	6 / 0.444	- / -	6 / 0.444	- / -	- / -	- / -	- / -	- / -	6 / 0.444
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	6 / 0.450	- / -	- / -	- / -	- / -	6 / 0.450
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	6 / 0.444	- / -	6 / 0.444	6 / 0.450	- / -	- / -	- / -	- / -	12 / 0.894

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	3	3	-	-	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	12
Out	-	-	-	-	-	-	-	-	-	-	-	3	3	-	-	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	12

Footnotes:

(16) GW061: Funding provides for procurement and installation of 10 systems on LSD. Installation funding is for both DSA and AIT installation of systems procured in the same year. The installation cost associated with GW061 is a combination of DSA (\$19K/install) and AIT Installation (\$56K/install).

(17) GW061: Funding provides for procurement and installation of 12 systems on PC. Installation funding is for both DSA and AIT installation of systems procured in the same year. The installation cost associated with GW061 is a combination of DSA (\$19K/install) and AIT Installation (\$56K/install).

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6				P-1 Line Item Number / Title: 0670 / Other Navigation Equipment					Modification Number / Title: 9 / GW062: AN/WSN-7 CDU TECH REFRESH			

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	0.000	-	-	2.273	-	2.273	-	0.630	2.640	2.079	-	7.622
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	0.000	-	-	2.273	-	2.273	-	0.630	2.640	2.079	-	7.622
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	0.000	-	-	2.273	-	2.273	-	0.630	2.640	2.079	-	7.622
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

These funds are required for the procurement, installation, and NRE/ILS/support of replacement for legacy AN/WSN-7 Control Display Units on amphibious and surface platforms.

Installation Cost tables are shown separately in this P-3A for Amphibious and Surface platforms due to different installation plans and costs.

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6					P-1 Line Item Number / Title: 0670 / Other Navigation Equipment					Modification Number / Title: 9 / GW062: AN/WSN-7 CDU TECH REFRESH			
Models of Systems Affected: GW062: AN/WSN-7 CDU TECH REFRESH					Modification Type: AN/WSN-7 CDU TECH REFRESH					Related RDT&E PEs:			
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
<i>Modification Item 1 of 1:</i> GW062: AN/WSN-7 CDU TECH REFRESH													
B Kits													
Recurring													
1.1) AMBPHIB AN/WSN-7 CDU TECH REFRESH - NonOrganic ⁽¹⁸⁾	- / -	- / -	- / -	5 / 0.405	- / -	5 / 0.405	- / -	5 / 0.445	5 / 0.465	- / -	- / -	15 / 1.315	
1.2) SURFACE AN/WSN-7 CDU TECH REFRESH - NonOrganic ⁽¹⁹⁾	- / -	- / -	- / -	15 / 1.215	- / -	15 / 1.215	- / -	- / -	15 / 1.395	15 / 1.470	- / -	45 / 4.080	
<i>Subtotal: Recurring</i>	- / 0.000	- / -	- / -	- / 1.620	- / -	- / 1.620	- / -	- / 0.445	- / 1.860	- / 1.470	- / -	- / 5.395	
<i>Subtotal: GW062: AN/WSN-7 CDU TECH REFRESH</i>	- / -	- / -	- / -	20 / 1.620	- / -	20 / 1.620	- / -	5 / 0.445	20 / 1.860	15 / 1.470	- / -	60 / 5.395	
<i>Subtotal: Procurement, All Modification Items</i>	- / 0.000	- / -	- / -	- / 1.620	- / -	- / 1.620	- / -	- / 0.445	- / 1.860	- / 1.470	- / -	- / 5.395	
Installation													
<i>Modification Item 1 of 1:</i> GW062: AN/WSN-7 CDU TECH REFRESH	- / 0.000	- / -	- / -	- / 0.653	- / -	- / 0.653	- / -	- / 0.185	- / 0.780	- / 0.609	- / -	- / 2.227	
<i>Subtotal: Installation</i>	- / 0.000	- / -	- / -	- / 0.653	- / -	- / 0.653	- / -	- / 0.185	- / 0.780	- / 0.609	- / -	- / 2.227	
Total													
Total Cost (Procurement + Support + Installation)	0.000	-	-	2.273	-	2.273	-	0.630	2.640	2.079	-	7.622	

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Exhibit P-3a, Individual Modification: PB 2016 Navy				Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6		P-1 Line Item Number / Title: 0670 / Other Navigation Equipment			Modification Number / Title: 9 / GW062: AN/WSN-7 CDU TECH REFRESH		

Modification Item 1 of 1: GW062: AN/WSN-7 CDU TECH REFRESH

Manufacturer Information

Manufacturer Name: TBD				Manufacturer Location: TBD			
Administrative Leadtime (in Months): 3				Production Leadtime (in Months): 3			

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates			Dec 2015	Dec 2016	Dec 2017	Dec 2018	
Delivery Dates			Mar 2016	Mar 2017	Mar 2018	Mar 2019	

Installation Information

Method of Implementation: AIT:: Installation Name: AMBPHIB AN/WSN-7 CDU TECH REFRESH

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	5 / 0.165	- / -	5 / 0.165	- / -	- / -	- / -	- / -	- / -	5 / 0.165
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.185	- / -	- / -	- / -	5 / 0.185
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.195	- / -	- / -	5 / 0.195
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	5 / 0.165	- / -	5 / 0.165	- / -	5 / 0.185	5 / 0.195	- / -	- / -	15 / 0.545

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	2	3	-	-	-	-	-	-	2	3	-	-	2	3	-	-	-	-	-	15
Out	-	-	-	-	-	-	-	-	-	-	-	2	3	-	-	-	-	-	-	2	3	-	-	2	3	-	-	-	-	-	15

Method of Implementation: AIT:: Installation Name: SURFACE AN/WSN-7 CDU TECH REFRESH

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 6	P-1 Line Item Number / Title: 0670 / Other Navigation Equipment	Modification Number / Title: 9 / GW062: AN/WSN-7 CDU TECH REFRESH

Modification Item 1 of 1: GW062: AN/WSN-7 CDU TECH REFRESH

Installation Information

Method of Implementation: AIT:: Installation Name: SURFACE AN/WSN-7 CDU TECH REFRESH

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	15 / 0.488	- / -	15 / 0.488	- / -	- / -	- / -	- / -	- / -	15 / 0.488
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	15 / 0.585	- / -	- / -	15 / 0.585
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	15 / 0.609	- / -	15 / 0.609
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	15 / 0.488	- / -	15 / 0.488	- / -	- / -	15 / 0.585	15 / 0.609	- / -	45 / 1.682

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	7	8	-	-	-	-	-	-	-	-	-	7	8	-	-	7	8	-	45	
Out	-	-	-	-	-	-	-	-	-	-	-	7	8	-	-	-	-	-	-	-	-	-	7	8	-	-	7	8	-	45	

Footnotes:

(18) GW062: Funding provides for procurement and installation of 15 upgrades, LHA (2), LHD (6), and LPD (7). Installation funding is for both DSA and AIT installation of systems procured in the same year. The installation cost associated with GW062 is a combination of DSA (\$8K/install) and AIT Installation (\$25K/install).

(19) GW062: Funding provides for procurement and installation of 45 upgrades, CG (8), DDG (35), and LCS (2). Installation funding is for both DSA and AIT installation of systems procured in the same year. The installation cost associated with GW062 is a combination of DSA (\$8K/install) and AIT Installation (\$25K/install).

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy **Date:** February 2015

Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 8: Periscopes	P-1 Line Item Number / Title: 0831 / Sub Periscopes & Imaging Equip

ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:					Other Related Program Elements:				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	520.553	45.704	57.221	63.109	-	63.109	60.343	54.746	67.918	72.482	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	520.553	45.704	57.221	63.109	-	63.109	60.343	54.746	67.918	72.482	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	520.553	45.704	57.221	63.109	-	63.109	60.343	54.746	67.918	72.482	Continuing	Continuing
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (<i>\$ in Millions</i>)	-	8.501	5.244	5.797	-	5.797	1.946	3.009	1.055	0.253	Continuing	Continuing
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Submarine Periscopes and Imaging Equipment Program procures the Type 18 and Type 8 periscope upgrades; all variants of Photonics Mast (PM), including Low Profile Photonics Mast (LPPM) and 360 degree imaging capability and incorporates it in the Integrated Submarine Imaging System (ISIS), and VIRGINIA Class imaging upgrades and Photonics land based spares. Commander Naval Submarine Force (CNSF), Operations Review Group (ORG) selected the Periscope Acquisition, Tracking, and Ranging with Improved Observation Techniques (PATRIOT) Type 18 Periscope Rangefinder and the Night Owl Type 8 Infra-Red (IR) Periscope as high priority tactical control technologies to field. By OPNAV Ltr Ser. N77/3U629209, 12 June 2003, OPNAV N87 established the ISIS to rapidly field these systems and integrate existing periscope imagery systems into a single system for installation on board submarines. An ISIS capability development document (CDD) was approved 22 Dec, 2011. The CDD is used to fully integrate the ISIS program of record into the submarine force's rapid insertion technology process and to incorporate Fleet-endorsed requirements such as LPPM that are not levied by the ISIS Operational Requirements Documents. ISIS supports high intensity operations in the littorals, providing the submarine force with the tactical imaging systems necessary to safely and effectively employ its surveillance and weapons capabilities. The IR imaging capability improves imaging at night and in low visibility conditions. The PATRIOT Automated Range Finder provides a 360 degree search independent of the visual search, enhanced situational awareness and provides a collision avoidance capability. Tactical Imagery Technology Insertion includes the common control and displays hardware and software on all platforms regardless of imaging sensors, an integrated imaging system that provides for operator alerts, imaging enhancement tools and contact analysis tools, and a fully Submarine Warfare Federated Tactical Systems (SWFTS) integrated system providing "any display anywhere." Funding improves submarine imaging capability in the areas of: ship safety, Intelligence, Surveillance and Reconnaissance (ISR), tactical control (contact management in the littorals) to provide high quality imaging 24 hours a day, 7 days a week in all weather conditions to support submarine operations worldwide. ISIS provides for the modernization of imaging systems to improve imaging capabilities for the submarine force in support of ISR requirements. This includes the integration of new capabilities, both inboard hardware and software, into the Type 18 and Type 8 Periscopes for LOS ANGELES Class and SEAWOLF Class submarines, the Photonics Mast Variant (PMV) for SSGN, and Photonics Mast upgrades to the VIRGINIA Class AN/BVS-1 including the AN/BVY-1 ISIS capability and LPPM.

PL010 - Imaging ISIS Technical Insertions - Continuing in FY16 funding procures Imaging systems and Technical Insertion kits and spares to upgrade ISIS systems on LOS ANGELES, SEAWOLF, VA and OHIO Class SSGN platforms to allow for Capability Insertion and obsolescence avoidance. FY16 procurement also adds funding for improved copper-fiber optic diploops and hull penetrators required to support advanced Imaging and Early Warning capabilities included in Low Profile Photonics Mast and future 360 degree Imaging masts.

PL011 - Imaging Block Upgrades - FY16 funding continues procurement of Periscopes and Imaging Equipment reliability, capability, and maintainability upgrades, e.g., Eyepiece Box, periscope mechanical hoisting mechanism upgrades, inboard electronic processing hardware and associated Integrated Logistics Support (ILS), Robust Surveillance Program, Certification of regional repair centers for Imaging System maintenance and technical data. Variable quantities and types are bought in each fiscal year.

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 8: Periscopes		P-1 Line Item Number / Title: 0831 / Sub Periscopes & Imaging Equip
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:
PL012 - Funds procure replacement in support of Special Support Equipment (SSE) for each maintenance level to ensure systems are maintained in a state of operational readiness. Equipment includes Q-Band Test Equipment, Mast Dynamic Collimator, Eyebox/Mast Test Set, and Antenna/Outer Head Simulator required due to obsolescence and age of existing imaging systems SSE. PL015 - Funding is for Interim Contract Support provided by the periscope manufacturer. The majority of the funding is for Type18 service life extension, depot repair and upgrades for all configurations of Photonics Masts. It also funds all levels of repairs for all types of tactical submarine imaging systems. PL016 - Funding is for imaging systems training requirements to include curriculum development, training materials, and initial factory training pilot course conduct, Navy Training Plans, and instructor advisory services. PL022 - Funding is for the procurement of SSN ISIS Imaging Systems. ISIS provides for the modernization of imaging systems to improve imaging capabilities for the submarine force in support of ISR requirements. This includes the integration of the Type 18 PATRIOT Automated Range Finder and Type 8 IR Periscope as well as other new capabilities into the Type 18 and Type 8 Periscopes. PL023 - Funding is for the procurement and support of VIRGINIA Class ISIS Imaging Systems, as well as, Technical Insertions required for sustainment of VIRGINIA Class platforms, including the integration of the Mast Technical Insertions into the Photonics Mast. These systems support submarine force ISR requirements through the modernization of legacy hardware which allows for Capability Insertion, obsolescence avoidance, and improved system reliability. PL025 - Funding is for the procurement, support and technical insertion of VIRGINIA Class LPPM production and land based spare masts and associated components. The spares will be used for replacement Imaging Masts on VIRGINIA Class Submarines. Quantity of spares will increase with VIRGINIA submarine procurements. PL830 - Production Engineering funds provide the following functions: value engineering; review and evaluation of production design data and documentation; production configuration control; maintenance engineering efforts designed and incorporated into the production manufacturing process, and other related engineering functions that are integral to all of the Imaging Systems and ancillary components. PL900 - Imaging Systems engineering, technical and maintenance services funds provide the following functions: In-Service engineering and technical support to deployed Periscope and Imaging Equipment, imaging system installation and integration planning, SHIPALT and TEMPALT technical data preparation, production hardware design review, engineering/technical support for installations, training materials development, field engineering and technical problem resolution, block upgrade installation planning, configuration management, and maintenance planning including inventory, management, repair, and restoration scheduling. PL927 - Funding is for the installation of Fleet Modernization Program Equipment. PL4M7 - Funding is for the installation of non-Fleet Modernization Program Equipment.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy	Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 8: Periscopes	P-1 Line Item Number / Title: 0831 / Sub Periscopes & Imaging Equip

ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:

Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
SUBMARINE PERISCOPES & IMAGING EQUIPMENT	P-40a		- / 93.433	- / 13.758	- / 12.219	- / 14.033	- / -	- / 14.033
1 / PL010 - Imaging ISIS Technical Insertion (ORDALT)	P-3a		- / 0.000	- / 30.623	- / 27.911	- / 40.212	- / -	- / 40.212
2 / PL011 Imaging Block Upgrades/Technical Insertions Imaging: Type 8/Type 18 (ORDALT)	P-3a		- / 20.030	- / 0.351	- / 0.357	- / 0.363	- / -	- / 0.363
3 / PL011 Imaging Block Upgrades/Technical Insertions Imaging: ISIS (ORDALT)	P-3a		- / 45.090	- / 0.196	- / -	- / -	- / -	- / -
4 / PL022 Integrated Submarine Imaging System (ISIS) Increment I Capability Insertion (SHIPALT)	P-3a		- / 295.584	- / 0.327	- / -	- / -	- / -	- / -
5 / PL023 VIRGINIA Class Imaging Modernization AN/BVS-1 ISIS (SHIPALT)	P-3a		- / 54.302	- / 0.370	- / -	- / -	- / -	- / -
6 / PL023 VIRGINIA Class Imaging Modernization AN/BVS-1 MAST Tech Insertion (SHIPALT)	P-3a		- / 12.114	- / 0.079	- / -	- / -	- / -	- / -
7 / PL025 Low Profile Photonics Mast (LPPM) (SHIPALT)	P-3a		- / 0.000	- / -	- / 16.734	- / 8.501	- / -	- / 8.501
Total Gross/Weapon System Cost			- / 520.553	- / 45.704	- / 57.221	- / 63.109	- / -	- / 63.109

Exhibits Schedule			FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
SUBMARINE PERISCOPES & IMAGING EQUIPMENT	P-40a		- / -	- / -	- / -	- / -	- / -	- / -
1 / PL010 - Imaging ISIS Technical Insertion (ORDALT)	P-3a		- / 39.434	- / 26.210	- / 26.154	- / 31.200	Continuing	Continuing
2 / PL011 Imaging Block Upgrades/Technical Insertions Imaging: Type 8/Type 18 (ORDALT)	P-3a		- / 0.369	- / 0.376	- / 0.384	- / 0.392	Continuing	Continuing
3 / PL011 Imaging Block Upgrades/Technical Insertions Imaging: ISIS (ORDALT)	P-3a		- / -	- / -	- / -	- / -	- / -	- / 45.286
4 / PL022 Integrated Submarine Imaging System (ISIS) Increment I Capability Insertion (SHIPALT)	P-3a		- / -	- / -	- / -	- / -	- / -	- / 295.911
5 / PL023 VIRGINIA Class Imaging Modernization AN/BVS-1 ISIS (SHIPALT)	P-3a		- / -	- / -	- / -	- / -	- / -	- / 54.672
6 / PL023 VIRGINIA Class Imaging Modernization AN/BVS-1 MAST Tech Insertion (SHIPALT)	P-3a		- / -	- / -	- / -	- / -	- / -	- / 12.193
7 / PL025 Low Profile Photonics Mast (LPPM) (SHIPALT)	P-3a		- / 0.112	- / 8.875	- / 17.989	- / 18.349	- / -	- / 70.560
Total Gross/Weapon System Cost			- / 60.343	- / 54.746	- / 67.918	- / 72.482	Continuing	Continuing

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 8								P-1 Line Item Number / Title: 0831 / Sub Periscopes & Imaging Equip							Aggregated Items Title: SUBMARINE PERISCOPES & IMAGING EQUIPMENT				

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) PL012 PERISCOPE SPECIAL SUPPORT EQUIPMENT																				
1.1) SPECIAL SUPPORT EQUIPMENT	A		-	-	4.865	-	-	0.518	-	-	0.528	-	-	0.536	-	-	-	-	-	0.536
Subtotal: 1) PL012 PERISCOPE SPECIAL SUPPORT EQUIPMENT			-	-	4.865	-	-	0.518	-	-	0.528	-	-	0.536	-	-	-	-	-	0.536
2) PL015 PERISCOPE INTERIM CONTRACTOR SUPPORT ⁽¹⁾																				
2.1) INTERIM CONTRACTOR SUPPORT	A		-	-	59.465	-	-	9.225	-	-	7.598	-	-	9.339	-	-	-	-	-	9.339
Subtotal: 2) PL015 PERISCOPE INTERIM CONTRACTOR SUPPORT			-	-	59.465	-	-	9.225	-	-	7.598	-	-	9.339	-	-	-	-	-	9.339
3) PL016 PERISCOPE TRAINING																				
3.1) TRAINING	A		-	-	1.279	-	-	0.172	-	-	0.176	-	-	0.178	-	-	-	-	-	0.178
Subtotal: 3) PL016 PERISCOPE TRAINING			-	-	1.279	-	-	0.172	-	-	0.176	-	-	0.178	-	-	-	-	-	0.178
4) PL830 PERISCOPE PRODUCTION ENGINEERING																				
4.1) PRODUCTION ENGINEERING	A		-	-	23.776	-	-	3.459	-	-	3.525	-	-	3.582	-	-	-	-	-	3.582
Subtotal: 4) PL830 PERISCOPE PRODUCTION ENGINEERING			-	-	23.776	-	-	3.459	-	-	3.525	-	-	3.582	-	-	-	-	-	3.582
5) PL900 PERISCOPE CONSULTING SERVICES																				
5.1) CONSULTING SERVICES	A		-	-	4.048	-	-	0.384	-	-	0.392	-	-	0.398	-	-	-	-	-	0.398
Subtotal: 5) PL900 PERISCOPE CONSULTING SERVICES			-	-	4.048	-	-	0.384	-	-	0.392	-	-	0.398	-	-	-	-	-	0.398
Total			-	-	93.433	-	-	13.758	-	-	12.219	-	-	14.033	-	-	-	-	-	14.033

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	FY 2017			FY 2018			FY 2019			FY 2020			To Complete			Total Cost								
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)						
1) PL012 PERISCOPE SPECIAL SUPPORT EQUIPMENT																										
1.1) SPECIAL SUPPORT EQUIPMENT	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy																Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 8								P-1 Line Item Number / Title: 0831 / Sub Periscopes & Imaging Equip								Aggregated Items Title: SUBMARINE PERISCOPES & IMAGING EQUIPMENT			

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2017			FY 2018			FY 2019			FY 2020			To Complete			Total Cost		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Subtotal: 1) PL012 PERISCOPE SPECIAL SUPPORT EQUIPMENT			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2) PL015 PERISCOPE INTERIM CONTRACTOR SUPPORT ⁽¹⁾																				
2.1) INTERIM CONTRACTOR SUPPORT	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 2) PL015 PERISCOPE INTERIM CONTRACTOR SUPPORT			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3) PL016 PERISCOPE TRAINING																				
3.1) TRAINING	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 3) PL016 PERISCOPE TRAINING			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4) PL830 PERISCOPE PRODUCTION ENGINEERING																				
4.1) PRODUCTION ENGINEERING	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 4) PL830 PERISCOPE PRODUCTION ENGINEERING			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5) PL900 PERISCOPE CONSULTING SERVICES																				
5.1) CONSULTING SERVICES	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 5) PL900 PERISCOPE CONSULTING SERVICES			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Footnotes:

⁽¹⁾ FY16 increase provides support and repairs for new prototype Low Profile Photonics Masts (LPPM).

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Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 8				P-1 Line Item Number / Title: 0831 / Sub Periscopes & Imaging Equip					Modification Number / Title: 1 / PL010 - Imaging ISIS Technical Insertion				
Resource Summary		Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)		-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)		0.000	30.623	27.911	40.212	-	40.212	39.434	26.210	26.154	31.200	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)		-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)		0.000	30.623	27.911	40.212	-	40.212	39.434	26.210	26.154	31.200	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)		-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)		0.000	30.623	27.911	40.212	-	40.212	39.434	26.210	26.154	31.200	Continuing	Continuing
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)													
Initial Spares (\$ in Millions)		-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)		-	-	-	-	-	-	-	-	-	-	-	-
Description: Provides for the modernization of Imaging systems and Technical Insertion kits to upgrade Integrated Submarine Imaging System (ISIS) on LOS ANGELES, SEAWOLF, VIRGINIA and OHIO Class SSGN platforms in support of Intelligence, Surveillance and Reconnaissance (ISR) requirements. FY16 \$4.0 million Technical Insertion increase to VIRGINIA ISIS backfit cost procures two (2) copper fiber diploop and hull penetrator sets required for VIRGINIA Class Submarines receiving ISIS Backfit Upgrades to field LPPM and future masts. Base VIRGINIA ISIS Backfit cost (\$9.991 million) reflects historical VIRGINIA Backfit cost baseline.													

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 8				P-1 Line Item Number / Title: 0831 / Sub Periscopes & Imaging Equip				Modification Number / Title: 1 / PL010 - Imaging ISIS Technical Insertion				
Models of Systems Affected: ISIS TI				Modification Type: ORDALT				Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Procurement												
Modification Item 1 of 1: PL010 - Imaging ISIS Technical Insertion												
B Kits												
Recurring												
1.1.1) 688/21 TECHNICAL INSERTION - NonOrganic	- / -	2 / 1.932	6 / 5.906	7 / 7.001	- / -	7 / 7.001	- / -	7 / 7.262	5 / 5.291	4 / 4.317	- / -	31 / 31.709
1.1.2) VA TECHNICAL INSERTION - NonOrganic	- / -	- / -	- / -	- / -	- / -	- / -	4 / 8.905	- / -	- / -	1 / 4.982	- / -	5 / 13.887
1.1.3) SSGN TECHNICAL INSERTION - NonOrganic	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 2.776	2 / 2.831	- / -	4 / 5.607
1.1.4) VA ISIS BACKFIT - NonOrganic ⁽²⁾	- / -	- / -	- / -	2 / 13.991	- / -	2 / 13.991	2 / 10.171	- / -	- / -	- / -	- / -	4 / 24.162
1.1.5) SSBN BACKFIT - NonOrganic	- / -	- / -	- / -	2 / 0.380	- / -	2 / 0.380	2 / 0.387	3 / 0.591	3 / 0.603	3 / 0.615	- / -	13 / 2.576
1.1.6) ISIS TI CCM - Organic	- / -	1 / 0.966	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.966
Subtotal: Recurring	- / 0.000	- / 2.898	- / 5.906	- / 21.372	- / -	- / 21.372	- / 19.463	- / 7.853	- / 8.670	- / 12.745	- / -	- / 78.907
Subtotal: PL010 - Imaging ISIS Technical Insertion	- / -	3 / 2.898	6 / 5.906	11 / 21.372	- / -	11 / 21.372	8 / 19.463	10 / 7.853	10 / 8.670	10 / 12.745	- / -	58 / 78.907
Subtotal: Procurement, All Modification Items	- / 0.000	- / 2.898	- / 5.906	- / 21.372	- / -	- / 21.372	- / 19.463	- / 7.853	- / 8.670	- / 12.745	- / -	- / 78.907
Support (All Modification Items)												
2.1) ISIS TECHNICAL INSERTION NRE ⁽³⁾	- / -	- / 27.725	- / 21.405	- / 17.015	- / -	- / 17.015	- / 16.195	- / 15.456	- / 14.995	- / 15.471	Continuing	Continuing
Subtotal: Support	- / 0.000	- / 27.725	- / 21.405	- / 17.015	- / -	- / 17.015	- / 16.195	- / 15.456	- / 14.995	- / 15.471	Continuing	Continuing
Installation												
Modification Item 1 of 1: PL010 - Imaging ISIS Technical Insertion	- / 0.000	- / -	- / 0.600	- / 1.825	- / -	- / 1.825	- / 3.776	- / 2.901	- / 2.489	- / 2.984	- / 3.002	- / 17.577
Subtotal: Installation	- / 0.000	- / -	- / 0.600	- / 1.825	- / -	- / 1.825	- / 3.776	- / 2.901	- / 2.489	- / 2.984	- / 3.002	- / 17.577
Total												
Total Cost (Procurement + Support + Installation)	0.000	30.623	27.911	40.212	-	40.212	39.434	26.210	26.154	31.200	Continuing	Continuing

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Exhibit P-3a, Individual Modification: PB 2016 Navy				Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 8		P-1 Line Item Number / Title: 0831 / Sub Periscopes & Imaging Equip			Modification Number / Title: 1 / PL010 - Imaging ISIS Technical Insertion		

Modification Item 1 of 1: PL010 - Imaging ISIS Technical Insertion

Manufacturer Information

Manufacturer Name: LMC	Manufacturer Location: Manassas, VA
Administrative Leadtime (in Months): 6	Production Leadtime (in Months): 12

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Mar 2014	Mar 2015	Mar 2016	Mar 2017	Mar 2018	Mar 2019	Mar 2020
Delivery Dates	Mar 2015	Mar 2016	Mar 2017	Mar 2018	Mar 2019	Mar 2020	Mar 2021

Installation Information

Method of Implementation: AIT:: Installation Name: 688/21 TECHNICAL INSERTION

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / -	2 / 0.600	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.600
FY 2015	- / -	- / -	- / -	6 / 1.825	- / -	6 / 1.825	- / -	- / -	- / -	- / -	- / -	6 / 1.825
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	7 / 2.037	- / -	- / -	- / -	- / -	7 / 2.037
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	7 / 2.121	- / -	- / -	7 / 2.121
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 1.644	- / -	5 / 1.644
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 1.342	4 / 1.342
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	2 / 0.600	6 / 1.825	- / -	6 / 1.825	7 / 2.037	- / -	7 / 2.121	5 / 1.644	4 / 1.342	31 / 9.569

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	1	1	-	-	2	2	2	-	3	2	2	-	-	-	-	-	3	3	1	-	2	2	1	4	31
Out	-	-	-	-	-	-	1	1	-	-	2	2	2	-	3	2	2	-	-	-	-	-	3	3	1	-	2	2	1	4	31

Method of Implementation: AIT:: Installation Name: VA TECHNICAL INSERTION

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 8	P-1 Line Item Number / Title: 0831 / Sub Periscopes & Imaging Equip	Modification Number / Title: 1 / PL010 - Imaging ISIS Technical Insertion

Modification Item 1 of 1: PL010 - Imaging ISIS Technical Insertion

Installation Information

Method of Implementation: AIT:: Installation Name: VA TECHNICAL INSERTION

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 1.129	- / -	- / -	- / -	4 / 1.129
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.293	1 / 0.293
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 1.129	- / -	- / -	1 / 0.293	5 / 1.422

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	1	-	-	-	-	-	-	-	-	1	5	
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	1	-	-	-	-	-	-	-	-	1	5	

Method of Implementation: AIT:: Installation Name: SSGN TECHNICAL INSERTION

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.965	- / -	2 / 0.965
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.984	2 / 0.984
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.965	2 / 0.984	4 / 1.949

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 8	P-1 Line Item Number / Title: 0831 / Sub Periscopes & Imaging Equip	Modification Number / Title: 1 / PL010 - Imaging ISIS Technical Insertion

Modification Item 1 of 1: PL010 - Imaging ISIS Technical Insertion

Installation Information

Method of Implementation: AIT:: Installation Name: SSGN TECHNICAL INSERTION

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	2	4	
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	2	4	

Method of Implementation: AIT:: Installation Name: VA ISIS BACKFIT

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	2 / 1.503	- / -	- / -	- / -	- / -	2 / 1.503
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 1.532	- / -	- / -	- / -	2 / 1.532
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	- / -	- / -	- / -	2 / 1.503	2 / 1.532	- / -	- / -	- / -	4 / 3.035

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	1	1	-	-	-	-	-	-	-	-	-	-	4
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	1	1	-	-	-	-	-	-	-	-	-	-	4

Method of Implementation: AIT:: Installation Name: SSBN BACKFIT

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 8	P-1 Line Item Number / Title: 0831 / Sub Periscopes & Imaging Equip	Modification Number / Title: 1 / PL010 - Imaging ISIS Technical Insertion

Modification Item 1 of 1: PL010 - Imaging ISIS Technical Insertion

Installation Information

Method of Implementation: AIT:: Installation Name: SSBN BACKFIT

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.236	- / -	- / -	- / -	- / -	2 / 0.236
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.240	- / -	- / -	- / -	2 / 0.240
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.368	- / -	- / -	3 / 0.368
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.375	- / -	3 / 0.375
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.383	3 / 0.383
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.236	2 / 0.240	3 / 0.368	3 / 0.375	3 / 0.383	13 / 1.602

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	1	1	-	-	1	1	1	-	1	1	1	3	13
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	1	1	-	-	1	1	1	-	1	1	1	3	13

Method of Implementation (Organic): Not Installed - ISIS TI CCM

Installation Quantity: 1

Footnotes:

- (2) Increase of \$4.0 million to fund two (2) copper fiber diploop and hull penetrator sets required for VIRGINIA Class Submarines receiving ISIS Backfit Upgrades to field LPPM and future masts.
- (3) Increased TI/APB NRE reflects funding required for productionization of externally developed Advanced Processor Build (APB) capabilities and ISIS software stability support.

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 8	P-1 Line Item Number / Title: 0831 / Sub Periscopes & Imaging Equip	Modification Number / Title: 2 / PL011 Imaging Block Upgrades/ Technical Insertions Imaging: Type 8/ Type 18

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	20.030	0.351	0.357	0.363	-	0.363	0.369	0.376	0.384	0.392	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	20.030	0.351	0.357	0.363	-	0.363	0.369	0.376	0.384	0.392	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	20.030	0.351	0.357	0.363	-	0.363	0.369	0.376	0.384	0.392	Continuing	Continuing
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Provides obsolescence related upgrades for Submarine Periscopes. One (1) set is procured in each fiscal year that includes variable quantities.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 8				P-1 Line Item Number / Title: 0831 / Sub Periscopes & Imaging Equip						Modification Number / Title: 2 / PL011 Imaging Block Upgrades/ Technical Insertions Imaging: Type 8/ Type 18			
Models of Systems Affected: TYPE 8/TYPE 18				Modification Type: ORDALT					Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: PL011 Imaging Block Upgrades/Technical Insertions Imaging: Type 8/Type 18													
B Kits													
Recurring													
1.1.1) TYPE 8/TYPE 18 - NonOrganic	64 / 15.203	1 / 0.239	1 / 0.243	1 / 0.247	- / -	1 / 0.247	1 / 0.251	1 / 0.256	1 / 0.261	1 / 0.267	Continuing	Continuing	
Subtotal: Recurring	- / 15.203	- / 0.239	- / 0.243	- / 0.247	- / -	- / 0.247	- / 0.251	- / 0.256	- / 0.261	- / 0.267	Continuing	Continuing	
Subtotal: PL011 Imaging Block Upgrades/Technical Insertions Imaging: Type 8/Type 18	64 / 15.203	1 / 0.239	1 / 0.243	1 / 0.247	- / -	1 / 0.247	1 / 0.251	1 / 0.256	1 / 0.261	1 / 0.267	Continuing	Continuing	
Subtotal: Procurement, All Modification Items	- / 15.203	- / 0.239	- / 0.243	- / 0.247	- / -	- / 0.247	- / 0.251	- / 0.256	- / 0.261	- / 0.267	Continuing	Continuing	
Installation													
Modification Item 1 of 1: PL011 Imaging Block Upgrades/Technical Insertions Imaging: Type 8/Type 18	- / 4.827	- / 0.112	- / 0.114	- / 0.116	- / -	- / 0.116	- / 0.118	- / 0.120	- / 0.123	- / 0.125	- / 0.128	- / 5.783	
Subtotal: Installation	- / 4.827	- / 0.112	- / 0.114	- / 0.116	- / -	- / 0.116	- / 0.118	- / 0.120	- / 0.123	- / 0.125	- / 0.128	- / 5.783	
Total													
Total Cost (Procurement + Support + Installation)	20.030	0.351	0.357	0.363	-	0.363	0.369	0.376	0.384	0.392	Continuing	Continuing	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 8	P-1 Line Item Number / Title: 0831 / Sub Periscopes & Imaging Equip	Modification Number / Title: 2 / PL011 Imaging Block Upgrades/ Technical Insertions Imaging: Type 8/ Type 18

Modification Item 1 of 1: PL011 Imaging Block Upgrades/Technical Insertions Imaging: Type 8/Type 18

Manufacturer Information

Manufacturer Name: Multiple Vendors	Manufacturer Location: Various
Administrative Leadtime (in Months): 6	Production Leadtime (in Months): 14

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Mar 2014	Mar 2015	Mar 2016	Mar 2017	Mar 2018	Mar 2019	Mar 2020
Delivery Dates	May 2015	May 2016	May 2017	May 2018	May 2019	May 2020	May 2021

Installation Information

Method of Implementation: AIT:: Installation Name: TYPE 8/TYPE 18

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	63 / 4.827	1 / 0.112	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	64 / 4.939
FY 2014	- / -	- / -	1 / 0.114	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.114
FY 2015	- / -	- / -	- / -	1 / 0.116	- / -	1 / 0.116	- / -	- / -	- / -	- / -	- / -	1 / 0.116
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.118	- / -	- / -	- / -	- / -	1 / 0.118
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.120	- / -	- / -	- / -	1 / 0.120
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.123	- / -	- / -	1 / 0.123
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.125	- / -	1 / 0.125
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.128	1 / 0.128
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	63 / 4.827	1 / 0.112	1 / 0.114	1 / 0.116	- / -	1 / 0.116	1 / 0.118	1 / 0.120	1 / 0.123	1 / 0.125	1 / 0.128	71 / 5.783

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	63	-	-	1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	1	-	1	71
Out	63	-	-	1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	1	-	1	71

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 8				P-1 Line Item Number / Title: 0831 / Sub Periscopes & Imaging Equip					Modification Number / Title: 3 / PL011 Imaging Block Upgrades/ Technical Insertions Imaging: ISIS				
Resource Summary		Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>		-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>		45.090	0.196	-	-	-	-	-	-	-	-	-	45.286
Less PY Advance Procurement <i>(\$ in Millions)</i>		-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>		45.090	0.196	-	-	-	-	-	-	-	-	-	45.286
Plus CY Advance Procurement <i>(\$ in Millions)</i>		-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>		45.090	0.196	-	-	-	-	-	-	-	-	-	45.286
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)													
Initial Spares <i>(\$ in Millions)</i>		-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>		-	-	-	-	-	-	-	-	-	-	-	-
Description: Imaging Technical Insertion kits upgrade the Integrated Submarine Imaging System (ISIS) on LOS ANGELES, SEAWOLF, and OHIO Class (SSGN) platforms to allow for obsolescence avoidance. FY14 completes TI installations of TI's previously procured under PL011. Procurements were merged into PL010 beginning FY14.													

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 8					P-1 Line Item Number / Title: 0831 / Sub Periscopes & Imaging Equip					Modification Number / Title: 3 / PL011 Imaging Block Upgrades/ Technical Insertions Imaging: ISIS			
Models of Systems Affected: ISIS IMAGING BLOCK UPGRADES/TECHNICAL INSERTIONS					Modification Type: ORDALT					Related RDT&E PEs:			
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Procurement													
<i>Modification Item 1 of 1:</i> PL011 Imaging Block Upgrades/Technical Insertions Imaging: ISIS													
B Kits													
Recurring													
1.1.1) TECHNICAL INSERTIONS - NonOrganic	17 / 15.937	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	17 / 15.937
<i>Subtotal: Recurring</i>	- / 15.937	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 15.937
<i>Subtotal: PL011 Imaging Block Upgrades/Technical Insertions Imaging: ISIS</i>	17 / 15.937	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	17 / 15.937
<i>Subtotal: Procurement, All Modification Items</i>	- / 15.937	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 15.937
Support (All Modification Items)													
2.1) TECHNICAL INSERTION NRE	- / 23.136	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 23.136
<i>Subtotal: Support</i>	- / 23.136	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 23.136
Installation													
<i>Modification Item 1 of 1:</i> PL011 Imaging Block Upgrades/Technical Insertions Imaging: ISIS	- / 6.017	- / 0.196	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 6.213
<i>Subtotal: Installation</i>	- / 6.017	- / 0.196	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 6.213
Total													
Total Cost (Procurement + Support + Installation)	45.090	0.196	-	-	-	-	-	-	-	-	-	-	45.286

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy				Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 8		P-1 Line Item Number / Title: 0831 / Sub Periscopes & Imaging Equip			Modification Number / Title: 3 / PL011 Imaging Block Upgrades/ Technical Insertions Imaging: ISIS		

Modification Item 1 of 1: PL011 Imaging Block Upgrades/Technical Insertions Imaging: ISIS

Manufacturer Information

Manufacturer Name: LMC				Manufacturer Location: Manassas, VA			
Administrative Leadtime (in Months): 6				Production Leadtime (in Months): 12			

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: AIT:: Installation Name: TECHNICAL INSERTIONS

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	13 / 6.017	4 / 0.196	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	17 / 6.213
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	13 / 6.017	4 / 0.196	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	17 / 6.213

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	13	-	1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17
Out	13	-	1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 8	P-1 Line Item Number / Title: 0831 / Sub Periscopes & Imaging Equip	Modification Number / Title: 4 / PL022 Integrated Submarine Imaging System (ISIS) Increment I Capability Insertion

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	295.584	0.327	-	-	-	-	-	-	-	-	-	295.911
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	295.584	0.327	-	-	-	-	-	-	-	-	-	295.911
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	295.584	0.327	-	-	-	-	-	-	-	-	-	295.911
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Provides for the modernization of submarine imaging systems to improve imaging capabilities in support of Intelligence, Surveillance and Reconnaissance (ISR) requirements. FY14 completes increment I installations of previously procured systems.

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 8				P-1 Line Item Number / Title: 0831 / Sub Periscopes & Imaging Equip						Modification Number / Title: 4 / PL022 Integrated Submarine Imaging System (ISIS) Increment I Capability Insertion			
Models of Systems Affected: ISIS INCREMENT I				Modification Type: SHIPALT					Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: PL022 Integrated Submarine Imaging System (ISIS) Increment I Capability Insertion													
B Kits													
Recurring													
1.1.1) ISIS CAPABILITY INSERTION - NonOrganic	47 / 213.024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	47 / 213.024	
1.1.2) CAPABILITY INSERTION SPARES/CCM - Organic	8 / 27.357	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	8 / 27.357	
Subtotal: Recurring	- / 240.381	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 240.381	
Subtotal: PL022 Integrated Submarine Imaging System (ISIS) Increment I Capability Insertion	55 / 240.381	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	55 / 240.381	
Subtotal: Procurement, All Modification Items	- / 240.381	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 240.381	
Support (All Modification Items)													
2.1) ISIS CAPABILITY INSERTION NRE	- / 14.339	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 14.339	
Subtotal: Support	- / 14.339	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 14.339	
Installation													
Modification Item 1 of 1: PL022 Integrated Submarine Imaging System (ISIS) Increment I Capability Insertion	- / 40.864	- / 0.327	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 41.191	
Subtotal: Installation	- / 40.864	- / 0.327	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 41.191	
Total													
Total Cost (Procurement + Support + Installation)	295.584	0.327	-	-	-	-	-	-	-	-	-	295.911	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 8	P-1 Line Item Number / Title: 0831 / Sub Periscopes & Imaging Equip	Modification Number / Title: 4 / PL022 Integrated Submarine Imaging System (ISIS) Increment I Capability Insertion

Modification Item 1 of 1: PL022 Integrated Submarine Imaging System (ISIS) Increment I Capability Insertion

Manufacturer Information

Manufacturer Name: Multiple Vendors	Manufacturer Location: Various
Administrative Leadtime (in Months): 6	Production Leadtime (in Months): 17

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: AIT:: Installation Name: ISIS CAPABILITY INSERTION

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	45 / 40.864	2 / 0.327	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	47 / 41.191
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	45 / 40.864	2 / 0.327	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	47 / 41.191

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	45	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	47
Out	45	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	47

Method of Implementation (Organic): Not Installed - CAPABILITY INSERTION SPARES/CCM **Installation Quantity:** 8

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 8	P-1 Line Item Number / Title: 0831 / Sub Periscopes & Imaging Equip	Modification Number / Title: 5 / PL023 VIRGINIA Class Imaging Modernization AN/BVS-1 ISIS

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	54.302	0.370	-	-	-	-	-	-	-	-	-	54.672
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	54.302	0.370	-	-	-	-	-	-	-	-	-	54.672
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	54.302	0.370	-	-	-	-	-	-	-	-	-	54.672
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Provides for the modernization of VA Class submarine imaging systems to install the Integrated Submarine Imaging System (ISIS) capabilities in support of Intelligence, Surveillance and Reconnaissance (ISR) requirements. Activities previously funded under PL023 in FY14 and earlier years are funded under PL010 in FY15 and future years.

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 8				P-1 Line Item Number / Title: 0831 / Sub Periscopes & Imaging Equip				Modification Number / Title: 5 / PL023 VIRGINIA Class Imaging Modernization AN/BVS-1 ISIS					
Models of Systems Affected: VA CLASS ISIS AN/ BVS-1				Modification Type: SHIPALT				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: PL023 VIRGINIA Class Imaging Modernization AN/BVS-1 ISIS													
B Kits													
Recurring													
1.1.1) VA CLASS ISIS - NonOrganic	6 / 30.065	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 30.065	
Subtotal: Recurring	- / 30.065	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 30.065	
Subtotal: PL023 VIRGINIA Class Imaging Modernization AN/BVS-1 ISIS	6 / 30.065	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 30.065	
Subtotal: Procurement, All Modification Items	- / 30.065	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 30.065	
Support (All Modification Items)													
2.1) VA CLASS ISIS TECHNICAL INSERTION NRE	- / 18.760	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 18.760	
2.2) VA ISIS PRODUCTION SUPPORT	- / 2.928	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.928	
Subtotal: Support	- / 21.688	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 21.688	
Installation													
Modification Item 1 of 1: PL023 VIRGINIA Class Imaging Modernization AN/BVS-1 ISIS	- / 2.549	- / 0.370	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.919	
Subtotal: Installation	- / 2.549	- / 0.370	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.919	
Total													
Total Cost (Procurement + Support + Installation)	54.302	0.370	-	-	-	-	-	-	-	-	-	54.672	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 8	P-1 Line Item Number / Title: 0831 / Sub Periscopes & Imaging Equip	Modification Number / Title: 5 / PL023 VIRGINIA Class Imaging Modernization AN/BVS-1 ISIS

Modification Item 1 of 1: PL023 VIRGINIA Class Imaging Modernization AN/BVS-1 ISIS

Manufacturer Information							
Manufacturer Name: LMC				Manufacturer Location: Manassas, VA			
Administrative Leadtime (in Months): 6				Production Leadtime (in Months): 12			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: AIT:: Installation Name: VA CLASS ISIS

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	4 / 2.549	2 / 0.370	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 2.919
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	4 / 2.549	2 / 0.370	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 2.919

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	4	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
Out	4	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 8	P-1 Line Item Number / Title: 0831 / Sub Periscopes & Imaging Equip	Modification Number / Title: 6 / PL023 VIRGINIA Class Imaging Modernization AN/BVS-1 MAST Tech Insertion

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	12.114	0.079	-	-	-	-	-	-	-	-	-	12.193
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	12.114	0.079	-	-	-	-	-	-	-	-	-	12.193
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	12.114	0.079	-	-	-	-	-	-	-	-	-	12.193
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Provides obsolescence related upgrades for VA Class submarine imaging systems in support of Intelligence, Surveillance and Reconnaissance (ISR) requirements. Activities previously funded under PL023 in FY14 and earlier years are funded under PL010 in FY15 and future years.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 8				P-1 Line Item Number / Title: 0831 / Sub Periscopes & Imaging Equip				Modification Number / Title: 6 / PL023 VIRGINIA Class Imaging Modernization AN/BVS-1 MAST Tech Insertion					
Models of Systems Affected: VA CLASS AN/BVS-1 MTI				Modification Type: SHIPALT				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: PL023 VIRGINIA Class Imaging Modernization AN/BVS-1 MAST Tech Insertion													
B Kits													
Recurring													
1.1.1) VA CLASS MTI - NonOrganic 12 / 7.476 - / - - / - - / - - / - - / - - / - - / - - 12 / 7.476													
1.1.2) VA CLASS MTI SPARES - Organic 2 / 1.274 - / - - / - - / - - / - - - / - - / - - - / - - 2 / 1.274													
Subtotal: Recurring - / 8.750 - / - - / - - / - - / - - - / - - / - - - / - - - / - - - / 8.750													
Subtotal: PL023 VIRGINIA Class Imaging Modernization AN/BVS-1 MAST Tech Insertion 14 / 8.750 - / - - / - - / - - / - - - / - - / - - - / - - - / - - 14 / 8.750													
Subtotal: Procurement, All Modification Items - / 8.750 - / - - / - - / - - / - - - / - - / - - - / - - - / - - - / 8.750													
Support (All Modification Items)													
2.1) VA CLASS MIT PRODUCTION SUPPORT - / 2.929 - / - - / - - / - - / - - - / - - / - - - / - - - / - - - / 2.929													
Subtotal: Support - / 2.929 - / - - / - - / - - / - - - / - - / - - - / - - - / - - - / 2.929													
Installation													
Modification Item 1 of 1: PL023 VIRGINIA Class Imaging Modernization AN/BVS-1 MAST Tech Insertion - / 0.435 - / 0.079 - / - - / - - / - - / - - - / - - / - - - / - - - / - - - / 0.514													
Subtotal: Installation - / 0.435 - / 0.079 - / - - / - - / - - / - - - / - - / - - - / - - - / - - - / 0.514													
Total													
Total Cost (Procurement + Support + Installation) 12.114 0.079 - - - - - - - - - - 12.193													

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 8	P-1 Line Item Number / Title: 0831 / Sub Periscopes & Imaging Equip	Modification Number / Title: 6 / PL023 VIRGINIA Class Imaging Modernization AN/BVS-1 MAST Tech Insertion

Modification Item 1 of 1: PL023 VIRGINIA Class Imaging Modernization AN/BVS-1 MAST Tech Insertion

Manufacturer Information

Manufacturer Name: Seacorp	Manufacturer Location: Middletown, RI
Administrative Leadtime (in Months): 6	Production Leadtime (in Months): 12

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: AIT:: Installation Name: VA CLASS MTI

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	8 / 0.435	4 / 0.079	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	12 / 0.514
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	8 / 0.435	4 / 0.079	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	12 / 0.514

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	8	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12
Out	8	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12

Method of Implementation (Organic): Not Installed - VA CLASS MTI SPARES **Installation Quantity:** 2

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 8				P-1 Line Item Number / Title: 0831 / Sub Periscopes & Imaging Equip						Modification Number / Title: 7 / PL025 Low Profile Photonics Mast (LPPM)		
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	0.000	-	16.734	8.501	-	8.501	0.112	8.875	17.989	18.349	-	70.560
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	0.000	-	16.734	8.501	-	8.501	0.112	8.875	17.989	18.349	-	70.560
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	0.000	-	16.734	8.501	-	8.501	0.112	8.875	17.989	18.349	-	70.560
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: VA Class Low Profile Photonics Mast (LPPM) with high definition color, short wave infrared, and laser range finder capabilities. Procures initial modernization assets as well as spare masts later in FYDP to maintain overall spares ratio for imaging masts as quantity of imaging equipped ships increases. Maintaining sufficient quantities of installed and spare LPPMs is essential to meet PACFLT requirements for all deploying VA class submarines in the Pacific to be equipped with low profile imaging masts.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 8				P-1 Line Item Number / Title: 0831 / Sub Periscopes & Imaging Equip					Modification Number / Title: 7 / PL025 Low Profile Photonics Mast (LPPM)				
Models of Systems Affected: Photonics Mast				Modification Type: SHIPALT					Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: PL025 Low Profile Photonics Mast (LPPM)													
B Kits													
Recurring													
1.1.1) LPPM - NonOrganic	- / -	- / -	2 / 16.734	1 / 8.501	- / -	1 / 8.501	- / -	- / -	- / -	- / -	- / -	3 / 25.235	
1.1.2) LPPM SPARE - Organic	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 8.818	2 / 17.989	2 / 18.349	- / -	5 / 45.156	
Subtotal: Recurring	- / 0.000	- / -	- / 16.734	- / 8.501	- / -	- / 8.501	- / -	- / 8.818	- / 17.989	- / 18.349	- / -	- / 70.391	
Subtotal: PL025 Low Profile Photonics Mast (LPPM)	- / -	- / -	2 / 16.734	1 / 8.501	- / -	1 / 8.501	- / -	1 / 8.818	2 / 17.989	2 / 18.349	- / -	8 / 70.391	
Subtotal: Procurement, All Modification Items	- / 0.000	- / -	- / 16.734	- / 8.501	- / -	- / 8.501	- / -	- / 8.818	- / 17.989	- / 18.349	- / -	- / 70.391	
Installation													
Modification Item 1 of 1: PL025 Low Profile Photonics Mast (LPPM)	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / 0.112	- / 0.057	- / -	- / -	- / -	- / 0.169	
Subtotal: Installation	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / 0.112	- / 0.057	- / -	- / -	- / -	- / 0.169	
Total													
Total Cost (Procurement + Support + Installation)	0.000	-	16.734	8.501	-	8.501	0.112	8.875	17.989	18.349	-	70.560	

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Exhibit P-3a, Individual Modification: PB 2016 Navy							Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 8				P-1 Line Item Number / Title: 0831 / Sub Periscopes & Imaging Equip				Modification Number / Title: 7 / PL025 Low Profile Photonics Mast (LPPM)				
Modification Item 1 of 1: PL025 Low Profile Photonics Mast (LPPM)												
Manufacturer Information												
Manufacturer Name: TBD ⁽⁴⁾							Manufacturer Location: TBD					
Administrative Leadtime <i>(in Months)</i> : 6							Production Leadtime <i>(in Months)</i> : 24					
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020					
Contract Dates		Jun 2015	Mar 2016		Mar 2018	Mar 2019	Mar 2020					
Delivery Dates		Jun 2017	Mar 2018		Mar 2020	Mar 2021	Mar 2022					
Manufacturer Name: L3 KEO ⁽⁵⁾							Manufacturer Location: Northhampton, MA					
Administrative Leadtime <i>(in Months)</i> : 6							Production Leadtime <i>(in Months)</i> : 24					
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020					
Contract Dates		Jun 2015										
Delivery Dates		Jun 2017										
Installation Information												
Method of Implementation: AIT:: Installation Name: LPPM												
Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.112	- / -	- / -	- / -	- / -	2 / 0.112
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.057	- / -	- / -	- / -	1 / 0.057
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.112	1 / 0.057	- / -	- / -	- / -	3 / 0.169

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Exhibit P-3a, Individual Modification: PB 2016 Navy																						Date: February 2015														
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 8										P-1 Line Item Number / Title: 0831 / Sub Periscopes & Imaging Equip										Modification Number / Title: 7 / PL025 Low Profile Photonics Mast (LPPM)																
Modification Item 1 of 1: PL025 Low Profile Photonics Mast (LPPM)																																				
Installation Information																																				
Method of Implementation: AIT:: Installation Name: LPPM																																				
Installation Schedule																																				
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot					
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			Q1	Q2	Q3	Q4	
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
Method of Implementation (Organic): Not Installed - LPPM SPARE																																				
																						Installation Quantity: 5														
Footnotes: ⁽⁴⁾ Competitive Contract Award ⁽⁵⁾ Prototype LPPM procured to support deployment requirements for pre-TI-16 equipped ships until modernized to TI-16. Unlike production LPPMs, prototype uses copper diploops compatible with earlier ISIS installations.																																				

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment							P-1 Line Item Number / Title: 0900 / DDG Mod					
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items: 0204228N					Other Related Program Elements: 0604567N, 0604307N				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	1,229.794	285.994	324.219	364.157	-	364.157	403.782	570.886	507.745	521.562	3,873.962	8,082.101
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	1,229.794	285.994	324.219	364.157	-	364.157	403.782	570.886	507.745	521.562	3,873.962	8,082.101
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	1,229.794	285.994	324.219	364.157	-	364.157	403.782	570.886	507.745	521.562	3,873.962	8,082.101
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	7.948	6.379	26.194	-	26.194	14.038	9.889	10.464	7.881	Continuing	Continuing
Flyaway Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: The FY 2016 funding request was reduced by \$15.528 million to account for the availability of prior years execution balance. 1. The DDG Modernization Program is required to upgrade the in-service Flight I, II, and IIA DDG-51 Class ships in order to keep them relevant and affordable components of the Navy's Sea Power 21 Plan. The DDG Modernization Program is composed of a series of improvements in both the HM&E and Combat Systems (CS). The modernization installations are planned for each ship at approximately the midlife point for each hull. The quantity line represents the total DDG Modernization availabilities (HM&E and Combat Systems) started in each fiscal year. HM&E: 2-1-3-2-6-5-5 Combat System: 1-2-1-1-1-2 The HM&E modernization will be comprised of the technologies transitioned from SCN funded DDG 111/112 and those additional improvements required to support the expected service life of the DDG 51 Class. The upgrades will focus on Technologies that reduce workload and Total Ownership Costs (TOC) for the remaining hull life of each ship. The centerpiece of the CS modernization is the Aegis Weapon System (AWS) upgrade. This upgrade will consist of the introduction of displays, computing equipment and the computer program required to implement Aegis Open Architecture (AOA) and replacement of the existing SPY-1D Signal Processor (SIGPRO) with the Multi-Mission Signal Processor. Selected warfighting improvements will also be installed in conjunction with the combat systems upgrade. This modernization program will provide a core modernization of the infrastructure "foundation" of each ship including the core engineering plan, core computing plan, and Combat Information Center (CIC). This modernization program will also provide an infrastructure foundation that will function as a landing zone for future warfighting capabilities. [P40A / DM002 - LAND BASED ENGINEERING SITES]: Funds will be used to upgrade shore facilities for HM&E alterations providing risk reduction testing and provide for Combat System and HM&E training products. [P40A / DM013 - CONJUNCTIVE ALTERATION DEFINITION AND INTEGRATION]: Procures Conjunctive Alteration Definition and Integration that includes equipment procurement, non-recurring and recurring engineering, equipment integration and Integrated Logistics Support (ILS) products for DDG 51 Class ships. [P40A / DMCA1 - DDG-51 MODERNIZATION PROGRAM CONGRESSIONAL ADD]: Description: DDG Modernization Congressional Add Procures AN/SQQ-89 A(V)15 with Multi-Function Towed Array (MFTA) and other equipment for DDG Modernization Program that consist of hardware, software, system engineering, integrated logistics support, system test & evaluation, training, data, installation assistance teams, spare and repair parts, and program management for DDG 51 Class ships. [P40A / DMCA3 - COMMUNICATIONS UPGRADE FOR DDG MOD CONGRESSIONAL ADD]: Description: Communications Upgrade for DDG Modernization Congressional Add												

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment		P-1 Line Item Number / Title: 0900 / DDG Mod
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items: 0204228N	Other Related Program Elements: 0604567N, 0604307N
Procures communications upgrades for DDG Modernization Program that consist of hardware, software, system engineering, integrated logistics support, system test & evaluation, training, data, installation assistance teams, spare and repair parts, and program management for DDG 51 Class ships.		
[P40A / DMCA4 - SMART VALVE AUTOMATIC FIRE SUPPRESSION SYSTEM]: Description: Congressional Add for Smart Valve system. The Smart Valve is the enabling technology behind the Automatic Fire Suppression System (AFSS), which provides the sensing capability to detect ruptures in the fire main piping system that occur during a damage event; the ability to isolate damaged sections of the piping system; and the embedded "intelligence" to reconfigure the system to maintain firefighting capability where it is most needed without any operator intervention for DDG 51 Class ships. [P40A / DSA FOR FY14 AVAILABILITY]: Interchangeable Cruiser/Destroyer combat system equipment will be installed during the FY 14 DDG combat system availability. This equipment will not require procurement funding in FY12; however, will still require Design Services Allocation (DSA) and installation funding in FY 12-14. [P40A / DM6IN - INSTALLATION]: Funds are for installation of DDG Modernization equipment in support of the Fleet Modernization Program. [P40A / AIT & CONJUNCTIVE ALTS INSTALLATION]: Includes conjunctive alteration installation, installation support, future DSA, and AIT support. [P40A / MRG Procurement]: The contractor will engineer, manufacture, test and deliver a fully operational DDG 51 Class Main Reduction Gear (MRG). The MRG combines the input of two LM2500 engines to convert the high speed, low torque output suitable to drive the propulsion shafting, and the related support systems and equipment. [P3A / DM001 - DDG MODERNIZATION HME (GEDMS)]: Gigabit Ethernet Data Multiplexing System (GEDMS) replaces the obsolete copper machinery control LAN infrastructure with a new system based on the widely used Ethernet industry standard. [P3A - 2 / DM001 - DDG MODERNIZATION HME (MCS/DCS)]: Machinery Control System (MCS) replaces the obsolete control consoles while also delivering enhanced capability to the fleet through improved situational awareness and reconfigurable user stations. The new consoles use COTS-based computers which connect via VME-chassis technology. The VME architecture is expected to be supportable for the remaining service life of the ship and will enable computer upgrades within the chassis thereby mitigating future obsolescence concerns. [P3A - 3 / DM001 - DDG MODERNIZATION HME (DVSS)]: Digital Video Surveillance System (DVSS) is a network of video cameras which are integrated into the Machinery Control system. This system is primarily a watch-stander situational awareness tool which supplements the workload reduction benefits of the new MCS. [P3A - 4 / DM001 - DDG MODERNIZATION HME (WIRELESS COMMUNICATIONS)]: Shipwide Interior Wireless Communication System (SIWCS) - provides point-to-point coverage throughout the internal spaces of the ship as well as topside, topside-to-interior, line of sight ship-to-ship & line of sight ship-to-shore communications capabilities. [P3A - 5 / DM001 - DDG MODERNIZATION HME (IBNS)]: The Integrated Bridge & Navigation System (IBNS) replaces obsolete bridge consoles and introduces flexibility with how the pilot house is managed during navigation. The key benefit is the ability for operating with fewer watch-standers, reduced watch standard workloads, and improved safety of navigation. [P3A - 6 / DM003 - MK 160 MOD 15 GWS]: Procures MK 160 Mod 15 Gun Weapon System (GWS) that includes equipment procurement, recurring engineering, equipment integration and Integrated Logistics Support (ILS) products for DDG 51 Class ships. [P3A - 7 / DM004 - AWS UPGRADE]: Procures equipment for the AWS Upgrades that includes equipment procurement, recurring engineering, equipment integration and Integrated Logistics Support (ILS) products for DDG 51 Class ships. [P3A - 8 / DM005 - MULTI-MISSION SIGPRO]: Procures Multi-Mission SIGPRO combat systems that includes equipment procurement, recurring engineering, equipment integration and Integrated Logistics Support (ILS) products for DDG 51 Class ships.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment		P-1 Line Item Number / Title: 0900 / DDG Mod
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items: 0204228N	Other Related Program Elements: 0604567N, 0604307N
[P3A - 9 / DM006 - MULTI-MISSION SSA/CWI MICROWAVE TUBES]: Procures Multi-Mission Solid State Amplifier (SSA)/Continuous Wave Illumination (CWI) Microwave Tubes upgrades for DDG Modernization Program that includes equipment procurement, recurring engineering, equipment integration and Integrated Logistics Support (ILS) products for DDG 51 Class ships.		
[P3A - 10 / DM007 - SPY-1D TRANSMITTER UPGRADES]: Procures SPY-1D Transmitter Upgrades combat systems that includes equipment procurement, recurring engineering, equipment integration and Integrated Logistics Support (ILS) products for DDG 51 Class ships.		
[P3A - 11 / DM008 - MULTI-MISSION BMD CAPABILITY]: Procures Multi-Mission Ballistic Missile Defense (BMD) Capability combat systems that includes equipment procurement, recurring engineering, equipment integration and Integrated Logistics Support (ILS) products for DDG 51 Class ships.		
[P3A - 12 / DM009 - VLS UPGRADES]: Procures Vertical Launch System (VLS) Modifications, Evolved Sea Sparrow Missile VLS Modifications, SM3 Operability Heating Ventilation Air Conditioning (HVAC) and VLS MODS for SM3 Block 3 combat systems that includes equipment procurement, recurring engineering, equipment integration and Integrated Logistics Support (ILS) products for DDG 51 Class ships.		
[P3A - 13 / DM010 - FCS STAMO]: Procures Stabilized Master Oscillator (STAMO) combat systems that include equipment procurement, recurring engineering, equipment integration and Integrated Logistics Support (ILS) products for DDG 51 Class ships.		
[P3A - 14 / DM011 - AN/SQQ-89 A(V15)]: Procures improved AN/SQQ-89(V)15 with Multi-Functional Towed Array (MFTA) combat systems to replace the installed MIL-STD AN/SQQ-89(V) that includes equipment procurement, recurring engineering, equipment integration and Integrated Logistics Support (ILS) products for DDG 51 Class ships.		
[P3A - 15 / DM012 - CEC]: Procures Cooperative Engagement Capability (CEC) combat systems that includes equipment procurement, recurring engineering, equipment integration and Integrated Logistics Support (ILS) products for DDG 51 Class ships.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy						Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment				P-1 Line Item Number / Title: 0900 / DDG Mod				
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items: 0204228N			Other Related Program Elements: 0604567N, 0604307N		
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
DDG Mod	P-40a		- / 381.199	- / 94.634	- / 123.863	- / 98.948	- / -	- / 98.948
1 / DM001 - DDG MODERNIZATION HME (GEDMS) ()	P-3a		- / 108.830	- / 22.237	- / 15.650	- / 33.934	- / -	- / 33.934
2 / DM001 - DDG MODERNIZATION HME (MCS/DCS) ()	P-3a		- / 154.029	- / 41.302	- / 31.200	- / 67.589	- / -	- / 67.589
3 / DM001 - DDG MODERNIZATION HME (DVSS) ()	P-3a		- / 10.979	- / 2.970	- / 2.377	- / 5.938	- / -	- / 5.938
4 / DM001 - DDG MODERNIZATION HME (WIRELESS COMMUNICATIONS) ()	P-3a		- / 7.502	- / 1.738	- / 0.969	- / 2.716	- / -	- / 2.716
5 / DM001 - DDG MODERNIZATION HME (IBNS) ()	P-3a		- / 76.945	- / 15.277	- / 12.288	- / 29.664	- / -	- / 29.664
6 / DM003 - MK 160 MOD 15 GWS ()	P-3a		- / 25.097	- / 5.696	- / 6.799	- / 5.851	- / -	- / 5.851
7 / DM004 - AWS UPGRADE ()	P-3a		- / 166.424	- / 36.703	- / 69.911	- / 47.570	- / -	- / 47.570
8 / DM005 - MULTI-MISSION SIGPRO ()	P-3a		- / 107.073	- / 20.367	- / 23.936	- / 22.312	- / -	- / 22.312
9 / DM006 - MULTI-MISSION SSA/CWI MICROWAVE TUBES ()	P-3a		- / 5.768	- / 0.993	- / 1.011	- / 1.029	- / -	- / 1.029
10 / DM007 - SPY-1D TRANSMITTER UPGRADES ()	P-3a		- / 26.413	- / 5.234	- / 5.382	- / 5.263	- / -	- / 5.263
11 / DM008 - MULTI-MISSION BMD CAPABILITY ()	P-3a		- / 10.190	- / 1.650	- / 1.680	- / 1.710	- / -	- / 1.710
12 / DM009 - VLS UPGRADES ()	P-3a		- / 46.934	- / 9.192	- / 12.019	- / 11.845	- / -	- / 11.845
13 / DM010 - FCS STAMO ()	P-3a		- / 12.005	- / 1.938	- / 0.500	- / 0.400	- / -	- / 0.400
14 / DM011 - AN/SQQ-89 A(V15) ()	P-3a		- / 61.677	- / 20.083	- / 11.635	- / 26.955	- / -	- / 26.955
15 / DM012 - CEC ()	P-3a		- / 28.729	- / 5.980	- / 5.001	- / 2.433	- / -	- / 2.433
Total Gross/Weapon System Cost			- / 1,229.794	- / 285.994	- / 324.219	- / 364.157	- / -	- / 364.157
Exhibits Schedule			FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
DDG Mod	P-40a		- / -	- / -	- / -	- / -	- / -	- / -
1 / DM001 - DDG MODERNIZATION HME (GEDMS) ()	P-3a		- / 33.929	- / 47.843	- / 43.966	- / 38.213	- / 245.352	- / 589.954
2 / DM001 - DDG MODERNIZATION HME (MCS/DCS) ()	P-3a		- / 68.730	- / 92.020	- / 86.104	- / 77.758	- / 490.170	- / 1,108.902
3 / DM001 - DDG MODERNIZATION HME (DVSS) ()	P-3a		- / 5.505	- / 8.433	- / 7.708	- / 6.701	- / 40.239	- / 90.850
4 / DM001 - DDG MODERNIZATION HME (WIRELESS COMMUNICATIONS) ()	P-3a		- / 2.416	- / 3.316	- / 3.153	- / 1.890	- / 1.092	- / 24.792
5 / DM001 - DDG MODERNIZATION HME (IBNS) ()	P-3a		- / 29.696	- / 36.707	- / 34.933	- / 34.593	- / 173.599	- / 443.702
6 / DM003 - MK 160 MOD 15 GWS ()	P-3a		- / 5.832	- / 9.845	- / 10.634	- / 12.059	- / 131.035	- / 212.848
7 / DM004 - AWS UPGRADE ()	P-3a		- / 46.227	- / 71.376	- / 77.598	- / 95.656	- / 1,086.874	- / 1,698.339
8 / DM005 - MULTI-MISSION SIGPRO ()	P-3a		- / 22.327	- / 39.602	- / 40.996	- / 44.158	- / 476.937	- / 797.708
9 / DM006 - MULTI-MISSION SSA/CWI MICROWAVE TUBES ()	P-3a		- / 1.048	- / 2.133	- / 2.171	- / 2.210	- / 23.688	- / 40.051
10 / DM007 - SPY-1D TRANSMITTER UPGRADES ()	P-3a		- / 5.358	- / 10.517	- / 10.877	- / 6.058	- / 0.890	- / 75.992
11 / DM008 - MULTI-MISSION BMD CAPABILITY ()	P-3a		- / 1.741	- / 3.544	- / 3.608	- / 3.673	- / 39.367	- / 67.163
12 / DM009 - VLS UPGRADES ()	P-3a		- / 12.628	- / 18.859	- / 19.562	- / 21.079	- / 239.621	- / 391.739
13 / DM010 - FCS STAMO ()	P-3a		- / -	- / -	- / -	- / -	- / -	- / 14.843
14 / DM011 - AN/SQQ-89 A(V15) ()	P-3a		- / 21.039	- / 28.256	- / 28.537	- / 14.006	- / 47.876	- / 260.064

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy							Date: February 2015	
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment					P-1 Line Item Number / Title: 0900 / DDG Mod			
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items: 0204228N			Other Related Program Elements: 0604567N, 0604307N		
Exhibits Schedule			FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
15 / DM012 - CEC ()	P-3a		- / -	- / -	- / -	- / -	- / -	- / 42.143
Total Gross/Weapon System Cost			- / 403.782	- / 570.886	- / 507.745	- / 521.562	- / 3,873.962	- / 8,082.101
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown. Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.								

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9									P-1 Line Item Number / Title: 0900 / DDG Mod						Aggregated Items Title: DDG Mod					
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.																				
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) DM002 - LAND BASED ENGINEERING SITES																				
1.1) DM002 - Land Based Engineering Sites	A		-	-	161.898	-	-	6.529	-	-	7.149	-	-	5.235	-	-	-	-	-	5.235
Subtotal: 1) DM002 - LAND BASED ENGINEERING SITES			-	-	161.898	-	-	6.529	-	-	7.149	-	-	5.235	-	-	-	-	-	5.235
2) DM013 - CONJUNCTIVE ALTERATION DEFINITION AND INTEGRATION																				
2.1) DM013 - CONJUNCTIVE ALTERATION DEFINITION AND INTEGRATION	A		-	-	33.810	-	-	8.737	-	-	7.706	-	-	15.418	-	-	-	-	-	15.418
Subtotal: 2) DM013 - CONJUNCTIVE ALTERATION DEFINITION AND INTEGRATION			-	-	33.810	-	-	8.737	-	-	7.706	-	-	15.418	-	-	-	-	-	15.418
3) DMCA1 - DDG-51 MODERNIZATION PROGRAM CONGRESSIONAL ADD																				
3.1) DMCA1 - DDG-51 MODERNIZATION	A		-	-	5.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3.2) SQQ-89A (V) W/ MFTA	A		-	-	25.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 3) DMCA1 - DDG-51 MODERNIZATION PROGRAM CONGRESSIONAL ADD			-	-	30.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4) DMCA3 - COMMUNICATIONS UPGRADE FOR DDG MOD CONGRESSIONAL ADD																				
4.1) DMCA3 - COMMUNICATIONS UPGRADE	A		-	-	3.120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 4) DMCA3 - COMMUNICATIONS UPGRADE FOR DDG MOD CONGRESSIONAL ADD			-	-	3.120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5) DMCA4 - SMART VALVE AUTOMATIC FIRE SUPPRESSION SYSTEM																				
5.1) SMART VALVE EQUIPMENT	A		-	-	2.480	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 5) DMCA4 - SMART VALVE AUTOMATIC FIRE SUPPRESSION SYSTEM			-	-	2.480	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6) DSA FOR FY14 AVAILABILITY																				

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9								P-1 Line Item Number / Title: 0900 / DDG Mod							Aggregated Items Title: DDG Mod				

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
6.1) DSA FOR FY14 AVAILABILITY	A		-	-	12.289	-	-	26.778	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: 6) DSA FOR FY14 AVAILABILITY</i>			-	-	12.289	-	-	26.778	-	-	-	-	-	-	-	-	-	-	-	-
7) DM6IN - INSTALLATION																				
7.1) AIT & CONJUNCTIVE ALTS INSTALLATION ⁽¹⁾	A		-	-	137.602	-	-	52.590	-	-	109.008	-	-	63.295	-	-	-	-	-	63.295
<i>Subtotal: 7) DM6IN - INSTALLATION</i>			-	-	137.602	-	-	52.590	-	-	109.008	-	-	63.295	-	-	-	-	-	63.295
8) MRG Procurement																				
8.1) MRG Equipment	A		-	-	-	-	-	-	-	-	-	15,000K	1	15.000	-	-	-	15,000K	1	15.000
<i>Subtotal: 8) MRG Procurement</i>			-	-	0.000	-	-	-	-	-	-	-	-	15.000	-	-	-	-	-	15.000
Total			-	-	381.199	-	-	94.634	-	-	123.863	-	-	98.948	-	-	-	-	-	98.948

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	FY 2017			FY 2018			FY 2019			FY 2020			To Complete			Total Cost		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) DM002 - LAND BASED ENGINEERING SITES																				
1.1) DM002 - Land Based Engineering Sites	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 1) DM002 - LAND BASED ENGINEERING SITES			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2) DM013 - CONJUNCTIVE ALTERATION DEFINITION AND INTEGRATION																				
2.1) DM013 - CONJUNCTIVE ALTERATION DEFINITION AND INTEGRATION	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 2) DM013 - CONJUNCTIVE ALTERATION DEFINITION AND INTEGRATION			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3) DMCA1 - DDG-51 MODERNIZATION PROGRAM CONGRESSIONAL ADD																				
3.1) DMCA1 - DDG-51 MODERNIZATION	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy																Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9								P-1 Line Item Number / Title: 0900 / DDG Mod								Aggregated Items Title: DDG Mod			

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2017			FY 2018			FY 2019			FY 2020			To Complete			Total Cost		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
3.2) SQQ-89A (V) W/ MFTA	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 3) DMCA1 - DDG-51 MODERNIZATION PROGRAM CONGRESSIONAL ADD			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4) DMCA3 - COMMUNICATIONS UPGRADE FOR DDG MOD CONGRESSIONAL ADD																				
4.1) DMCA3 - COMMUNICATIONS UPGRADE	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 4) DMCA3 - COMMUNICATIONS UPGRADE FOR DDG MOD CONGRESSIONAL ADD			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5) DMCA4 - SMART VALVE AUTOMATIC FIRE SUPPRESSION SYSTEM																				
5.1) SMART VALVE EQUIPMENT	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 5) DMCA4 - SMART VALVE AUTOMATIC FIRE SUPPRESSION SYSTEM			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6) DSA FOR FY14 AVAILABILITY																				
6.1) DSA FOR FY14 AVAILABILITY	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 6) DSA FOR FY14 AVAILABILITY			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7) DM6IN - INSTALLATION																				
7.1) AIT & CONJUNCTIVE ALTS INSTALLATION ⁽¹⁾	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 7) DM6IN - INSTALLATION			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8) MRG Procurement																				
8.1) MRG Equipment	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 8) MRG Procurement			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Footnotes:

⁽¹⁾ Includes conjunctive alteration installation, installation support, future DSA, and AIT support.

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0900 / DDG Mod	Modification Number / Title: 1 / DM001 - DDG MODERNIZATION HME (GEDMS)

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ <i>in Millions</i>)	108.830	22.237	15.650	33.934	-	33.934	33.929	47.843	43.966	38.213	245.352	589.954
Less PY Advance Procurement (\$ <i>in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ <i>in Millions</i>)	108.830	22.237	15.650	33.934	-	33.934	33.929	47.843	43.966	38.213	245.352	589.954
Plus CY Advance Procurement (\$ <i>in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ <i>in Millions</i>)	108.830	22.237	15.650	33.934	-	33.934	33.929	47.843	43.966	38.213	245.352	589.954
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (\$ <i>in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ <i>in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Gigabit Ethernet Data Multiplexing System (GEDMS) replaces the obsolete copper machinery control LAN infrastructure with a new system based on the widely used Ethernet industry standard.

Engineering Services:

Production Support Services are phased over a three (3) year span starting two (2) years prior to installation on a per hull basis. It includes five (5) elements that are related to the production and delivery of a usable end-item: Production Engineering, Quality Assurance, Product Improvement, Acceptance Test and Evaluation, and Contractor Engineering and Technical Services (CETS). Due to the phasing of the requirement over a three year period, engineering services will fluctuate depending on the number of ships in each year.

Five (5) elements and approximate breakdown is as follows:

Production Engineering includes preparation, test and technical evaluation of engineering changes to correct deficiencies in the production items; production configuration control; review and evaluation of production design data and documentation; and logistic supportability efforts.

Quality Assurance includes the preparation of procedures and the conduct of inspections, examinations and test during production that are necessary to deliver an item of the required quality as specified by the terms of the contract.

Product Improvement includes improving reliability/maintainability/availability, and the correction of deficiencies exclusive of contractual specifications.

Acceptance Test and Evaluation of a production item includes preparation of test plans, testing, data analysis, and data evaluation.

Contractor Engineering and Technical Services (CETS) includes the furnishing of advice, instruction, and training by commercial or industrial companies.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0900 / DDG Mod				Modification Number / Title: 1 / DM001 - DDG MODERNIZATION HME (GEDMS)					
Models of Systems Affected:				Modification Type:				Related RDT&E PEs: 0604567N					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: DM001 - DDG MODERNIZATION HME (GEDMS)													
B Kits													
Recurring													
1.1.1) GEDMS Equipment - NonOrganic ⁽²⁾	13 / 57.173	3 / 7.887	1 / 2.676	4 / 10.898	- / -	4 / 10.898	3 / 8.321	2 / 5.647	2 / 5.749	- / -	- / -	28 / 98.351	
1.1.2) GEDMS EQUIPMENT FLIGHT IIA - NonOrganic ⁽³⁾	- / -	- / -	1 / 1.285	2 / 2.616	- / -	2 / 2.616	2 / 2.663	3 / 4.066	3 / 4.139	3 / 4.213	20 / 30.105	34 / 49.087	
Subtotal: Recurring	- / 57.173	- / 7.887	- / 3.961	- / 13.514	- / -	- / 13.514	- / 10.984	- / 9.713	- / 9.888	- / 4.213	- / 30.105	- / 147.438	
Subtotal: DM001 - DDG MODERNIZATION HME (GEDMS)	13 / 57.173	3 / 7.887	2 / 3.961	6 / 13.514	- / -	6 / 13.514	5 / 10.984	5 / 9.713	5 / 9.888	3 / 4.213	20 / 30.105	62 / 147.438	
Subtotal: Procurement, All Modification Items	- / 57.173	- / 7.887	- / 3.961	- / 13.514	- / -	- / 13.514	- / 10.984	- / 9.713	- / 9.888	- / 4.213	- / 30.105	- / 147.438	
Support (All Modification Items)													
2.1) GEDMS Engineering Services	- / 12.957	- / 5.628	- / 3.197	- / 4.623	- / -	- / 4.623	- / 4.814	- / 4.950	- / 5.039	- / 5.130	- / 44.506	- / 90.844	
Subtotal: Support	- / 12.957	- / 5.628	- / 3.197	- / 4.623	- / -	- / 4.623	- / 4.814	- / 4.950	- / 5.039	- / 5.130	- / 44.506	- / 90.844	
Installation													
Modification Item 1 of 1: DM001 - DDG MODERNIZATION HME (GEDMS)	- / 38.700	- / 8.722	- / 8.492	- / 15.797	- / -	- / 15.797	- / 18.131	- / 33.180	- / 29.039	- / 28.870	- / 170.741	- / 351.672	
Subtotal: Installation	- / 38.700	- / 8.722	- / 8.492	- / 15.797	- / -	- / 15.797	- / 18.131	- / 33.180	- / 29.039	- / 28.870	- / 170.741	- / 351.672	
Total													
Total Cost (Procurement + Support + Installation)	108.830	22.237	15.650	33.934	-	33.934	33.929	47.843	43.966	38.213	245.352	589.954	

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Exhibit P-3a, Individual Modification: PB 2016 Navy				Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9		P-1 Line Item Number / Title: 0900 / DDG Mod			Modification Number / Title: 1 / DM001 - DDG MODERNIZATION HME (GEDMS)		

Modification Item 1 of 1: DM001 - DDG MODERNIZATION HME (GEDMS)

Manufacturer Information

Manufacturer Name: Boeing	Manufacturer Location: Anaheim, CA
Administrative Leadtime (in Months): 6	Production Leadtime (in Months): 16

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Aug 2014	Aug 2015	Aug 2016	Aug 2017	Jun 2018	May 2019	Jun 2020
Delivery Dates	Dec 2015	Dec 2016	Dec 2017	Dec 2018	Oct 2019	Sep 2020	Oct 2021

Installation Information

Method of Implementation: SHIPYARD:: Installation Name: GEDMS Equipment

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	10 / 38.700	2 / 8.022	1 / 4.067	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	13 / 50.789
FY 2014	- / -	- / 0.700	- / 3.920	3 / 11.128	- / -	3 / 11.128	- / -	- / -	- / -	- / -	- / -	3 / 15.748
FY 2015	- / -	- / -	- / 0.267	- / 1.562	- / -	- / 1.562	1 / 4.376	- / -	- / -	- / -	- / -	1 / 6.205
FY 2016	- / -	- / -	- / -	- / 1.061	- / -	- / 1.061	- / 5.942	4 / 16.744	- / -	- / -	- / -	4 / 23.747
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.779	- / 4.355	3 / 12.310	- / -	- / -	3 / 17.444
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.579	- / 3.244	2 / 9.016	- / 8.524	2 / 21.363
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.590	- / 3.304	2 / 9.162	2 / 13.056
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	10 / 38.700	2 / 8.722	1 / 8.254	3 / 13.751	- / -	3 / 13.751	1 / 11.097	4 / 21.678	3 / 16.144	2 / 12.320	2 / 17.686	28 / 148.352

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	10	-	1	1	-	-	1	-	-	-	3	-	-	-	1	-	-	-	1	2	1	-	-	2	1	-	1	-	1	2	28
Out	7	1	1	1	-	1	1	-	-	1	-	1	2	-	-	1	-	-	-	1	1	-	1	1	1	-	-	1	5	28	

Method of Implementation: [none specified]:: Installation Name: GEDMS EQUIPMENT FLIGHT IIA

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0900 / DDG Mod	Modification Number / Title: 1 / DM001 - DDG MODERNIZATION HME (GEDMS)

Modification Item 1 of 1: DM001 - DDG MODERNIZATION HME (GEDMS)

Installation Information

Method of Implementation: [none specified]:: Installation Name: GEDMS EQUIPMENT FLIGHT IIA

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / 0.238	- / 1.547	- / -	- / 1.547	1 / 3.743	- / -	- / -	- / -	- / -	1 / 5.528
FY 2016	- / -	- / -	- / -	- / 0.499	- / -	- / 0.499	- / 2.783	2 / 7.922	- / -	- / -	- / -	2 / 11.204
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.508	- / 2.836	2 / 8.047	- / -	- / -	2 / 11.391
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.744	- / 4.155	3 / 11.833	- / -	3 / 16.732
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.693	- / 3.879	3 / 11.178	3 / 15.750
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.838	3 / 17.777	3 / 18.615
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	20 / 124.100	20 / 124.100
Total	- / -	- / -	- / 0.238	- / 2.046	- / -	- / 2.046	1 / 7.034	2 / 11.502	2 / 12.895	3 / 16.550	26 / 153.055	34 / 203.320

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	2	-	-	-	2	-	-	1	1	1	-	26	34
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	2	-	-	-	2	-	-	29	34

Footnotes:

(2) Engineering Services line includes both Flight I/II and Flight IIA ships. Installation costs across the FYDP may vary depending on current port rates. Port rates are updated every year by a CNRMC letter based on the forecasted port loading model. Port loading rate forecasts are the rates recommended for all budgeted maintenance and organic modernization within a specific port. Individual ship's availability durations vary dependent upon the integration of ship's maintenance and modernization work packages.

(3) Due to ship specific differences, the unit cost for a Flight IIA ship is less than that for a Flight I/II ship. DDG 111 & 112 received GEDMS during new construction.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0900 / DDG Mod					Modification Number / Title: 2 / DM001 - DDG MODERNIZATION HME (MCS/DCS)			

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ <i>in Millions</i>)	154.029	41.302	31.200	67.589	-	67.589	68.730	92.020	86.104	77.758	490.170	1,108.902
Less PY Advance Procurement (\$ <i>in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ <i>in Millions</i>)	154.029	41.302	31.200	67.589	-	67.589	68.730	92.020	86.104	77.758	490.170	1,108.902
Plus CY Advance Procurement (\$ <i>in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ <i>in Millions</i>)	154.029	41.302	31.200	67.589	-	67.589	68.730	92.020	86.104	77.758	490.170	1,108.902
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ <i>in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ <i>in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Machinery Control System (MCS) replaces the obsolete control consoles while also delivering enhanced capability to the fleet through improved situational awareness and reconfigurable user stations. The new consoles use COTS-based computers which connect via VME-chassis technology. The VME architecture is expected to be supportable for the remaining service life of the ship and will enable computer upgrades within the chassis thereby mitigating future obsolescence concerns.

Engineering Services:

Production Support Services are phased over a three (3) year span starting two (2) years prior to installation on a per hull basis. It includes five (5) elements that are related to the production and delivery of a usable end-item: Production Engineering, Quality Assurance, Product Improvement, Acceptance Test and Evaluation, and Contractor Engineering and Technical Services (CETS). Due to the phasing of the requirement over a three year period, engineering services will fluctuate depending on the number of ships in each year.

Five (5) elements and approximate breakdown is as follows:

Production Engineering includes preparation, test and technical evaluation of engineering changes to correct deficiencies in the production items; production configuration control; review and evaluation of production design data and documentation; and logistic supportability efforts.

Quality Assurance includes the preparation of procedures and the conduct of inspections, examinations and test during production that are necessary to deliver an item of the required quality as specified by the terms of the contract.

Product Improvement includes improving reliability/maintainability/availability, and the correction of deficiencies exclusive of contractual specifications.

Acceptance Test and Evaluation of a production item includes preparation of test plans, testing, data analysis, and data evaluation.

Contractor Engineering and Technical Services (CETS) includes the furnishing of advice, instruction, and training by commercial or industrial companies.

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0900 / DDG Mod	Modification Number / Title: 2 / DM001 - DDG MODERNIZATION HME (MCS/DCS)

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0900 / DDG Mod				Modification Number / Title: 2 / DM001 - DDG MODERNIZATION HME (MCS/DCS)					
Models of Systems Affected:				Modification Type:				Related RDT&E PEs: 0604567N					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: DM001 - DDG MODERNIZATION HME (MCS/DCS)													
B Kits													
Recurring													
1.1.1) MCS/DCS EQUIPMENT - NonOrganic ⁽⁴⁾	13 / 47.318	3 / 12.386	2 / 8.406	6 / 25.671	- / -	6 / 25.671	5 / 21.778	5 / 22.170	5 / 22.569	3 / 13.785	20 / 98.492	62 / 272.575	
Subtotal: Recurring	- / 47.318	- / 12.386	- / 8.406	- / 25.671	- / -	- / 25.671	- / 21.778	- / 22.170	- / 22.569	- / 13.785	- / 98.492	- / 272.575	
Non-Recurring													
1.2.1) MCS/DCS 1ST ARTICLE & NRE - Organic	- / 8.643	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 8.643	
Subtotal: Non-Recurring	- / 8.643	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 8.643	
Subtotal: DM001 - DDG MODERNIZATION HME (MCS/DCS)	13 / 55.961	3 / 12.386	2 / 8.406	6 / 25.671	- / -	6 / 25.671	5 / 21.778	5 / 22.170	5 / 22.569	3 / 13.785	20 / 98.492	62 / 281.218	
Subtotal: Procurement, All Modification Items	- / 55.961	- / 12.386	- / 8.406	- / 25.671	- / -	- / 25.671	- / 21.778	- / 22.170	- / 22.569	- / 13.785	- / 98.492	- / 281.218	
Support (All Modification Items)													
2.1) MCS/DCS ENGINEERING SERVICES	- / 22.268	- / 14.825	- / 7.700	- / 12.836	- / -	- / 12.836	- / 12.100	- / 11.472	- / 11.679	- / 11.889	- / 103.147	- / 207.916	
Subtotal: Support	- / 22.268	- / 14.825	- / 7.700	- / 12.836	- / -	- / 12.836	- / 12.100	- / 11.472	- / 11.679	- / 11.889	- / 103.147	- / 207.916	
Installation													
Modification Item 1 of 1: DM001 - DDG MODERNIZATION HME (MCS/DCS)	- / 75.800	- / 14.091	- / 15.094	- / 29.082	- / -	- / 29.082	- / 34.852	- / 58.378	- / 51.856	- / 52.084	- / 288.531	- / 619.768	
Subtotal: Installation	- / 75.800	- / 14.091	- / 15.094	- / 29.082	- / -	- / 29.082	- / 34.852	- / 58.378	- / 51.856	- / 52.084	- / 288.531	- / 619.768	
Total													
Total Cost (Procurement + Support + Installation)	154.029	41.302	31.200	67.589	-	67.589	68.730	92.020	86.104	77.758	490.170	1,108.902	

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Exhibit P-3a, Individual Modification: PB 2016 Navy				Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9		P-1 Line Item Number / Title: 0900 / DDG Mod			Modification Number / Title: 2 / DM001 - DDG MODERNIZATION HME (MCS/DCS)		

Modification Item 1 of 1: DM001 - DDG MODERNIZATION HME (MCS/DCS)

Manufacturer Information

Manufacturer Name: Lockheed Martin				Manufacturer Location: Orlando, FL			
Administrative Leadtime (in Months): 6				Production Leadtime (in Months): 16			

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Aug 2014	Aug 2015	Aug 2016	Aug 2017	Jun 2018	May 2019	Jun 2020
Delivery Dates	Dec 2015	Dec 2016	Dec 2017	Dec 2018	Oct 2019	Sep 2020	Oct 2021

Installation Information

Method of Implementation: [none specified]:: Installation Name: MCS/DCS EQUIPMENT

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	10 / 75.800	2 / 12.716	1 / 5.476	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	13 / 93.992
FY 2014	- / -	- / 1.375	- / 8.627	3 / 19.180	- / -	3 / 19.180	- / -	- / -	- / -	- / -	- / -	3 / 29.182
FY 2015	- / -	- / -	- / 0.991	- / 6.842	- / -	- / 6.842	2 / 13.127	- / -	- / -	- / -	- / -	2 / 20.960
FY 2016	- / -	- / -	- / -	- / 3.060	- / -	- / 3.060	- / 19.201	6 / 39.955	- / -	- / -	- / -	6 / 62.216
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.524	- / 15.826	5 / 32.930	- / -	- / -	5 / 51.280
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.597	- / 16.280	5 / 33.841	- / -	5 / 52.718
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.646	- / 16.598	5 / 34.485	5 / 53.729
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.645	3 / 31.706	3 / 33.351
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	20 / 222.340	20 / 222.340
Total	10 / 75.800	2 / 14.091	1 / 15.094	3 / 29.082	- / -	3 / 29.082	2 / 34.852	6 / 58.378	5 / 51.856	5 / 52.084	28 / 288.531	62 / 619.768

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	10	-	1	1	-	-	1	-	-	-	3	-	-	-	2	-	-	-	3	2	1	-	2	-	3	1	1	2	1	28	62
Out	7	1	1	1	-	1	1	-	-	1	-	1	1	-	1	1	-	-	1	-	1	1	2	1	1	1	2	-	1	34	62

Footnotes:

(4) Installation costs across the FYDP may vary depending on current port rates. Port rates are updated every year by a CNRMC letter based on the forecasted port loading model. Port loading rate forecasts are the rates recommended for all budgeted maintenance and organic modernization within a specific port. Individual ship's availability durations vary dependent upon the integration of ship's maintenance and modernization work packages.

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0900 / DDG Mod	Modification Number / Title: 3 / DM001 - DDG MODERNIZATION HME (DVSS)

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	10.979	2.970	2.377	5.938	-	5.938	5.505	8.433	7.708	6.701	40.239	90.850
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	10.979	2.970	2.377	5.938	-	5.938	5.505	8.433	7.708	6.701	40.239	90.850
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	10.979	2.970	2.377	5.938	-	5.938	5.505	8.433	7.708	6.701	40.239	90.850
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Digital Video Surveillance System (DVSS) is a network of video cameras which are integrated into the Machinery Control system. This system is primarily a watch-stander situational awareness tool which supplements the workload reduction benefits of the new MCS.

Engineering Services:

Production Support Services are phased over a three (3) year span starting two (2) years prior to installation on a per hull basis. It includes five (5) elements that are related to the production and delivery of a usable end-item: Production Engineering, Quality Assurance, Product Improvement, Acceptance Test and Evaluation, and Contractor Engineering and Technical Services (CETS). Due to the phasing of the requirement over a three year period, engineering services will fluctuate depending on the number of ships in each year.

Five (5) elements and approximate breakdown is as follows:

Production Engineering includes preparation, test and technical evaluation of engineering changes to correct deficiencies in the production items; production configuration control; review and evaluation of production design data and documentation; and logistic supportability efforts.

Quality Assurance includes the preparation of procedures and the conduct of inspections, examinations and test during production that are necessary to deliver an item of the required quality as specified by the terms of the contract.

Product Improvement includes improving reliability/maintainability/availability, and the correction of deficiencies exclusive of contractual specifications.

Acceptance Test and Evaluation of a production item includes preparation of test plans, testing, data analysis, and data evaluation.

Contractor Engineering and Technical Services (CETS) includes the furnishing of advice, instruction, and training by commercial or industrial companies.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0900 / DDG Mod				Modification Number / Title: 3 / DM001 - DDG MODERNIZATION HME (DVSS)					
Models of Systems Affected:				Modification Type:				Related RDT&E PEs: 0604567N					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: DM001 - DDG MODERNIZATION HME (DVSS)													
B Kits													
Recurring													
1.1.1) DVSS Equipment - NonOrganic ⁽⁵⁾	13 / 3.502	3 / 1.456	2 / 0.988	6 / 3.018	- / -	6 / 3.018	5 / 2.560	5 / 2.606	5 / 2.653	3 / 1.621	20 / 11.579	62 / 29.983	
Subtotal: Recurring	- / 3.502	- / 1.456	- / 0.988	- / 3.018	- / -	- / 3.018	- / 2.560	- / 2.606	- / 2.653	- / 1.621	- / 11.579	- / 29.983	
Non-Recurring													
1.2.1) DVSS 1st Article & NRE - Organic	- / 0.477	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.477	
Subtotal: Non-Recurring	- / 0.477	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.477	
Subtotal: DM001 - DDG MODERNIZATION HME (DVSS)	13 / 3.979	3 / 1.456	2 / 0.988	6 / 3.018	- / -	6 / 3.018	5 / 2.560	5 / 2.606	5 / 2.653	3 / 1.621	20 / 11.579	62 / 30.460	
Subtotal: Procurement, All Modification Items	- / 3.979	- / 1.456	- / 0.988	- / 3.018	- / -	- / 3.018	- / 2.560	- / 2.606	- / 2.653	- / 1.621	- / 11.579	- / 30.460	
Support (All Modification Items)													
2.1) Engineering Services	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Subtotal: Support	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Installation													
Modification Item 1 of 1: DM001 - DDG MODERNIZATION HME (DVSS)	- / 7.000	- / 1.514	- / 1.389	- / 2.920	- / -	- / 2.920	- / 2.945	- / 5.827	- / 5.055	- / 5.080	- / 28.660	- / 60.390	
Subtotal: Installation	- / 7.000	- / 1.514	- / 1.389	- / 2.920	- / -	- / 2.920	- / 2.945	- / 5.827	- / 5.055	- / 5.080	- / 28.660	- / 60.390	
Total													
Total Cost (Procurement + Support + Installation)	10.979	2.970	2.377	5.938	-	5.938	5.505	8.433	7.708	6.701	40.239	90.850	

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Exhibit P-3a, Individual Modification: PB 2016 Navy				Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9		P-1 Line Item Number / Title: 0900 / DDG Mod			Modification Number / Title: 3 / DM001 - DDG MODERNIZATION HME (DVSS)		

Modification Item 1 of 1: DM001 - DDG MODERNIZATION HME (DVSS)

Manufacturer Information

Manufacturer Name: NSWC SSES	Manufacturer Location: Philadelphia, PA
Administrative Leadtime (in Months): 6	Production Leadtime (in Months): 16

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Aug 2014	Aug 2015	Aug 2016	Aug 2017	Jun 2018	May 2019	Jun 2020
Delivery Dates	Dec 2015	Dec 2016	Dec 2017	Dec 2018	Oct 2019	Sep 2020	Oct 2021

Installation Information

Method of Implementation: [none specified]:: Installation Name: DVSS Equipment

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	10 / 7.000	2 / 1.391	1 / 0.757	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	13 / 9.148
FY 2014	- / -	- / 0.123	- / 0.543	3 / 2.215	- / -	3 / 2.215	- / -	- / -	- / -	- / -	- / -	3 / 2.881
FY 2015	- / -	- / -	- / 0.089	- / 0.430	- / -	- / 0.430	2 / 1.512	- / -	- / -	- / -	- / -	2 / 2.031
FY 2016	- / -	- / -	- / -	- / 0.275	- / -	- / 0.275	- / 1.207	6 / 4.596	- / -	- / -	- / -	6 / 6.078
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.226	- / 0.998	5 / 3.791	- / -	- / -	5 / 5.015
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.233	- / 1.026	5 / 3.887	- / -	5 / 5.146
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.238	- / 1.045	5 / 3.953	5 / 5.236
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.148	3 / 3.094	3 / 3.242
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	20 / 21.613	20 / 21.613
Total	10 / 7.000	2 / 1.514	1 / 1.389	3 / 2.920	- / -	3 / 2.920	2 / 2.945	6 / 5.827	5 / 5.055	5 / 5.080	28 / 28.660	62 / 60.390

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	10	-	1	1	-	-	1	-	-	-	3	-	-	-	2	-	-	-	3	2	1	-	2	-	3	1	1	2	1	28	62
Out	7	1	1	1	-	1	1	-	-	1	-	1	1	-	1	1	-	-	1	-	1	1	2	1	1	1	2	-	1	34	62

Footnotes:

⁽⁵⁾ Installation costs across the FYDP may vary depending on current port rates. Port rates are updated every year by a CNRMC letter based on the forecasted port loading model. Port loading rate forecasts are the rates recommended for all budgeted maintenance and organic modernization within a specific port. Individual ship's availability durations vary dependent upon the integration of ship's maintenance and modernization work packages.

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0900 / DDG Mod	Modification Number / Title: 4 / DM001 - DDG MODERNIZATION HME (WIRELESS COMMUNICATIONS)

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	7.502	1.738	0.969	2.716	-	2.716	2.416	3.316	3.153	1.890	1.092	24.792
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	7.502	1.738	0.969	2.716	-	2.716	2.416	3.316	3.153	1.890	1.092	24.792
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	7.502	1.738	0.969	2.716	-	2.716	2.416	3.316	3.153	1.890	1.092	24.792
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Shipwide Interior Wireless Communication System (SIWCS) - provides point-to-point coverage throughout the internal spaces of the ship as well as topside, topside-to-interior, line of sight ship-to-ship & line of sight ship-to-shore communications capabilities. All FLT IIAs (DDG 79+) have a version of SIWCS installed.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0900 / DDG Mod				Modification Number / Title: 4 / DM001 - DDG MODERNIZATION HME (WIRELESS COMMUNICATIONS)					
Models of Systems Affected:				Modification Type:				Related RDT&E PEs: 0604567N					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: DM001 - DDG MODERNIZATION HME (WIRELESS COMMUNICATIONS)													
B Kits													
Recurring													
1.1.1) Wireless Communications Equipment - NonOrganic ⁽⁶⁾		9 / 3.202	3 / 1.233	- / -	3 / 1.278	- / -	3 / 1.278	3 / 1.301	2 / 0.883	2 / 0.899	- / -	- / -	22 / 8.796
Subtotal: Recurring		- / 3.202	- / 1.233	- / -	- / 1.278	- / -	- / 1.278	- / 1.301	- / 0.883	- / 0.899	- / -	- / -	- / 8.796
Subtotal: DM001 - DDG MODERNIZATION HME (WIRELESS COMMUNICATIONS)		9 / 3.202	3 / 1.233	- / -	3 / 1.278	- / -	3 / 1.278	3 / 1.301	2 / 0.883	2 / 0.899	- / -	- / -	22 / 8.796
Subtotal: Procurement, All Modification Items		- / 3.202	- / 1.233	- / -	- / 1.278	- / -	- / 1.278	- / 1.301	- / 0.883	- / 0.899	- / -	- / -	- / 8.796
Installation													
Modification Item 1 of 1: DM001 - DDG MODERNIZATION HME (WIRELESS COMMUNICATIONS)		- / 4.300	- / 0.505	- / 0.969	- / 1.438	- / -	- / 1.438	- / 1.115	- / 2.433	- / 2.254	- / 1.890	- / 1.092	- / 15.996
Subtotal: Installation		- / 4.300	- / 0.505	- / 0.969	- / 1.438	- / -	- / 1.438	- / 1.115	- / 2.433	- / 2.254	- / 1.890	- / 1.092	- / 15.996
Total													
Total Cost (Procurement + Support + Installation)		7.502	1.738	0.969	2.716	-	2.716	2.416	3.316	3.153	1.890	1.092	24.792

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Exhibit P-3a, Individual Modification: PB 2016 Navy				Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9		P-1 Line Item Number / Title: 0900 / DDG Mod			Modification Number / Title: 4 / DM001 - DDG MODERNIZATION HME (WIRELESS COMMUNICATIONS)		

Modification Item 1 of 1: DM001 - DDG MODERNIZATION HME (WIRELESS COMMUNICATIONS)

Manufacturer Information

Manufacturer Name: Spawar Systems Center Atlantic				Manufacturer Location: Charleston, SC			
Administrative Leadtime (in Months): 6				Production Leadtime (in Months): 16			

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Aug 2014		Aug 2016	Feb 2018	Sep 2018	Sep 2019	
Delivery Dates	Dec 2015		Dec 2017	Jun 2019	Jan 2020	Jan 2021	

Installation Information

Method of Implementation: [none specified]:: Installation Name: Wireless Communications Equipment

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	8 / 4.300	1 / 0.386	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	9 / 4.686
FY 2014	- / -	- / 0.119	- / 0.969	3 / 1.316	- / -	3 / 1.316	- / -	- / -	- / -	- / -	- / -	3 / 2.404
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / 0.122	- / -	- / 0.122	- / 0.990	3 / 1.324	- / -	- / -	- / -	3 / 2.436
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.125	- / 1.009	3 / 1.350	- / -	- / -	3 / 2.484
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.100	- / 0.802	2 / 1.072	- / -	2 / 1.974
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.102	- / 0.818	2 / 1.092	2 / 2.012
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	8 / 4.300	1 / 0.505	- / 0.969	3 / 1.438	- / -	3 / 1.438	- / 1.115	3 / 2.433	3 / 2.254	2 / 1.890	2 / 1.092	22 / 15.996

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	8	-	1	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	2	1	-	-	-	3	-	-	1	1	2	22	
Out	5	1	1	1	-	1	-	-	-	-	-	1	1	-	1	-	-	-	-	1	-	-	1	1	1	-	-	1	5	22	

Footnotes:

⁽⁶⁾ All flight I & II require SIWCS with the exception of DDGs 53-56 and 63 (previously installed). All flight IIA's have a version of SIWCS installed. Installation costs across the FYDP may vary depending on current port rates. Port rates are updated every year by a CNRMC letter based on the forecasted port loading model. Port loading rate forecasts are the rates recommended for all budgeted maintenance and organic modernization within a specific port. Individual ship's availability durations vary dependent upon the integration of ship's maintenance and modernization work packages.

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0900 / DDG Mod	Modification Number / Title: 5 / DM001 - DDG MODERNIZATION HME (IBNS)

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ <i>in Millions</i>)	76.945	15.277	12.288	29.664	-	29.664	29.696	36.707	34.933	34.593	173.599	443.702
Less PY Advance Procurement (\$ <i>in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ <i>in Millions</i>)	76.945	15.277	12.288	29.664	-	29.664	29.696	36.707	34.933	34.593	173.599	443.702
Plus CY Advance Procurement (\$ <i>in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ <i>in Millions</i>)	76.945	15.277	12.288	29.664	-	29.664	29.696	36.707	34.933	34.593	173.599	443.702
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (\$ <i>in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ <i>in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Integrated Bridge & Navigation System (IBNS) replaces obsolete bridge consoles and introduces flexibility with how the pilot house is managed during navigation. The key benefit is the ability for operating with fewer watchstanders, reduced watch standard workloads, and improved safety of navigation.

Engineering Services:

Production Support Services are phased over a three (3) year span starting two (2) years prior to installation on a per hull basis. It includes five (5) elements that are related to the production and delivery of a usable end-item: Production Engineering, Quality Assurance, Product Improvement, Acceptance Test and Evaluation, and Contractor Engineering and Technical Services (CETS). Due to the phasing of the requirement over a three year period, engineering services will fluctuate depending on the number of ships in each year.

Five (5) elements and approximate breakdown is as follows:

Production Engineering includes preparation, test and technical evaluation of engineering changes to correct deficiencies in the production items; production configuration control; review and evaluation of production design data and documentation; and logistic supportability efforts.

Quality Assurance includes the preparation of procedures and the conduct of inspections, examinations and test during production that are necessary to deliver an item of the required quality as specified by the terms of the contract.

Product Improvement includes improving reliability/maintainability/availability, and the correction of deficiencies exclusive of contractual specifications.

Acceptance Test and Evaluation of a production item includes preparation of test plans, testing, data analysis, and data evaluation.

Contractor Engineering and Technical Services (CETS) includes the furnishing of advice, instruction, and training by commercial or industrial companies.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0900 / DDG Mod				Modification Number / Title: 5 / DM001 - DDG MODERNIZATION HME (IBNS)					
Models of Systems Affected:				Modification Type:				Related RDT&E PEs: 0604567N					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: DM001 - DDG MODERNIZATION HME (IBNS)													
B Kits													
Recurring													
1.1.1) IBNS Equipment - NonOrganic ⁽⁷⁾	13 / 39.833	3 / 9.316	2 / 6.323	6 / 19.309	- / -	6 / 19.309	5 / 16.381	5 / 16.675	5 / 16.976	3 / 10.369	20 / 74.083	62 / 209.265	
Subtotal: Recurring	- / 39.833	- / 9.316	- / 6.323	- / 19.309	- / -	- / 19.309	- / 16.381	- / 16.675	- / 16.976	- / 10.369	- / 74.083	- / 209.265	
Non-Recurring													
1.2.1) IBNS 1st Article & NRE - Organic	- / 4.186	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 4.186	
Subtotal: Non-Recurring	- / 4.186	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 4.186	
Subtotal: DM001 - DDG MODERNIZATION HME (IBNS)	13 / 44.019	3 / 9.316	2 / 6.323	6 / 19.309	- / -	6 / 19.309	5 / 16.381	5 / 16.675	5 / 16.976	3 / 10.369	20 / 74.083	62 / 213.451	
Subtotal: Procurement, All Modification Items	- / 44.019	- / 9.316	- / 6.323	- / 19.309	- / -	- / 19.309	- / 16.381	- / 16.675	- / 16.976	- / 10.369	- / 74.083	- / 213.451	
Support (All Modification Items)													
2.1) IBNS Engineering Services	- / 3.126	- / 1.431	- / 0.703	- / 1.165	- / -	- / 1.165	- / 1.968	- / 1.468	- / 1.403	- / 1.292	- / 7.790	- / 20.346	
Subtotal: Support	- / 3.126	- / 1.431	- / 0.703	- / 1.165	- / -	- / 1.165	- / 1.968	- / 1.468	- / 1.403	- / 1.292	- / 7.790	- / 20.346	
Installation													
Modification Item 1 of 1: DM001 - DDG MODERNIZATION HME (IBNS)	- / 29.800	- / 4.530	- / 5.262	- / 9.190	- / -	- / 9.190	- / 11.347	- / 18.564	- / 16.554	- / 22.932	- / 91.726	- / 209.905	
Subtotal: Installation	- / 29.800	- / 4.530	- / 5.262	- / 9.190	- / -	- / 9.190	- / 11.347	- / 18.564	- / 16.554	- / 22.932	- / 91.726	- / 209.905	
Total													
Total Cost (Procurement + Support + Installation)	76.945	15.277	12.288	29.664	-	29.664	29.696	36.707	34.933	34.593	173.599	443.702	

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Exhibit P-3a, Individual Modification: PB 2016 Navy				Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9		P-1 Line Item Number / Title: 0900 / DDG Mod			Modification Number / Title: 5 / DM001 - DDG MODERNIZATION HME (IBNS)		

Modification Item 1 of 1: DM001 - DDG MODERNIZATION HME (IBNS)

Manufacturer Information

Manufacturer Name: Northrop Grumman Sperry				Manufacturer Location: Charlottesville, VA			
Administrative Leadtime (in Months): 6				Production Leadtime (in Months): 16			

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Aug 2014	Aug 2015	Aug 2016	Aug 2017	Jun 2018	May 2019	Jun 2020
Delivery Dates	Dec 2015	Dec 2016	Dec 2017	Dec 2018	Oct 2019	Sep 2020	Oct 2021

Installation Information

Method of Implementation: [none specified]:: Installation Name: IBNS Equipment

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	10 / 29.800	2 / 4.094	1 / 2.043	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	13 / 35.937
FY 2014	- / -	- / 0.436	- / 2.905	3 / 5.916	- / -	3 / 5.916	- / -	- / -	- / -	- / -	- / -	3 / 9.257
FY 2015	- / -	- / -	- / 0.314	- / 2.305	- / -	- / 2.305	2 / 4.077	- / -	- / -	- / -	- / -	2 / 6.696
FY 2016	- / -	- / -	- / -	- / 0.969	- / -	- / 0.969	- / 6.469	6 / 12.409	- / -	- / -	- / -	6 / 19.847
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.801	- / 5.332	5 / 10.231	- / -	- / -	5 / 16.364
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.823	- / 5.485	5 / 16.818	- / -	5 / 23.126
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.838	- / 5.591	5 / 10.706	5 / 17.135
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.523	3 / 10.113	3 / 10.636
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	20 / 70.907	20 / 70.907
Total	10 / 29.800	2 / 4.530	1 / 5.262	3 / 9.190	- / -	3 / 9.190	2 / 11.347	6 / 18.564	5 / 16.554	5 / 22.932	28 / 91.726	62 / 209.905

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	10	-	1	1	-	-	1	-	-	-	3	-	-	-	2	-	-	-	3	2	1	-	2	-	3	1	1	2	1	28	62
Out	7	1	1	1	-	1	1	-	-	1	-	1	1	-	1	1	-	-	1	-	1	1	2	1	1	1	2	-	1	34	62

Footnotes:

⁽⁷⁾ Installation costs across the FYDP may vary depending on current port rates. Port rates are updated every year by a CNRMC letter based on the forecasted port loading model. Port loading rate forecasts are the rates recommended for all budgeted maintenance and organic modernization within a specific port. Individual ship's availability durations vary dependent upon the integration of ship's maintenance and modernization work packages.

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0900 / DDG Mod						Modification Number / Title: 6 / DM003 - MK 160 MOD 15 GWS		
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	25.097	5.696	6.799	5.851	-	5.851	5.832	9.845	10.634	12.059	131.035	212.848
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	25.097	5.696	6.799	5.851	-	5.851	5.832	9.845	10.634	12.059	131.035	212.848
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	25.097	5.696	6.799	5.851	-	5.851	5.832	9.845	10.634	12.059	131.035	212.848
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: Procures MK 160 Mod 15 Gun Weapon System (GWS) that includes equipment procurement, recurring engineering, equipment integration and Integrated Logistics Support (ILS) products for DDG 51 Class ships. Engineering Services: Production Support Services are phased over a three (3) year span starting two (2) years prior to installation on a per hull basis. It includes five (5) elements that are related to the production and delivery of a usable end-item: Production Engineering, Quality Assurance, Product Improvement, Acceptance Test and Evaluation, and Contractor Engineering and Technical Services (CETS). Due to the phasing of the requirement over a three year period, engineering services will fluctuate depending on the number of ships in each year. Five (5) elements and approximate breakdown is as follows: Production Engineering includes preparation, test and technical evaluation of engineering changes to correct deficiencies in the production items; production configuration control; review and evaluation of production design data and documentation; and logistic supportability efforts. Quality Assurance includes the preparation of procedures and the conduct of inspections, examinations and test during production that are necessary to deliver an item of the required quality as specified by the terms of the contract. Product Improvement includes improving reliability/maintainability/availability, and the correction of deficiencies exclusive of contractual specifications. Acceptance Test and Evaluation of a production item includes preparation of test plans, testing, data analysis, and data evaluation. Contractor Engineering and Technical Services (CETS) includes the furnishing of advice, instruction, and training by commercial or industrial companies.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0900 / DDG Mod				Modification Number / Title: 6 / DM003 - MK 160 MOD 15 GWS					
Models of Systems Affected:				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: DM003 - MK 160 MOD 15 GWS													
B Kits													
Recurring													
1.1.1) MK 160 MOD 15 GWS EQUIPMENT - NonOrganic ⁽⁸⁾	5 / 14.594	1 / 3.155	1 / 3.212	1 / 3.270	- / -	1 / 3.270	1 / 3.329	2 / 6.778	2 / 6.900	2 / 7.024	20 / 75.277	35 / 123.539	
Subtotal: Recurring	- / 14.594	- / 3.155	- / 3.212	- / 3.270	- / -	- / 3.270	- / 3.329	- / 6.778	- / 6.900	- / 7.024	- / 75.277	- / 123.539	
Subtotal: DM003 - MK 160 MOD 15 GWS	5 / 14.594	1 / 3.155	1 / 3.212	1 / 3.270	- / -	1 / 3.270	1 / 3.329	2 / 6.778	2 / 6.900	2 / 7.024	20 / 75.277	35 / 123.539	
Subtotal: Procurement, All Modification Items	- / 14.594	- / 3.155	- / 3.212	- / 3.270	- / -	- / 3.270	- / 3.329	- / 6.778	- / 6.900	- / 7.024	- / 75.277	- / 123.539	
Support (All Modification Items)													
2.1) ENGINEERING SERVICES	- / 7.403	- / 1.985	- / 1.754	- / 1.336	- / -	- / 1.336	- / 1.359	- / 1.733	- / 2.121	- / 2.642	- / 28.812	- / 49.145	
Subtotal: Support	- / 7.403	- / 1.985	- / 1.754	- / 1.336	- / -	- / 1.336	- / 1.359	- / 1.733	- / 2.121	- / 2.642	- / 28.812	- / 49.145	
Installation													
Modification Item 1 of 1: DM003 - MK 160 MOD 15 GWS	- / 3.100	- / 0.556	- / 1.833	- / 1.245	- / -	- / 1.245	- / 1.144	- / 1.334	- / 1.613	- / 2.393	- / 26.946	- / 40.164	
Subtotal: Installation	- / 3.100	- / 0.556	- / 1.833	- / 1.245	- / -	- / 1.245	- / 1.144	- / 1.334	- / 1.613	- / 2.393	- / 26.946	- / 40.164	
Total													
Total Cost (Procurement + Support + Installation)	25.097	5.696	6.799	5.851	-	5.851	5.832	9.845	10.634	12.059	131.035	212.848	

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Exhibit P-3a, Individual Modification: PB 2016 Navy			Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9		P-1 Line Item Number / Title: 0900 / DDG Mod			Modification Number / Title: 6 / DM003 - MK 160 MOD 15 GWS

Modification Item 1 of 1: DM003 - MK 160 MOD 15 GWS

Manufacturer Information							
Manufacturer Name: VARIOUS				Manufacturer Location: VARIOUS			
Administrative Leadtime (in Months): 6				Production Leadtime (in Months): 18			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Jun 2014	Jun 2015	Jun 2016	Jun 2017	Apr 2018	Mar 2019	Apr 2020
Delivery Dates	Dec 2015	Dec 2016	Dec 2017	Dec 2018	Oct 2019	Sep 2020	Oct 2021

Installation Information

Method of Implementation: [none specified]:: Installation Name: MK 160 MOD 15 GWS EQUIPMENT

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	2 / 3.100	1 / 0.509	2 / 1.520	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 5.129
FY 2014	- / -	- / 0.047	- / 0.263	1 / 0.874	- / -	1 / 0.874	- / -	- / -	- / -	- / -	- / -	1 / 1.184
FY 2015	- / -	- / -	- / 0.050	- / 0.312	- / -	- / 0.312	1 / 0.769	- / -	- / -	- / -	- / -	1 / 1.131
FY 2016	- / -	- / -	- / -	- / 0.059	- / -	- / 0.059	- / 0.315	1 / 0.904	- / -	- / -	- / -	1 / 1.278
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.060	- / 0.321	1 / 0.919	- / -	- / -	1 / 1.300
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.109	- / 0.582	2 / 1.685	- / -	2 / 2.376
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.112	- / 0.594	2 / 1.716	2 / 2.422
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.114	2 / 2.190	2 / 2.304
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	20 / 23.040	20 / 23.040
Total	2 / 3.100	1 / 0.556	2 / 1.833	1 / 1.245	- / -	1 / 1.245	1 / 1.144	1 / 1.334	1 / 1.613	2 / 2.393	24 / 26.946	35 / 40.164

Installation Schedule																															
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020					
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	2	1	-	-	-	-	-	1	1	-	-	-	1	-	1	-	-	-	1	-	-	-	1	-	-	1	-	1	-	24	35
Out	-	-	-	-	2	1	-	-	-	-	-	1	1	-	-	-	1	-	1	-	-	-	1	-	-	-	1	-	-	26	35

Footnotes:

⁽⁸⁾ Interchangeable Cruiser/Destroyer combat system equipment is being installed during the FY 14 DDG combat system availability. This equipment did not require procurement funding in FY12; however, still required Design Services Allocation (DSA) and installation funding in FY 12-14. Installation costs across the FYDP may vary depending on current port rates. Port rates are updated every year by a CNRMC letter based on the forecasted port loading model. Port loading rate forecasts are the rates recommended for all budgeted maintenance and organic modernization within a specific port. Individual ship's availability durations vary dependent upon the integration of ship's maintenance and modernization work packages.

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Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0900 / DDG Mod					Modification Number / Title: 7 / DM004 - AWS UPGRADE			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	166.424	36.703	69.911	47.570	-	47.570	46.227	71.376	77.598	95.656	1,086.874	1,698.339
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	166.424	36.703	69.911	47.570	-	47.570	46.227	71.376	77.598	95.656	1,086.874	1,698.339
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	166.424	36.703	69.911	47.570	-	47.570	46.227	71.376	77.598	95.656	1,086.874	1,698.339
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: Procures equipment for the Aegis Weapon System (AWS) Upgrades that includes equipment procurement, recurring engineering, equipment integration and Integrated Logistics Support (ILS) products for DDG 51 Class ships.												
Engineering Services: Production Support Services are phased over a three (3) year span starting two (2) years prior to installation on a per hull basis. It includes five (5) elements that are related to the production and delivery of a usable end-item: Production Engineering, Quality Assurance, Product Improvement, Acceptance Test and Evaluation, and Contractor Engineering and Technical Services (CETS). Due to the phasing of the requirement over a three year period, engineering services will fluctuate depending on the number of ships in each year. Five (5) elements and approximate breakdown is as follows: Production Engineering includes preparation, test and technical evaluation of engineering changes to correct deficiencies in the production items; production configuration control; review and evaluation of production design data and documentation; and logistic supportability efforts. Quality Assurance includes the preparation of procedures and the conduct of inspections, examinations and test during production that are necessary to deliver an item of the required quality as specified by the terms of the contract. Product Improvement includes improving reliability/maintainability/availability, and the correction of deficiencies exclusive of contractual specifications. Acceptance Test and Evaluation of a production item includes preparation of test plans, testing, data analysis, and data evaluation. Contractor Engineering and Technical Services (CETS) includes the furnishing of advice, instruction, and training by commercial or industrial companies.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015						
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0900 / DDG Mod				Modification Number / Title: 7 / DM004 - AWS UPGRADE						
Models of Systems Affected:			Modification Type:						Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total		
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)		
Procurement														
Modification Item 1 of 1: DM004 - AWS UPGRADE														
B Kits														
Recurring														
1.1.1) AWS EQUIPMENT - NonOrganic ⁽⁹⁾	5 / 105.481	1 / 22.750	1 / 23.159	1 / 20.197	- / -	1 / 20.197	1 / 20.560	2 / 41.861	2 / 42.615	2 / 43.382	20 / 464.936	35 / 784.941		
Subtotal: Recurring	- / 105.481	- / 22.750	- / 23.159	- / 20.197	- / -	- / 20.197	- / 20.560	- / 41.861	- / 42.615	- / 43.382	- / 464.936	- / 784.941		
Subtotal: DM004 - AWS UPGRADE	5 / 105.481	1 / 22.750	1 / 23.159	1 / 20.197	- / -	1 / 20.197	1 / 20.560	2 / 41.861	2 / 42.615	2 / 43.382	20 / 464.936	35 / 784.941		
Subtotal: Procurement, All Modification Items	- / 105.481	- / 22.750	- / 23.159	- / 20.197	- / -	- / 20.197	- / 20.560	- / 41.861	- / 42.615	- / 43.382	- / 464.936	- / 784.941		
Support (All Modification Items)														
2.1) ENGINEERING SERVICES	- / 6.443	- / 2.856	- / 3.065	- / 2.531	- / -	- / 2.531	- / 2.755	- / 3.017	- / 3.606	- / 4.403	- / 46.797	- / 75.473		
Subtotal: Support	- / 6.443	- / 2.856	- / 3.065	- / 2.531	- / -	- / 2.531	- / 2.755	- / 3.017	- / 3.606	- / 4.403	- / 46.797	- / 75.473		
Installation														
Modification Item 1 of 1: DM004 - AWS UPGRADE	- / 54.500	- / 11.097	- / 43.687	- / 24.842	- / -	- / 24.842	- / 22.912	- / 26.498	- / 31.377	- / 47.871	- / 575.141	- / 837.925		
Subtotal: Installation	- / 54.500	- / 11.097	- / 43.687	- / 24.842	- / -	- / 24.842	- / 22.912	- / 26.498	- / 31.377	- / 47.871	- / 575.141	- / 837.925		
Total														
Total Cost (Procurement + Support + Installation)	166.424	36.703	69.911	47.570	-	47.570	46.227	71.376	77.598	95.656	1,086.874	1,698.339		

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Exhibit P-3a, Individual Modification: PB 2016 Navy																Date: February 2015															
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9										P-1 Line Item Number / Title: 0900 / DDG Mod										Modification Number / Title: 7 / DM004 - AWS UPGRADE											
Modification Item 1 of 1: DM004 - AWS UPGRADE																															
Manufacturer Information																															
Manufacturer Name: LOCKHEED MARTIN															Manufacturer Location: MOORESTOWN, NJ																
Administrative Leadtime (in Months): 6															Production Leadtime (in Months): 20																
Dates		FY 2014			FY 2015			FY 2016			FY 2017			FY 2018			FY 2019			FY 2020											
Contract Dates		Apr 2014			Apr 2015			Apr 2016			Apr 2017			Feb 2018			Jan 2019			Feb 2020											
Delivery Dates		Dec 2015			Dec 2016			Dec 2017			Dec 2018			Oct 2019			Sep 2020			Oct 2021											
Installation Information																															
Method of Implementation: [none specified]:: Installation Name: AWS EQUIPMENT																															
Installation Cost		Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total																		
		Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)																
Prior Years		2 / 54.500	1 / 10.068	2 / 37.364	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 101.932																	
FY 2014		- / -	- / 1.029	- / 5.210	1 / 18.309	- / -	1 / 18.309	- / -	- / -	- / -	- / -	- / -	- / -	1 / 24.548																	
FY 2015		- / -	- / -	- / 1.113	- / 5.431	- / -	- / 5.431	1 / 16.308	- / -	- / -	- / -	- / -	- / -	1 / 22.852																	
FY 2016		- / -	- / -	- / -	- / 1.102	- / -	- / 1.102	- / 5.481	1 / 18.875	- / -	- / -	- / -	- / -	1 / 25.458																	
FY 2017		- / -	- / -	- / -	- / -	- / -	- / -	- / 1.123	- / 5.586	1 / 19.166	- / -	- / -	- / -	1 / 25.875																	
FY 2018		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.037	- / 10.133	2 / 35.415	- / -	- / -	2 / 47.585																	
FY 2019		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.078	- / 10.339	2 / 36.003	2 / 48.420																		
FY 2020		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.117	2 / 47.088	2 / 49.205																		
To Complete		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	20 / 492.050	20 / 492.050																		
Total		2 / 54.500	1 / 11.097	2 / 43.687	1 / 24.842	- / -	1 / 24.842	1 / 22.912	1 / 26.498	1 / 31.377	2 / 47.871	24 / 575.141	35 / 837.925																		
Installation Schedule																															
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020					
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	2	1	-	-	-	-	-	1	1	-	-	-	1	-	1	-	-	-	1	-	-	-	1	-	-	1	-	1	-	24	35
Out	-	-	-	-	2	1	-	-	-	-	-	1	1	-	-	-	1	-	1	-	-	-	1	-	-	-	1	-	-	26	35
Footnotes:																															
(9) Installation/DSA decreases due to correction of manday rate in Navy Data Environment (NDE). Interchangeable Cruiser/Destroyer combat system equipment has been installed during the FY 14 DDG combat system availability. This equipment did not require procurement funding in FY12; however, still required Design Services Allocation (DSA) and installation funding in FY 12-14. Installation costs across the FYDP may vary depending on current port rates. Port rates are updated every year by a CNRMC letter based on the forecasted port loading model. Port loading rate forecasts are the rates recommended for all budgeted maintenance and organic modernization within a specific port. Unit cost decrease in FY 16 and follow due to updated unit cost information. Individual ship's availability durations vary dependent upon the integration of ship's maintenance and modernization work packages.																															

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Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0900 / DDG Mod					Modification Number / Title: 8 / DM005 - MULTI-MISSION SIGPRO			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	107.073	20.367	23.936	22.312	-	22.312	22.327	39.602	40.996	44.158	476.937	797.708
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	107.073	20.367	23.936	22.312	-	22.312	22.327	39.602	40.996	44.158	476.937	797.708
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	107.073	20.367	23.936	22.312	-	22.312	22.327	39.602	40.996	44.158	476.937	797.708
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-
Description:												
Procures Multi-Mission SIGPRO combat systems that includes equipment procurement, recurring engineering, equipment integration and Integrated Logistics Support (ILS) products for DDG 51 Class ships.												
Engineering Services:												
Production Support Services are phased over a three (3) year span starting two (2) years prior to installation on a per hull basis. It includes five (5) elements that are related to the production and delivery of a usable end-item: Production Engineering, Quality Assurance, Product Improvement, Acceptance Test and Evaluation, and Contractor Engineering and Technical Services (CETS). Due to the phasing of the requirement over a three year period, engineering services will fluctuate depending on the number of ships in each year.												
Five (5) elements and approximate breakdown is as follows:												
Production Engineering includes preparation, test and technical evaluation of engineering changes to correct deficiencies in the production items; production configuration control; review and evaluation of production design data and documentation; and logistic supportability efforts.												
Quality Assurance includes the preparation of procedures and the conduct of inspections, examinations and test during production that are necessary to deliver an item of the required quality as specified by the terms of the contract.												
Product Improvement includes improving reliability/maintainability/availability, and the correction of deficiencies exclusive of contractual specifications.												
Acceptance Test and Evaluation of a production item includes preparation of test plans, testing, data analysis, and data evaluation.												
Contractor Engineering and Technical Services (CETS) includes the furnishing of advice, instruction, and training by commercial or industrial companies.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0900 / DDG Mod				Modification Number / Title: 8 / DM005 - MULTI-MISSION SIGPRO					
Models of Systems Affected:				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: DM005 - MULTI-MISSION SIGPRO													
B Kits													
Recurring													
1.1.1) MULTI-MISSION SIGPRO EQUIPMENT - NonOrganic ⁽¹⁰⁾	6 / 91.621	1 / 15.213	1 / 15.487	1 / 15.765	- / -	1 / 15.765	1 / 16.049	2 / 32.676	2 / 33.264	2 / 33.863	20 / 362.921	36 / 616.859	
Subtotal: Recurring	- / 91.621	- / 15.213	- / 15.487	- / 15.765	- / -	- / 15.765	- / 16.049	- / 32.676	- / 33.264	- / 33.863	- / 362.921	- / 616.859	
Subtotal: DM005 - MULTI-MISSION SIGPRO	6 / 91.621	1 / 15.213	1 / 15.487	1 / 15.765	- / -	1 / 15.765	1 / 16.049	2 / 32.676	2 / 33.264	2 / 33.863	20 / 362.921	36 / 616.859	
Subtotal: Procurement, All Modification Items	- / 91.621	- / 15.213	- / 15.487	- / 15.765	- / -	- / 15.765	- / 16.049	- / 32.676	- / 33.264	- / 33.863	- / 362.921	- / 616.859	
Support (All Modification Items)													
2.1) ENGINEERING SERVICES	- / 5.352	- / 3.659	- / 2.708	- / 2.737	- / -	- / 2.737	- / 2.786	- / 2.848	- / 2.905	- / 2.967	- / 25.860	- / 51.822	
Subtotal: Support	- / 5.352	- / 3.659	- / 2.708	- / 2.737	- / -	- / 2.737	- / 2.786	- / 2.848	- / 2.905	- / 2.967	- / 25.860	- / 51.822	
Installation													
Modification Item 1 of 1: DM005 - MULTI-MISSION SIGPRO	- / 10.100	- / 1.495	- / 5.741	- / 3.810	- / -	- / 3.810	- / 3.492	- / 4.078	- / 4.827	- / 7.328	- / 88.156	- / 129.027	
Subtotal: Installation	- / 10.100	- / 1.495	- / 5.741	- / 3.810	- / -	- / 3.810	- / 3.492	- / 4.078	- / 4.827	- / 7.328	- / 88.156	- / 129.027	
Total													
Total Cost (Procurement + Support + Installation)	107.073	20.367	23.936	22.312	-	22.312	22.327	39.602	40.996	44.158	476.937	797.708	

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Exhibit P-3a, Individual Modification: PB 2016 Navy			Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9		P-1 Line Item Number / Title: 0900 / DDG Mod			Modification Number / Title: 8 / DM005 - MULTI-MISSION SIGPRO

Modification Item 1 of 1: DM005 - MULTI-MISSION SIGPRO

Manufacturer Information

Manufacturer Name: LOCKHEED MARTIN	Manufacturer Location: MOORESTOWN, NJ
Administrative Leadtime (in Months): 6	Production Leadtime (in Months): 18

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Jun 2014	Jun 2015	Jun 2016	Jun 2017	Apr 2018	Mar 2019	Apr 2020
Delivery Dates	Dec 2015	Dec 2016	Dec 2017	Dec 2018	Oct 2019	Sep 2020	Oct 2021

Installation Information

Method of Implementation: [none specified]:: Installation Name: MULTI-MISSION SIGPRO EQUIPMENT

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	3 / 10.100	1 / 1.355	2 / 4.888	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 16.343
FY 2014	- / -	- / 0.140	- / 0.701	1 / 2.802	- / -	1 / 2.802	- / -	- / -	- / -	- / -	- / -	1 / 3.643
FY 2015	- / -	- / -	- / 0.152	- / 0.830	- / -	- / 0.830	1 / 2.473	- / -	- / -	- / -	- / -	1 / 3.455
FY 2016	- / -	- / -	- / -	- / 0.178	- / -	- / 0.178	- / 0.838	1 / 2.895	- / -	- / -	- / -	1 / 3.911
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.181	- / 0.854	1 / 2.943	- / -	- / -	1 / 3.978
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.329	- / 1.549	2 / 5.406	- / -	2 / 7.284
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.335	- / 1.580	2 / 5.503	2 / 7.418
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.342	2 / 7.203	2 / 7.545
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	20 / 75.450	20 / 75.450
Total	3 / 10.100	1 / 1.495	2 / 5.741	1 / 3.810	- / -	1 / 3.810	1 / 3.492	1 / 4.078	1 / 4.827	2 / 7.328	24 / 88.156	36 / 129.027

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	3	1	-	-	-	-	-	1	1	-	-	-	1	-	1	-	-	-	1	-	-	-	1	-	-	1	-	1	-	24	36
Out	1	-	-	-	2	1	-	-	-	-	-	1	1	-	-	-	1	-	1	-	-	-	1	-	-	-	1	-	-	26	36

Footnotes:

⁽¹⁰⁾ Installation costs across the FYDP may vary depending on current port rates. Port rates are updated every year by a CNRMC letter based on the forecasted port loading model. Port loading rate forecasts are the rates recommended for all budgeted maintenance and organic modernization within a specific port. Individual ship's availability durations vary dependent upon the integration of ship's maintenance and modernization work packages.

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Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0900 / DDG Mod					Modification Number / Title: 9 / DM006 - MULTI-MISSION SSA/CWI MICROWAVE TUBES				
Resource Summary		Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>		-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>		5.768	0.993	1.011	1.029	-	1.029	1.048	2.133	2.171	2.210	23.688	40.051
Less PY Advance Procurement <i>(\$ in Millions)</i>		-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>		5.768	0.993	1.011	1.029	-	1.029	1.048	2.133	2.171	2.210	23.688	40.051
Plus CY Advance Procurement <i>(\$ in Millions)</i>		-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>		5.768	0.993	1.011	1.029	-	1.029	1.048	2.133	2.171	2.210	23.688	40.051
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)													
Initial Spares <i>(\$ in Millions)</i>		-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>		-	-	-	-	-	-	-	-	-	-	-	-
Description: Procures Multi-Mission Solid State Amplifier (SSA)/Continuous Wave Illumination (CWI) Microwave Tubes upgrades for DDG Modernization Program that includes equipment procurement, recurring engineering, equipment integration and Integrated Logistics Support (ILS) products for DDG 51 Class ships.													

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Exhibit P-3a, Individual Modification: PB 2016 Navy					Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9			P-1 Line Item Number / Title: 0900 / DDG Mod			Modification Number / Title: 9 / DM006 - MULTI-MISSION SSA/CWI MICROWAVE TUBES	
Modification Item 1 of 1: DM006 - MULTI-MISSION SSA/CWI MICROWAVE TUBES							
Manufacturer Information							
Manufacturer Name: VARIOUS				Manufacturer Location: VARIOUS			
Administrative Leadtime (<i>in Months</i>): 6				Production Leadtime (<i>in Months</i>): 18			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Jun 2014	Jun 2015	Jun 2016	Jun 2017	Apr 2018	Mar 2019	Apr 2020
Delivery Dates	Dec 2015	Dec 2016	Dec 2017	Dec 2018	Oct 2019	Sep 2020	Oct 2021
Installation Information							
Method of Implementation (Organic): Not Installed - MULTI-MISSION SSA/CWI MICROWAVE TUBES EQUIPMENT					Installation Quantity: 36		
Footnotes: ⁽¹¹⁾ Installation costs for this equipment are captured in P40A/DM6IN-Installation.							

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0900 / DDG Mod	Modification Number / Title: 10 / DM007 - SPY-1D TRANSMITTER UPGRADES

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	26.413	5.234	5.382	5.263	-	5.263	5.358	10.517	10.877	6.058	0.890	75.992
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	26.413	5.234	5.382	5.263	-	5.263	5.358	10.517	10.877	6.058	0.890	75.992
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	26.413	5.234	5.382	5.263	-	5.263	5.358	10.517	10.877	6.058	0.890	75.992
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Procures SPY-1D Transmitter Upgrades combat systems that includes equipment procurement, recurring engineering, equipment integration and Integrated Logistics Support (ILS) products for DDG 51 Class ships.

Engineering Services:

Production Support Services are phased over a three (3) year span starting two (2) years prior to installation on a per hull basis. It includes five (5) elements that are related to the production and delivery of a usable end-item: Production Engineering, Quality Assurance, Product Improvement, Acceptance Test and Evaluation, and Contractor Engineering and Technical Services (CETS). Due to the phasing of the requirement over a three year period, engineering services will fluctuate depending on the number of ships in each year.

Five (5) elements and approximate breakdown is as follows:

Production Engineering includes preparation, test and technical evaluation of engineering changes to correct deficiencies in the production items; production configuration control; review and evaluation of production design data and documentation; and logistic supportability efforts.

Quality Assurance includes the preparation of procedures and the conduct of inspections, examinations and test during production that are necessary to deliver an item of the required quality as specified by the terms of the contract.

Product Improvement includes improving reliability/maintainability/availability, and the correction of deficiencies exclusive of contractual specifications.

Acceptance Test and Evaluation of a production item includes preparation of test plans, testing, data analysis, and data evaluation.

Contractor Engineering and Technical Services (CETS) includes the furnishing of advice, instruction, and training by commercial or industrial companies.

Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0900 / DDG Mod					Modification Number / Title: 10 / DM007 - SPY-1D TRANSMITTER UPGRADES			
Models of Systems Affected:				Modification Type:					Related RDT&E PEs:			
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Procurement												
Modification Item 1 of 1: DM007 - SPY-1D TRANSMITTER UPGRADES												
B Kits												
Recurring												
1.1.1) SPY-1D TRANSMITTER UPGRADES EQUIPMENT - Organic ⁽¹²⁾	6 / 25.543	1 / 4.557	1 / 4.639	1 / 4.723	- / -	1 / 4.723	1 / 4.808	2 / 9.789	2 / 9.965	1 / 5.072	- / -	15 / 69.096
Subtotal: Recurring	- / 25.543	- / 4.557	- / 4.639	- / 4.723	- / -	- / 4.723	- / 4.808	- / 9.789	- / 9.965	- / 5.072	- / -	- / 69.096
Subtotal: DM007 - SPY-1D TRANSMITTER UPGRADES	6 / 25.543	1 / 4.557	1 / 4.639	1 / 4.723	- / -	1 / 4.723	1 / 4.808	2 / 9.789	2 / 9.965	1 / 5.072	- / -	15 / 69.096
Subtotal: Procurement, All Modification Items	- / 25.543	- / 4.557	- / 4.639	- / 4.723	- / -	- / 4.723	- / 4.808	- / 9.789	- / 9.965	- / 5.072	- / -	- / 69.096
Support (All Modification Items)												
2.1) ENGINEERING SERVICES	- / 0.870	- / 0.677	- / 0.743	- / 0.540	- / -	- / 0.540	- / 0.550	- / 0.728	- / 0.912	- / 0.986	- / 0.890	- / 6.896
Subtotal: Support	- / 0.870	- / 0.677	- / 0.743	- / 0.540	- / -	- / 0.540	- / 0.550	- / 0.728	- / 0.912	- / 0.986	- / 0.890	- / 6.896
Installation												
Subtotal: Installation	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total												
Total Cost (Procurement + Support + Installation)	26.413	5.234	5.382	5.263	-	5.263	5.358	10.517	10.877	6.058	0.890	75.992

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Exhibit P-3a, Individual Modification: PB 2016 Navy					Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9			P-1 Line Item Number / Title: 0900 / DDG Mod			Modification Number / Title: 10 / DM007 - SPY-1D TRANSMITTER UPGRADES	
Modification Item 1 of 1: DM007 - SPY-1D TRANSMITTER UPGRADES							
Manufacturer Information							
Manufacturer Name: Raytheon				Manufacturer Location: Marlborough, MA			
Administrative Leadtime (<i>in Months</i>): 6				Production Leadtime (<i>in Months</i>): 18			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Jun 2014	Jun 2015	Jun 2016	Jun 2017	Apr 2018	Mar 2019	Apr 2020
Delivery Dates	Dec 2015	Dec 2016	Dec 2017	Dec 2018	Oct 2019	Sep 2020	Oct 2021
Installation Information							
Method of Implementation (Organic): Not Installed - SPY-1D TRANSMITTER UPGRADES EQUIPMENT					Installation Quantity: 15		
Footnotes: ⁽¹²⁾ SPY-1D Transmitter Upgrades aren't required for DDG 91 and follow. Installation costs for this equipment are captured in P40A/DM6IN-Installation.							

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Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0900 / DDG Mod					Modification Number / Title: 11 / DM008 - MULTI-MISSION BMD CAPABILITY			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	10.190	1.650	1.680	1.710	-	1.710	1.741	3.544	3.608	3.673	39.367	67.163
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	10.190	1.650	1.680	1.710	-	1.710	1.741	3.544	3.608	3.673	39.367	67.163
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	10.190	1.650	1.680	1.710	-	1.710	1.741	3.544	3.608	3.673	39.367	67.163
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: Procures Multi-Mission Ballistic Missile Defense (BMD) Capability combat systems that includes equipment procurement, recurring engineering, equipment integration and Integrated Logistics Support (ILS) products for DDG 51 Class ships.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy					Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9			P-1 Line Item Number / Title: 0900 / DDG Mod			Modification Number / Title: 11 / DM008 - MULTI-MISSION BMD CAPABILITY	
Modification Item 1 of 1: DM008 - MULTI-MISSION BMD CAPABILITY							
Manufacturer Information							
Manufacturer Name: LOCKHEED MARTIN				Manufacturer Location: MOORESTOWN, NJ			
Administrative Leadtime (<i>in Months</i>): 6				Production Leadtime (<i>in Months</i>): 18			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Jun 2014	Jun 2015	Jun 2016	Jun 2017	Apr 2018	Mar 2019	Apr 2020
Delivery Dates	Dec 2015	Dec 2016	Dec 2017	Dec 2018	Oct 2019	Sep 2020	Oct 2021
Installation Information							
Method of Implementation (Organic): Not Installed - MULTI-MISSION BMD EQUIPMENT					Installation Quantity: 36		
Footnotes: ⁽¹³⁾ Installation costs for this equipment are captured in P40A/DM6IN-Installation.							

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Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0900 / DDG Mod					Modification Number / Title: 12 / DM009 - VLS UPGRADES			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	46.934	9.192	12.019	11.845	-	11.845	12.628	18.859	19.562	21.079	239.621	391.739
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	46.934	9.192	12.019	11.845	-	11.845	12.628	18.859	19.562	21.079	239.621	391.739
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	46.934	9.192	12.019	11.845	-	11.845	12.628	18.859	19.562	21.079	239.621	391.739
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: Procures Vertical Launch System (VLS) Modifications, Evolved Sea Sparrow Missile VLS Modifications, SM3 Operability Heating Ventilation Air Conditioning (HVAC) and VLS MODS for SM3 Block 3 combat systems that includes equipment procurement, recurring engineering, equipment integration and Integrated Logistics Support (ILS) products for DDG 51 Class ships.												
Engineering Services: Production Support Services are phased over a three (3) year span starting two (2) years prior to installation on a per hull basis. It includes five (5) elements that are related to the production and delivery of a usable end-item: Production Engineering, Quality Assurance, Product Improvement, Acceptance Test and Evaluation, and Contractor Engineering and Technical Services (CETS). Due to the phasing of the requirement over a three year period, engineering services will fluctuate depending on the number of ships in each year. Five (5) elements and approximate breakdown is as follows: Production Engineering includes preparation, test and technical evaluation of engineering changes to correct deficiencies in the production items; production configuration control; review and evaluation of production design data and documentation; and logistic supportability efforts. Quality Assurance includes the preparation of procedures and the conduct of inspections, examinations and test during production that are necessary to deliver an item of the required quality as specified by the terms of the contract. Product Improvement includes improving reliability/maintainability/availability, and the correction of deficiencies exclusive of contractual specifications. Acceptance Test and Evaluation of a production item includes preparation of test plans, testing, data analysis, and data evaluation. Contractor Engineering and Technical Services (CETS) includes the furnishing of advice, instruction, and training by commercial or industrial companies. [VLS EQUIPMENT] Engineering services increase in FY 18 due to increased number of Combat System availabilities in FY 20.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0900 / DDG Mod	Modification Number / Title: 12 / DM009 - VLS UPGRADES

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0900 / DDG Mod				Modification Number / Title: 12 / DM009 - VLS UPGRADES					
Models of Systems Affected:			Modification Type:						Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: DM009 - VLS UPGRADES													
B Kits													
Recurring													
1.1.1) VLS EQUIPMENT - NonOrganic ⁽¹⁴⁾	5 / 33.426	1 / 4.963	1 / 5.052	1 / 5.143	- / -	1 / 5.143	1 / 5.235	2 / 10.659	2 / 10.851	2 / 11.047	20 / 118.390	35 / 204.766	
Subtotal: Recurring	- / 33.426	- / 4.963	- / 5.052	- / 5.143	- / -	- / 5.143	- / 5.235	- / 10.659	- / 10.851	- / 11.047	- / 118.390	- / 204.766	
Subtotal: DM009 - VLS UPGRADES	5 / 33.426	1 / 4.963	1 / 5.052	1 / 5.143	- / -	1 / 5.143	1 / 5.235	2 / 10.659	2 / 10.851	2 / 11.047	20 / 118.390	35 / 204.766	
Subtotal: Procurement, All Modification Items	- / 33.426	- / 4.963	- / 5.052	- / 5.143	- / -	- / 5.143	- / 5.235	- / 10.659	- / 10.851	- / 11.047	- / 118.390	- / 204.766	
Support (All Modification Items)													
2.1) ENGINEERING SERVICES	- / 8.308	- / 3.428	- / 4.153	- / 4.800	- / -	- / 4.800	- / 5.656	- / 6.158	- / 6.269	- / 6.381	- / 77.331	- / 122.484	
Subtotal: Support	- / 8.308	- / 3.428	- / 4.153	- / 4.800	- / -	- / 4.800	- / 5.656	- / 6.158	- / 6.269	- / 6.381	- / 77.331	- / 122.484	
Installation													
Modification Item 1 of 1: DM009 - VLS UPGRADES	- / 5.200	- / 0.801	- / 2.814	- / 1.902	- / -	- / 1.902	- / 1.737	- / 2.042	- / 2.442	- / 3.651	- / 43.900	- / 64.489	
Subtotal: Installation	- / 5.200	- / 0.801	- / 2.814	- / 1.902	- / -	- / 1.902	- / 1.737	- / 2.042	- / 2.442	- / 3.651	- / 43.900	- / 64.489	
Total													
Total Cost (Procurement + Support + Installation)	46.934	9.192	12.019	11.845	-	11.845	12.628	18.859	19.562	21.079	239.621	391.739	

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Exhibit P-3a, Individual Modification: PB 2016 Navy							Date: February 2015																								
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0900 / DDG Mod				Modification Number / Title: 12 / DM009 - VLS UPGRADES																							
Modification Item 1 of 1: DM009 - VLS UPGRADES																															
Manufacturer Information																															
Manufacturer Name: LOCKHEED MARTIN							Manufacturer Location: MOORESTOWN, NJ																								
Administrative Leadtime (in Months): 6							Production Leadtime (in Months): 18																								
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020																								
Contract Dates	Jun 2014	Jun 2015	Jun 2016	Jun 2017	Apr 2018	Mar 2019	Apr 2020																								
Delivery Dates	Dec 2015	Dec 2016	Dec 2017	Dec 2018	Oct 2019	Sep 2020	Oct 2021																								
Installation Information																															
Method of Implementation: [none specified]:: Installation Name: VLS EQUIPMENT																															
Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total																			
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)																			
Prior Years	2 / 5.200	1 / 0.728	2 / 2.358	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 8.286																			
FY 2014	- / -	- / 0.073	- / 0.376	1 / 1.364	- / -	1 / 1.364	- / -	- / -	- / -	- / -	- / -	1 / 1.813																			
FY 2015	- / -	- / -	- / 0.080	- / 0.445	- / -	- / 0.445	1 / 1.193	- / -	- / -	- / -	- / -	1 / 1.718																			
FY 2016	- / -	- / -	- / -	- / 0.093	- / -	- / 0.093	- / 0.449	1 / 1.412	- / -	- / -	- / -	1 / 1.954																			
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.095	- / 0.458	1 / 1.437	- / -	- / -	1 / 1.990																			
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.172	- / 0.830	2 / 2.625	- / -	2 / 3.627																			
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.175	- / 0.847	2 / 2.675	2 / 3.697																			
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.179	2 / 3.585	2 / 3.764																			
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	20 / 37.640	20 / 37.640																			
Total	2 / 5.200	1 / 0.801	2 / 2.814	1 / 1.902	- / -	1 / 1.902	1 / 1.737	1 / 2.042	1 / 2.442	2 / 3.651	24 / 43.900	35 / 64.489																			
Installation Schedule																															
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	2	1	-	-	-	-	-	1	1	-	-	-	1	-	1	-	-	-	1	-	-	-	1	-	-	1	-	1	-	24	35
Out	-	-	-	-	2	1	-	-	-	-	-	1	1	-	-	-	1	-	1	-	-	-	1	-	-	-	1	-	-	26	35
Footnotes: (14) Installation costs across the FYDP may vary depending on current port rates. Port rates are updated every year by a CNRMC letter based on the forecasted port loading model. Port loading rate forecasts are the rates recommended for all budgeted maintenance and organic modernization within a specific port. Individual ship's availability durations vary dependent upon the integration of ship's maintenance and modernization work packages.																															

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Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0900 / DDG Mod					Modification Number / Title: 13 / DM010 - FCS STAMO			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	12.005	1.938	0.500	0.400	-	0.400	-	-	-	-	-	14.843
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	12.005	1.938	0.500	0.400	-	0.400	-	-	-	-	-	14.843
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	12.005	1.938	0.500	0.400	-	0.400	-	-	-	-	-	14.843
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: Procures Stabilized Master Oscillator (STAMO) combat systems that include equipment procurement, recurring engineering, equipment integration and Integrated Logistics Support (ILS) products for DDG 51 Class ships.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0900 / DDG Mod				Modification Number / Title: 13 / DM010 - FCS STAMO				
Models of Systems Affected:			Modification Type:					Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Procurement												
Modification Item 1 of 1: DM010 - FCS STAMO												
B Kits												
Recurring												
1.1.1) FCS STAMO EQUIPMENT - NonOrganic ⁽¹⁵⁾	5 / 11.005	1 / 1.738	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 12.743
Subtotal: Recurring	- / 11.005	- / 1.738	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 12.743
Subtotal: DM010 - FCS STAMO	5 / 11.005	1 / 1.738	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 12.743
Subtotal: Procurement, All Modification Items	- / 11.005	- / 1.738	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 12.743
Installation												
Modification Item 1 of 1: DM010 - FCS STAMO	- / 1.000	- / 0.200	- / 0.500	- / 0.400	- / -	- / 0.400	- / -	- / -	- / -	- / -	- / -	- / 2.100
Subtotal: Installation	- / 1.000	- / 0.200	- / 0.500	- / 0.400	- / -	- / 0.400	- / -	- / -	- / -	- / -	- / -	- / 2.100
Total												
Total Cost (Procurement + Support + Installation)	12.005	1.938	0.500	0.400	-	0.400	-	-	-	-	-	14.843

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015																					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9										P-1 Line Item Number / Title: 0900 / DDG Mod										Modification Number / Title: 13 / DM010 - FCS STAMO											
Modification Item 1 of 1: DM010 - FCS STAMO																															
Manufacturer Information																															
Manufacturer Name: Raytheon															Manufacturer Location: Marlborough, MA																
Administrative Leadtime (in Months): 6															Production Leadtime (in Months): 18																
Dates		FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020					
Contract Dates		Jun 2014																													
Delivery Dates		Dec 2015																													
Installation Information																															
Method of Implementation: [none specified]:: Installation Name: FCS STAMO EQUIPMENT																															
Installation Cost		Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total																		
		Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)																		
Prior Years		2 / 1.000	1 / 0.100	2 / 0.400	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 1.500																		
FY 2014		- / -	- / 0.100	- / 0.100	1 / 0.400	- / -	1 / 0.400	- / -	- / -	- / -	- / -	- / -	1 / 0.600																		
FY 2015		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2016		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2017		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2018		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2019		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2020		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
To Complete		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
Total		2 / 1.000	1 / 0.200	2 / 0.500	1 / 0.400	- / -	1 / 0.400	- / -	- / -	- / -	- / -	- / -	6 / 2.100																		
Installation Schedule																															
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	2	1	-	-	-	-	-	1	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
Out	-	-	-	-	2	1	-	-	-	-	-	1	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	6
Footnotes:																															
⁽¹⁵⁾ STAMO has previously been installed on all DDG Flight IIA's, i.e. DDG 79 and follow previously received STAMO. Interchangeable Cruiser/Destroyer combat system equipment has been installed during the FY 14 DDG combat system availability. This equipment did not require procurement funding in FY12; however, still required Design Services Allocation (DSA) and installation funding in FY 12-14. Installation costs across the FYDP may vary depending on current port rates. Port rates are updated every year by a CNRMC letter based on the forecasted port loading model. Port loading rate forecasts are the rates recommended for all budgeted maintenance and organic modernization within a specific port. Individual ship's availability durations vary dependent upon the integration of ship's maintenance and modernization work packages.																															

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0900 / DDG Mod						Modification Number / Title: 14 / DM011 - AN/SQQ-89 A(V15)		
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	61.677	20.083	11.635	26.955	-	26.955	21.039	28.256	28.537	14.006	47.876	260.064
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	61.677	20.083	11.635	26.955	-	26.955	21.039	28.256	28.537	14.006	47.876	260.064
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	61.677	20.083	11.635	26.955	-	26.955	21.039	28.256	28.537	14.006	47.876	260.064
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: Procures improved AN/SQQ-89 A(V)15 with Multi-Functional Towed Array (MFTA) combat systems to replace the installed MIL-STD AN/SQQ-89(V) that includes equipment procurement, recurring engineering, equipment integration and Integrated Logistics Support (ILS) products for DDG 51 Class ships. Flight IIA DDGs have previously received an SQQ-89(A)V15 installation. Engineering Services: Production Support Services are phased over a three (3) year span starting two (2) years prior to installation on a per hull basis. It includes five (5) elements that are related to the production and delivery of a usable end-item: Production Engineering, Quality Assurance, Product Improvement, Acceptance Test and Evaluation, and Contractor Engineering and Technical Services (CETS). Due to the phasing of the requirement over a three year period, engineering services will fluctuate depending on the number of ships in each year. Five (5) elements and approximate breakdown is as follows: Production Engineering includes preparation, test and technical evaluation of engineering changes to correct deficiencies in the production items; production configuration control; review and evaluation of production design data and documentation; and logistic supportability efforts. Quality Assurance includes the preparation of procedures and the conduct of inspections, examinations and test during production that are necessary to deliver an item of the required quality as specified by the terms of the contract. Product Improvement includes improving reliability/maintainability/availability, and the correction of deficiencies exclusive of contractual specifications. Acceptance Test and Evaluation of a production item includes preparation of test plans, testing, data analysis, and data evaluation. Contractor Engineering and Technical Services (CETS) includes the furnishing of advice, instruction, and training by commercial or industrial companies.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0900 / DDG Mod				Modification Number / Title: 14 / DM011 - AN/SQQ-89 A(V15)				
Models of Systems Affected:			Modification Type:					Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Procurement												
Modification Item 1 of 1: DM011 - AN/SQQ-89 A(V15)												
B Kits												
Recurring												
1.1.1) AN/SQQ-89 EQUIPMENT A(V15) - NonOrganic (16)	5 / 38.284	2 / 15.138	- / -	2 / 15.688	- / -	2 / 15.688	2 / 15.970	2 / 16.258	2 / 16.550	- / -	- / -	15 / 117.888
Subtotal: Recurring	- / 38.284	- / 15.138	- / -	- / 15.688	- / -	- / 15.688	- / 15.970	- / 16.258	- / 16.550	- / -	- / -	- / 117.888
Subtotal: DM011 - AN/SQQ-89 A(V15)	5 / 38.284	2 / 15.138	- / -	2 / 15.688	- / -	2 / 15.688	2 / 15.970	2 / 16.258	2 / 16.550	- / -	- / -	15 / 117.888
Subtotal: Procurement, All Modification Items	- / 38.284	- / 15.138	- / -	- / 15.688	- / -	- / 15.688	- / 15.970	- / 16.258	- / 16.550	- / -	- / -	- / 117.888
Support (All Modification Items)												
2.1) ENGINEERING SERVICES	- / 10.693	- / 2.697	- / 2.746	- / 2.795	- / -	- / 2.795	- / 2.845	- / 2.896	- / 2.949	- / 3.002	- / 39.112	- / 69.735
Subtotal: Support	- / 10.693	- / 2.697	- / 2.746	- / 2.795	- / -	- / 2.795	- / 2.845	- / 2.896	- / 2.949	- / 3.002	- / 39.112	- / 69.735
Installation												
Modification Item 1 of 1: DM011 - AN/SQQ-89 A(V15)	- / 12.700	- / 2.248	- / 8.889	- / 8.472	- / -	- / 8.472	- / 2.224	- / 9.102	- / 9.038	- / 11.004	- / 8.764	- / 72.441
Subtotal: Installation	- / 12.700	- / 2.248	- / 8.889	- / 8.472	- / -	- / 8.472	- / 2.224	- / 9.102	- / 9.038	- / 11.004	- / 8.764	- / 72.441
Total												
Total Cost (Procurement + Support + Installation)	61.677	20.083	11.635	26.955	-	26.955	21.039	28.256	28.537	14.006	47.876	260.064

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015																					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9										P-1 Line Item Number / Title: 0900 / DDG Mod										Modification Number / Title: 14 / DM011 - AN/SQQ-89 A(V15)											
Modification Item 1 of 1: DM011 - AN/SQQ-89 A(V15)																															
Manufacturer Information																															
Manufacturer Name: Lockheed Martin															Manufacturer Location: Syracuse, NY																
Administrative Leadtime (in Months): 6															Production Leadtime (in Months): 18																
Dates		FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020					
Contract Dates		Jun 2014								Sep 2016				Sep 2017				Aug 2018				Jul 2019									
Delivery Dates		Dec 2015								Mar 2018				Mar 2019				Feb 2020				Jan 2021									
Installation Information																															
Method of Implementation: [none specified]:: Installation Name: AN/SQQ-89 EQUIPMENT A(V15)																															
Installation Cost		Prior Years		FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total		FY 2017		FY 2018		FY 2019		FY 2020		To Complete		Total							
		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)							
Prior Years		2 / 12.700		1 / 1.825		2 / 7.000		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		5 / 21.525					
FY 2014		- / -		- / 0.423		- / 1.889		2 / 8.056		- / -		2 / 8.056		- / -		- / -		- / -		- / -		- / -		- / -		2 / 10.368					
FY 2015		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2016		- / -		- / -		- / -		- / 0.416		- / -		- / 0.416		- / 1.856		2 / 6.878		- / -		- / -		- / -		- / -		2 / 9.150					
FY 2017		- / -		- / -		- / -		- / -		- / -		- / -		- / 0.368		- / 1.692		2 / 6.152		- / -		- / -		- / -		2 / 8.212					
FY 2018		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / 0.532		- / 2.344		2 / 8.616		- / -		- / -		2 / 11.492					
FY 2019		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / 0.542		- / 2.388		2 / 8.764		- / -		2 / 11.694					
FY 2020		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
To Complete		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
Total		2 / 12.700		1 / 2.248		2 / 8.889		2 / 8.472		- / -		2 / 8.472		- / 2.224		2 / 9.102		2 / 9.038		2 / 11.004		2 / 8.764		- / -		15 / 72.441					
Installation Schedule																															
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	2	1	-	-	-	-	-	1	1	-	2	-	-	-	-	-	-	-	-	1	1	-	-	-	2	-	1	-	1	2	15
Out	-	-	-	-	2	1	-	-	-	-	-	2	2	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	1	5	15
Footnotes:																															
⁽¹⁶⁾ Interchangeable Cruiser/Destroyer combat system equipment has been installed during the FY 14 DDG combat system availability. This equipment did not require procurement funding in FY12; however, still required Design Services Allocation (DSA) and installation funding in FY 12-14. Flight IIA DDGs have previously received an SQQ-89(A)V15 installation. Installation costs across the FYDP may vary depending on current port rates. Port rates are updated every year by a CNRMC letter based on the forecasted port loading model. Port loading rate forecasts are the rates recommended for all budgeted maintenance and organic modernization within a specific port. Individual ship's availability durations vary dependent upon the integration of ship's maintenance and modernization work packages.																															

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0900 / DDG Mod						Modification Number / Title: 15 / DM012 - CEC		
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	28.729	5.980	5.001	2.433	-	2.433	-	-	-	-	-	42.143
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	28.729	5.980	5.001	2.433	-	2.433	-	-	-	-	-	42.143
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	28.729	5.980	5.001	2.433	-	2.433	-	-	-	-	-	42.143
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: Procures Cooperative Engagement Capability (CEC) combat systems that includes equipment procurement, recurring engineering, equipment integration and Integrated Logistics Support (ILS) products for DDG 51 Class ships. Flight IIA DDGs have previously received CEC installation. Engineering Services: Production Support Services are phased over a three (3) year span starting two (2) years prior to installation on a per hull basis. It includes five (5) elements that are related to the production and delivery of a usable end-item: Production Engineering, Quality Assurance, Product Improvement, Acceptance Test and Evaluation, and Contractor Engineering and Technical Services (CETS). Due to the phasing of the requirement over a three year period, engineering services will fluctuate depending on the number of ships in each year. Five (5) elements and approximate breakdown is as follows: Production Engineering includes preparation, test and technical evaluation of engineering changes to correct deficiencies in the production items; production configuration control; review and evaluation of production design data and documentation; and logistic supportability efforts. Quality Assurance includes the preparation of procedures and the conduct of inspections, examinations and test during production that are necessary to deliver an item of the required quality as specified by the terms of the contract. Product Improvement includes improving reliability/maintainability/availability, and the correction of deficiencies exclusive of contractual specifications. Acceptance Test and Evaluation of a production item includes preparation of test plans, testing, data analysis, and data evaluation. Contractor Engineering and Technical Services (CETS) includes the furnishing of advice, instruction, and training by commercial or industrial companies.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0900 / DDG Mod				Modification Number / Title: 15 / DM012 - CEC					
Models of Systems Affected:				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: DM012 - CEC													
B Kits													
Recurring													
1.1.1) CEC EQUIPMENT - NonOrganic ⁽¹⁷⁾	5 / 22.176	1 / 4.614	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 26.790	
Subtotal: Recurring	- / 22.176	- / 4.614	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 26.790	
Subtotal: DM012 - CEC	5 / 22.176	1 / 4.614	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 26.790	
Subtotal: Procurement, All Modification Items	- / 22.176	- / 4.614	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 26.790	
Support (All Modification Items)													
2.1) ENGINEERING SERVICES	- / 1.253	- / 0.032	- / 0.033	- / 0.044	- / -	- / 0.044	- / -	- / -	- / -	- / -	- / -	- / 1.362	
Subtotal: Support	- / 1.253	- / 0.032	- / 0.033	- / 0.044	- / -	- / 0.044	- / -	- / -	- / -	- / -	- / -	- / 1.362	
Installation													
Modification Item 1 of 1: DM012 - CEC	- / 5.300	- / 1.334	- / 4.968	- / 2.389	- / -	- / 2.389	- / -	- / -	- / -	- / -	- / -	- / 13.991	
Subtotal: Installation	- / 5.300	- / 1.334	- / 4.968	- / 2.389	- / -	- / 2.389	- / -	- / -	- / -	- / -	- / -	- / 13.991	
Total													
Total Cost (Procurement + Support + Installation)	28.729	5.980	5.001	2.433	-	2.433	-	-	-	-	-	42.143	

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Exhibit P-3a, Individual Modification: PB 2016 Navy			Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9		P-1 Line Item Number / Title: 0900 / DDG Mod			Modification Number / Title: 15 / DM012 - CEC

Modification Item 1 of 1: DM012 - CEC

Manufacturer Information

Manufacturer Name: Raytheon			Manufacturer Location: St. Petersburg, FL		
Administrative Leadtime (in Months): 6			Production Leadtime (in Months): 18		

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Jun 2014						
Delivery Dates	Dec 2015						

Installation Information

Method of Implementation: [none specified]:: Installation Name: CEC EQUIPMENT

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	2 / 5.300	1 / 1.195	2 / 4.350	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 10.845
FY 2014	- / -	- / 0.139	- / 0.618	1 / 2.389	- / -	1 / 2.389	- / -	- / -	- / -	- / -	- / -	1 / 3.146
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	2 / 5.300	1 / 1.334	2 / 4.968	1 / 2.389	- / -	1 / 2.389	- / -	- / -	- / -	- / -	- / -	6 / 13.991

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	2	1	-	-	-	-	-	1	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
Out	-	-	-	-	2	1	-	-	-	-	-	1	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	6

Footnotes:

(17) Interchangeable Cruiser/Destroyer combat system equipment has been installed during the FY 14 DDG combat system availability. This equipment did not require procurement funding in FY12; however, still required Design Services Allocation (DSA) and installation funding in FY 12-14. Flight IIA DDGs have already received CEC. Installation costs across the FYDP may vary depending on current port rates. Port rates are updated every year by a CNRMC letter based on the forecasted port loading model. Port loading rate forecasts are the rates recommended for all budgeted maintenance and organic modernization within a specific port. Individual ship's availability durations vary dependent upon the integration of ship's maintenance and modernization work packages.

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment							P-1 Line Item Number / Title: 0910 / Firefighting Equipment					
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:					Other Related Program Elements:				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	42.422	14.389	15.134	16.089	-	16.089	17.004	15.133	18.959	17.935	278.729	435.794
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	42.422	14.389	15.134	16.089	-	16.089	17.004	15.133	18.959	17.935	278.729	435.794
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	42.422	14.389	15.134	16.089	-	16.089	17.004	15.133	18.959	17.935	278.729	435.794
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: The Department decided that a number of survivability improvements needed to be incorporated into mission-essential ship and combat systems during their acquisition and modernization. Shipboard fires have emphasized the urgent need to upgrade features and design standards that contribute to survivability. [P40A / HB003 - BREATHING APPARATUS REPLACEMENT]: Breathing apparatus are reaching service life of 15 years and must be replaced. There is no installation associated with this replacement. There are 3 types of apparatus which require replacement: (1) confined-space entry breathing apparatus, which are the first requiring replacement; (2) emergency escape breathing devices (EEBD), and (3) self-contained breathing apparatus (SCBA) for firefighters. The cost varies based on ship type. Units of EEBD and SCBA are quantity of ships; number of breathing apparatus varies by ship. [P40A / HB830 PRODUCTION ENGINEERING]: Development of technical manuals, Planned Maintenance System (PMS), Provisioning Technical Documentation (PTD), Program Support Data (PSD) and Allowance Parts List (APLs); engineering to manage procurement and material, and in support of design reviews. [P3A / HB002 - MAGAZINE SPRINKLING IMPROVEMENT]: HB002 - MAGAZINE SPRINKLING IMPROVEMENT Replaces the detection system designed in the 1960s, which performs poorly and is difficult to support and maintain. [P3A / MAGAZINE SPRINKLING IMPROVEMENT]: HB5IN - INSTALLATION OF EQUIPMENT Funding is for installation of equipment for the Fleet Modernization Program installations. HB6IN - INSTALLATION OF EQUIPMENT Funding is for installation of equipment for the Fleet Modernization Program installations. [P3A - 2 / HB007 SOPV REPLACEMENT]: HB007 - REPLACE SOLENOID-OPERATED PILOT VALVE (SOPV)The SOPV is a high-maintenance item. The SOPV provides a way for remote control of AFFF and countermeasure wash down (CMWD) systems. Replacement is required to ensure these systems are operational for emergencies. Top Management Attention/Top Management Initiative (TMA/TMI) and INSURV interest due to impact of this item on AFFF system operation. The requirement is for all surface ships. [P3A - 2 / HB007 SOPV REPLACEMENT FIRST ARTICLES]: HB6IN - INSTALLATION OF EQUIPMENT Funding is for installation of equipment for the Fleet Modernization Program installations.												

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment		P-1 Line Item Number / Title: 0910 / Firefighting Equipment
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:
[P3A - 3 / HB009 FIREFIGHTER ACCESS]: HB51N - INSTALLATION OF EQUIPMENT Funding is for installation of equipment for the Fleet Modernization Program installations.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy						Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment				P-1 Line Item Number / Title: 0910 / Firefighting Equipment				
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:			Other Related Program Elements:		
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
Firefighting Equipment	P-40a, P-5a, P-21		- / 31.913	- / 13.331	- / 14.230	- / 15.834	- / -	- / 15.834
1 / HB002 - MAGAZINE SPRINKLING IMPROVEMENT ()	P-3a		- / 1.275	- / 0.123	- / 0.780	- / 0.255	- / -	- / 0.255
2 / HB007 - SOPV REPLACEMENT ()	P-3a		- / 1.676	- / 0.935	- / -	- / -	- / -	- / -
3 / HB009 - FIREFIGHTER ACCESS ()	P-3a		- / 7.558	- / -	- / 0.124	- / -	- / -	- / -
Total Gross/Weapon System Cost			- / 42.422	- / 14.389	- / 15.134	- / 16.089	- / -	- / 16.089
Exhibits Schedule			FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
Firefighting Equipment	P-40a, P-5a, P-21		- / -	- / -	- / -	- / -	- / -	- / -
1 / HB002 - MAGAZINE SPRINKLING IMPROVEMENT ()	P-3a		- / 1.139	- / 2.559	- / 6.473	- / 6.257	- / 188.280	- / 207.141
2 / HB007 - SOPV REPLACEMENT ()	P-3a		- / 0.965	- / 0.986	- / 2.593	- / 2.233	- / 64.523	- / 73.911
3 / HB009 - FIREFIGHTER ACCESS ()	P-3a		- / 0.446	- / -	- / -	- / -	- / -	- / 8.128
Total Gross/Weapon System Cost			- / 17.004	- / 15.133	- / 18.959	- / 17.935	- / 278.729	- / 435.794
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.								
Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.								

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9								P-1 Line Item Number / Title: 0910 / Firefighting Equipment							Aggregated Items Title: Firefighting Equipment				

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) HB003 - BREATHING APPARATUS REPLACEMENT ⁽¹⁾																				
1.1) EMERGENCY ESCAPE BREATHING DEVICES (EEBD) ^(†)	A		330,928.57	14	4.633	218,892.86	28	6.129	312,320.00	25	7.808	357,380.95	21	7.505	-	-	-	357,380.95	21	7.505
1.2) SELF-CONTAINED BREATHING APPARATUS (SCBA) ^(†)	A		450,931.03	29	13.077	425,500.00	14	5.957	514,100.00	10	5.141	616,000.00	12	7.392	-	-	-	616,000.00	12	7.392
Subtotal: 1) HB003 - BREATHING APPARATUS REPLACEMENT			-	-	17.710	-	-	12.086	-	-	12.949	-	-	14.897	-	-	-	-	-	14.897
2) HB830 PRODUCTION ENGINEERING																				
2.1) HB830 - PRODUCTION ENGINEERING	A		-	-	14.203	-	-	1.245	-	-	1.281	-	-	0.937	-	-	-	-	-	0.937
Subtotal: 2) HB830 PRODUCTION ENGINEERING			-	-	14.203	-	-	1.245	-	-	1.281	-	-	0.937	-	-	-	-	-	0.937
Total			-	-	31.913	-	-	13.331	-	-	14.230	-	-	15.834	-	-	-	-	-	15.834

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2017			FY 2018			FY 2019			FY 2020			To Complete			Total Cost		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) HB003 - BREATHING APPARATUS REPLACEMENT ⁽¹⁾																				
1.1) EMERGENCY ESCAPE BREATHING DEVICES (EEBD) ^(†)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1.2) SELF-CONTAINED BREATHING APPARATUS (SCBA) ^(†)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 1) HB003 - BREATHING APPARATUS REPLACEMENT			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy																Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9						P-1 Line Item Number / Title: 0910 / Firefighting Equipment										Aggregated Items Title: Firefighting Equipment				
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2017			FY 2018			FY 2019			FY 2020			To Complete			Total Cost		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
2.1) HB830 - PRODUCTION ENGINEERING	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 2) HB830 PRODUCTION ENGINEERING			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(t) indicates the presence of a P-5a

Footnotes:

(1) The units on the P40 are ships not unit costs for EEBDs and SCBAs, therefore unit cost is dependent on the distribution of ship classes planned during each FY. As large deck amphibians have four to five times the equipment requirement as a DDG 51 or CG 47, the net unit cost will be much higher in years where multiple large deck amphibians are planned. HB003 - SCBA replacement includes the apparatus, 45-minute air cylinders, and 30-minute air cylinders. New type of carbon-fiber replacement cylinders are approved for 30-year service life. FY15 procurement is for three CG-47 class ships (average \$450K), six DDG-51 class ships (average \$502) and one LSD-41 class ship (\$780K) with a program total of \$5.141M. FY16 procurement is for six CG-47 class ships (average \$480K), four DDG-51 class ships (average \$540K), one LSD-41 class ship (\$980K) and one LPD-17 class ship (\$1,372K) with a program total of \$7.392M. EEBD FY15 procurement is for seven CG-47 class ships (average \$277K), ten DDG-51 class ships (\$270K), two LHD-1 class ship (\$1269K), one LSD-41 class ship (\$451K), three MCM class ships (average \$47K) and two PC-1 class ship (\$20K each) with a program total of \$7.808M. EEBD FY16 procurement is for two CG-47 class ships (average \$295K), fifteen DDG-51 class ships (\$295K), one LHD-1 class ship (\$1504K), two LSD-41 class ships (average \$478K) and one PC-1 class ship (\$30K each) with a program total of \$7.505M. Ship to ship costs can vary significantly depending on their port location. FY16 procurement cost includes a projected cost growth due to a new NIOSH Certification Standard for EEBDs effective APR 2015. .

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Exhibit P-5a, Procurement History and Planning: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0910 / Firefighting Equipment				Aggregated Items: Firefighting Equipment				
Item Number / Title [DODIC]	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1) HB003 - BREATHING APPARATUS REPLACEMENT												
1.1) EMERGENCY ESCAPE BREATHING DEVICES (EEBD) ^(†)		2014	OCENCO ⁽²⁾ / PLEASANT PRAIRIE, WI	C / FP	NSWC, PCD	Feb 2014	Apr 2014	28	218,892.86	Y		
1.1) EMERGENCY ESCAPE BREATHING DEVICES (EEBD) ^(†)		2015 ⁽³⁾	OCENCO ⁽²⁾ / PLEASANT PRAIRIE, WI	C / FP	NSWC, PCD	Jan 2015	Mar 2015	25	312,320.00	Y		
1.1) EMERGENCY ESCAPE BREATHING DEVICES (EEBD) ^(†)		2016	TBD ⁽⁴⁾ / TBD	C / FP	NSWC, PCD	Jan 2016	Apr 2016	21	357,380.95	N		
1.2) SELF-CONTAINED BREATHING APPARATUS (SCBA) ^(†)		2014	SCOTT HEALTH & SAFETY / MONROE, NC	C / FP	NSWC, PCD	Jan 2014	Apr 2014	14	425,500.00	Y		
1.2) SELF-CONTAINED BREATHING APPARATUS (SCBA) ^(†)		2015	SCOTT HEALTH & SAFETY / MONROE, NC	C / FP	NSWC, PCD	Jan 2015	Apr 2015	10	514,100.00	Y		
1.2) SELF-CONTAINED BREATHING APPARATUS (SCBA) ^(†)		2016	SCOTT HEALTH & SAFETY / MONROE, NC	C / FP	NSWC, PCD	Jan 2016	Apr 2016	12	616,000.00	Y		
^(†) indicates the presence of a P-21												
Footnotes: ⁽²⁾ Sole-source contract ⁽³⁾ EEBDs for 25 ship are planned to be procured under a new contract in FY15 that meet the new NIOSH requirements. ⁽⁴⁾ New competitive contract												

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Exhibit P-21, Production Schedule: PB 2016 Navy																			Date: February 2015																			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9										P-1 Line Item Number / Title: 0910 / Firefighting Equipment																			Aggregated Items: Firefighting Equipment									
Items (Units in Each)							Fiscal Year 2014														Fiscal Year 2015																	
O C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2013	BAL DUE AS OF 1 OCT	Calendar Year 2014														Calendar Year 2015																	
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L							
1) HB003 - BREATHING APPARATUS REPLACEMENT																																						
1.1) EMERGENCY ESCAPE BREATHING DEVICES (EEBD)																																						
Prior Years Deliveries: 14																																						
	2	2014	NAVY	28	-	28					A -	-	9	9	10																	-						
	2	2015	NAVY	25	-	25													A -	-	2	-	-	-	5	5	5	8										
	3	2016	NAVY	21	-	21																						21										
1.2) SELF-CONTAINED BREATHING APPARATUS (SCBA)																																						
Prior Years Deliveries: 29																																						
	4	2014	NAVY	14	-	14				A -	-	-	5	5	4																	-						
	4	2015	NAVY	10	-	10													A -	-	-	5	5								-							
	4	2016	NAVY	12	-	12																						12										
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L							

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Exhibit P-21, Production Schedule: PB 2016 Navy																				Date: February 2015													
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9										P-1 Line Item Number / Title: 0910 / Firefighting Equipment										Aggregated Items: Firefighting Equipment													
Items (Units in Each)							Fiscal Year 2016													Fiscal Year 2017													
O C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2015	BAL DUE AS OF 1 OCT	Calendar Year 2016													Calendar Year 2017													
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L		
1) HB003 - BREATHING APPARATUS REPLACEMENT																																	
1.1) EMERGENCY ESCAPE BREATHING DEVICES (EEBD)																																	
Prior Years Deliveries: 14																																	
	2	2014	NAVY	28	28	-																									-		
	2	2015	NAVY	25	17	8	8																									-	
	3	2016	NAVY	21	-	21				A -	-	-	6	6	9															-			
1.2) SELF-CONTAINED BREATHING APPARATUS (SCBA)																																	
Prior Years Deliveries: 29																																	
	4	2014	NAVY	14	14	-																									-		
	4	2015	NAVY	10	10	-																									-		
	4	2016	NAVY	12	-	12				A -	-	-	2	5	5															-			
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L		

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Exhibit P-21, Production Schedule: PB 2016 Navy								Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9					P-1 Line Item Number / Title: 0910 / Firefighting Equipment				Aggregated Items: Firefighting Equipment		

		Production Rates (Each / Year)			Procurement Leadtime (Months)							
MFR Ref #	MFR Name - Location	MSR For 2016	1-8-5 For 2016	MAX For 2016	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1
1	OCENCO ⁽²⁾ - PLEASANT PRAIRIE, WI	-	-	-	-	-	-	-	-	-	-	-
2	TBD ⁽⁴⁾ - TBD	-	-	-	-	-	-	-	-	-	-	-
3	SCOTT HEALTH & SAFETY - MONROE, NC	-	-	-	-	-	-	-	-	-	-	-

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Footnotes:

⁽²⁾ Sole-source contract

⁽⁴⁾ New competitive contract

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0910 / Firefighting Equipment	Modification Number / Title: 1 / HB002 - MAGAZINE SPRINKLING IMPROVEMENT

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	1.275	0.123	0.780	0.255	-	0.255	1.139	2.559	6.473	6.257	188.280	207.141
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	1.275	0.123	0.780	0.255	-	0.255	1.139	2.559	6.473	6.257	188.280	207.141
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	1.275	0.123	0.780	0.255	-	0.255	1.139	2.559	6.473	6.257	188.280	207.141
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

[MAGAZINE SPRINKLING IMPROVEMENT] Magazine sprinkling improvement replaces the detection system designed in the 1960s, which performs poorly and is difficult to support and maintain. Magazine sprinkling improvements may require installation by shipyards and if so will be programmed for CNO availabilities. Delivery of each ship set is planned for several months in advance of availability start to reduce risk of ship availability changes.

Unit costs vary significantly by ship class due to the quantity and/or size of the magazines. Amphibious ships have larger magazines, requiring more fire detectors than DDG-51 Class ships, and DDG-51 Class ships already have smoke detectors. Equipment pricing is actual contact price plus administrative cost. There is no cost growth in equipment cost. Units are quantities of ships; equipment cost varies by ship.

Procurement is for Fire Detection and Actuation Systems (FDAS) and for motor-operated pilot valves (MOPV). The FDAS consists of heat detectors, smoke detectors for amphibious ships, and associated electronic controls. When the FDAS detects a fire, the MOPV opens to provide the sprinkling for the magazine. The MOPV is the same item procured to replace SOPVs under HB007, resulting in reduced unit costs in some years, and in reduced logistics costs.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0910 / Firefighting Equipment				Modification Number / Title: 1 / HB002 - MAGAZINE SPRINKLING IMPROVEMENT					
Models of Systems Affected:				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: HB002 - MAGAZINE SPRINKLING IMPROVEMENT													
B Kits													
Recurring													
1.1.1) MAGAZINE SPRINKLING IMPROVEMENT - NonOrganic ⁽⁵⁾		1 / 0.553	1 / -	- / -	- / -	- / -	1 / 0.214	2 / 0.427	7 / 1.518	7 / 1.568	93 / 46.790	112 / 51.070	
1.1.2) DSA COST - Organic		- / 0.222	- / 0.123	- / -	- / 0.255	- / -	- / 0.255	- / 0.456	- / 1.175	- / 1.537	- / 1.271	- / 37.717	- / 42.756
Subtotal: Recurring		- / 0.775	- / 0.123	- / -	- / 0.255	- / -	- / 0.255	- / 0.670	- / 1.602	- / 3.055	- / 2.839	- / 84.507	- / 93.826
Subtotal: HB002 - MAGAZINE SPRINKLING IMPROVEMENT		1 / 0.775	1 / 0.123	- / -	- / 0.255	- / -	- / 0.255	1 / 0.670	2 / 1.602	7 / 3.055	7 / 2.839	93 / 84.507	112 / 93.826
Subtotal: Procurement, All Modification Items		- / 0.775	- / 0.123	- / -	- / 0.255	- / -	- / 0.255	- / 0.670	- / 1.602	- / 3.055	- / 2.839	- / 84.507	- / 93.826
Installation													
Modification Item 1 of 1: HB002 - MAGAZINE SPRINKLING IMPROVEMENT		- / 0.500	- / -	- / 0.780	- / -	- / -	- / -	- / 0.469	- / 0.957	- / 3.418	- / 3.418	- / 103.773	- / 113.315
Subtotal: Installation		- / 0.500	- / -	- / 0.780	- / -	- / -	- / -	- / 0.469	- / 0.957	- / 3.418	- / 3.418	- / 103.773	- / 113.315
Total													
Total Cost (Procurement + Support + Installation)		1.275	0.123	0.780	0.255	-	0.255	1.139	2.559	6.473	6.257	188.280	207.141

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy							Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0910 / Firefighting Equipment				Modification Number / Title: 1 / HB002 - MAGAZINE SPRINKLING IMPROVEMENT				
Modification Item 1 of 1: HB002 - MAGAZINE SPRINKLING IMPROVEMENT												
Manufacturer Information												
Manufacturer Name: Marotta ⁽⁶⁾							Manufacturer Location: Montville, NJ					
Administrative Leadtime (in Months): 2							Production Leadtime (in Months): 4					
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020					
Contract Dates	Jun 2014	Jan 2015	Jan 2016	Jan 2017	Jan 2018	Jan 2019	Jan 2020					
Delivery Dates	Oct 2014	May 2015	May 2016	May 2017	May 2018	May 2019	May 2020					
Manufacturer Name: Dynalec Corp. ⁽⁷⁾							Manufacturer Location: Sodus, N.Y.					
Administrative Leadtime (in Months): 2							Production Leadtime (in Months): 6					
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020					
Contract Dates	Jun 2014	Jan 2015	Jan 2016	Jan 2017	Jan 2018	Jan 2019	Jan 2020					
Delivery Dates	Dec 2014	Jul 2015	Jul 2016	Jul 2017	Jul 2018	Jul 2019	Jul 2020					
Installation Information												
Method of Implementation: SHIPALT:: Installation Name: MAGAZINE SPRINKLING IMPROVEMENT												
Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	1 / 0.500	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.500
FY 2014	- / -	- / -	1 / 0.780	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.780
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.469	- / -	- / -	- / -	- / -	1 / 0.469
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.957	- / -	- / -	- / -	2 / 0.957
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	7 / 3.418	- / -	- / -	7 / 3.418
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	7 / 3.418	- / -	7 / 3.418
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	93 / 103.773	93 / 103.773
Total	1 / 0.500	- / -	1 / 0.780	- / -	- / -	- / -	1 / 0.469	2 / 0.957	7 / 3.418	7 / 3.418	93 / 103.773	112 / 113.315

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0910 / Firefighting Equipment	Modification Number / Title: 1 / HB002 - MAGAZINE SPRINKLING IMPROVEMENT

Modification Item 1 of 1: HB002 - MAGAZINE SPRINKLING IMPROVEMENT

Installation Information

Method of Implementation: SHIPALT:: Installation Name: MAGAZINE SPRINKLING IMPROVEMENT

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	2	-	-	-	7	-	-	-	7	93	112
Out	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	1	1	-	-	2	2	2	1	100	112

Footnotes:

⁽⁵⁾ FY15 install cost is for one DDG-51 Class ship (DDG-57). FY16 DSA is in support of the Fire Detection and Actuation System (FDAS) install on USS RAMAGE (DDG-61) in FY17

⁽⁶⁾ Same contract for HB007 requirements

⁽⁷⁾ Award for first article testing 2012-05

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Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0910 / Firefighting Equipment					Modification Number / Title: 2 / HB007 - SOPV REPLACEMENT			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	1.676	0.935	-	-	-	-	0.965	0.986	2.593	2.233	64.523	73.911
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	1.676	0.935	-	-	-	-	0.965	0.986	2.593	2.233	64.523	73.911
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	1.676	0.935	-	-	-	-	0.965	0.986	2.593	2.233	64.523	73.911
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: [HB007 SOPV REPLACEMENT] The SOPV provides a way for remote control of AFFF and countermeasure wash down (CMWD) systems. Replacement is required to ensure these systems are operational for emergencies. Top Management Attention/Top Management Initiative (TMA/TMI) and INSURV interest due to impact of this item on AFFF system operation. The requirement is for all surface ships.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015						
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0910 / Firefighting Equipment				Modification Number / Title: 2 / HB007 - SOPV REPLACEMENT						
Models of Systems Affected:			Modification Type:						Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total		
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)		
Procurement														
Modification Item 1 of 1: HB007 - SOPV REPLACEMENT														
B Kits														
Recurring														
1.1.1) HB007 SOPV REPLACEMENT - NonOrganic	5 / 0.268	2 / 0.331	- / -	- / -	- / -	- / -	4 / 0.400	4 / 0.412	12 / 0.844	9 / 0.898	92 / 26.342	128 / 29.495		
1.1.2) HB007 SOPV REPLACEMENT FIRST ARTICLES - Organic ⁽⁸⁾	2 / 0.240	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.240		
1.1.3) DSA COST - Organic	- / 0.290	- / 0.247	- / -	- / -	- / -	- / -	- / 0.091	- / 0.091	- / 0.271	- / 0.204	92 / 7.183	92 / 8.377		
Subtotal: Recurring	- / 0.798	- / 0.578	- / -	- / -	- / -	- / -	- / 0.491	- / 0.503	- / 1.115	- / 1.102	- / 33.525	- / 38.112		
Subtotal: HB007 - SOPV REPLACEMENT	7 / 0.798	2 / 0.578	- / -	- / -	- / -	- / -	4 / 0.491	4 / 0.503	12 / 1.115	9 / 1.102	184 / 33.525	222 / 38.112		
Subtotal: Procurement, All Modification Items	- / 0.798	- / 0.578	- / -	- / -	- / -	- / -	- / 0.491	- / 0.503	- / 1.115	- / 1.102	- / 33.525	- / 38.112		
Installation														
Modification Item 1 of 1: HB007 - SOPV REPLACEMENT														
Subtotal: Installation	- / 0.878	- / 0.357	- / -	- / -	- / -	- / -	- / 0.474	- / 0.483	- / 1.478	- / 1.131	- / 30.998	- / 35.799		
Total														
Total Cost (Procurement + Support + Installation)	1.676	0.935	-	-	-	-	0.965	0.986	2.593	2.233	64.523	73.911		

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy											Date: February 2015																				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9					P-1 Line Item Number / Title: 0910 / Firefighting Equipment					Modification Number / Title: 2 / HB007 - SOPV REPLACEMENT																					
Modification Item 1 of 1: HB007 - SOPV REPLACEMENT																															
Manufacturer Information																															
Manufacturer Name: Marotta ⁽⁹⁾													Manufacturer Location: Montville, NJ																		
Administrative Leadtime (in Months): 2													Production Leadtime (in Months): 4																		
Dates		FY 2014			FY 2015			FY 2016			FY 2017			FY 2018			FY 2019			FY 2020											
Contract Dates		Jan 2014			Jan 2015			Jan 2016			Jan 2017			Jan 2018			Jan 2019			Jan 2020											
Delivery Dates		May 2014			May 2015			May 2016			May 2017			May 2018			May 2019			May 2020											
Installation Information																															
Method of Implementation: SHIPALT - AIT:: Installation Name: HB007 SOPV REPLACEMENT																															
Installation Cost		Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total																		
		Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)																		
Prior Years		5 / 0.878	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.878																		
FY 2014		- / -	2 / 0.357	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.357																		
FY 2015		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2016		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2017		- / -	- / -	- / -	- / -	- / -	- / -	4 / 0.474	- / -	- / -	- / -	- / -	4 / 0.474																		
FY 2018		- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 0.483	- / -	- / -	- / -	4 / 0.483																		
FY 2019		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	12 / 1.478	- / -	- / -	12 / 1.478																		
FY 2020		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	9 / 1.131	- / -	9 / 1.131																		
To Complete		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	92 / 30.998	92 / 30.998																		
Total		5 / 0.878	2 / 0.357	- / -	- / -	- / -	- / -	4 / 0.474	4 / 0.483	12 / 1.478	9 / 1.131	92 / 30.998	128 / 35.799																		
Installation Schedule																															
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	5	-	-	-	2	-	-	-	-	-	-	-	-	-	-	2	2	-	-	2	2	-	-	6	6	-	-	4	5	92	128
Out	3	2	-	-	2	-	-	-	-	-	-	-	-	-	-	2	2	-	-	2	2	-	-	6	6	-	-	4	5	92	128
Method of Implementation (Organic): Not Installed - HB007 SOPV REPLACEMENT FIRST ARTICLES																															
Installation Quantity: 2																															
Method of Implementation (Organic): Not Installed - DSA COST																															
Installation Quantity: 92																															
Footnotes:																															

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0910 / Firefighting Equipment	Modification Number / Title: 2 / HB007 - SOPV REPLACEMENT
⁽⁸⁾ The FY11 cost is for two first articles and first article testing. First articles will not be installed. ⁽⁹⁾ Same contract provides motor-operated pilot valve requirements under HB002		

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0910 / Firefighting Equipment					Modification Number / Title: 3 / HB009 - FIREFIGHTER ACCESS			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	7.558	-	0.124	-	-	-	0.446	-	-	-	-	8.128
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	7.558	-	0.124	-	-	-	0.446	-	-	-	-	8.128
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	7.558	-	0.124	-	-	-	0.446	-	-	-	-	8.128
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: [HB009 FIREFIGHTER ACCESS] Funding is for installation of equipment for the Fleet Modernization Program installations.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0910 / Firefighting Equipment				Modification Number / Title: 3 / HB009 - FIREFIGHTER ACCESS					
Models of Systems Affected:				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: HB009 - FIREFIGHTER ACCESS													
B Kits													
Recurring													
1.1.1) HB009 FIREFIGHTER ACCESS - NonOrganic	51 / 3.151	- / -	- / -	- / -	- / -	- / -	2 / 0.120	- / -	- / -	- / -	- / -	53 / 3.271	
Subtotal: Recurring	- / 3.151	- / -	- / -	- / -	- / -	- / -	- / 0.120	- / -	- / -	- / -	- / -	- / 3.271	
Subtotal: HB009 - FIREFIGHTER ACCESS	51 / 3.151	- / -	- / -	- / -	- / -	- / -	2 / 0.120	- / -	- / -	- / -	- / -	53 / 3.271	
Subtotal: Procurement, All Modification Items	- / 3.151	- / -	- / -	- / -	- / -	- / -	- / 0.120	- / -	- / -	- / -	- / -	- / 3.271	
Installation													
Modification Item 1 of 1: HB009 - FIREFIGHTER ACCESS													
Subtotal: Installation	- / 4.407	- / -	- / 0.124	- / -	- / -	- / -	- / 0.326	- / -	- / -	- / -	- / -	- / 4.857	
Total													
Total Cost (Procurement + Support + Installation)	7.558	-	0.124	-	-	-	0.446	-	-	-	-	8.128	

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015																					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9										P-1 Line Item Number / Title: 0910 / Firefighting Equipment										Modification Number / Title: 3 / HB009 - FIREFIGHTER ACCESS											
Modification Item 1 of 1: HB009 - FIREFIGHTER ACCESS																															
Manufacturer Information																															
Manufacturer Name: SELSTROM MAN															Manufacturer Location: PALATINE, IL																
Administrative Leadtime (in Months): 0															Production Leadtime (in Months): 3																
Dates		FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020					
Contract Dates														Jan 2018																	
Delivery Dates														Apr 2018																	
Installation Information																															
Method of Implementation: AIT:: Installation Name: HB009 FIREFIGHTER ACCESS																															
Installation Cost		Prior Years		FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total		FY 2017		FY 2018		FY 2019		FY 2020		To Complete		Total							
		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)							
Prior Years		49 / 4.407		- / -		1 / 0.124		- / -		- / -		- / -		1 / 0.326		- / -		- / -		- / -		- / -		- / -		51 / 4.857					
FY 2014		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2015		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2016		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2017		- / -		- / -		- / -		- / -		- / -		- / -		2 / -		- / -		- / -		- / -		- / -		- / -		2 / -					
FY 2018		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2019		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2020		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
To Complete		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
Total		49 / 4.407		- / -		1 / 0.124		- / -		- / -		- / -		3 / 0.326		- / -		- / -		- / -		- / -		- / -		53 / 4.857					
Installation Schedule																															
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	49	-	-	-	-	-	1	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	53
Out	49	-	-	-	-	-	1	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	53

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment							P-1 Line Item Number / Title: 0925 / Command and Control Switchboard					
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:					Other Related Program Elements:				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	62.326	2.436	2.219	2.255	-	2.255	2.206	2.247	2.303	2.351	-	78.343
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	62.326	2.436	2.219	2.255	-	2.255	2.206	2.247	2.303	2.351	-	78.343
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	62.326	2.436	2.219	2.255	-	2.255	2.206	2.247	2.303	2.351	-	78.343
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: The switchboard program provides mission critical switching capability required to link shipboard combat equipment including weapons, launchers, sensors, computers and navigation equipment. In essence, switchboards serve as the central connection point for most elements of combat and weapon systems, interior communications, data transfer, and command and control systems. They are designed to accommodate either analog, digital interfaces, or a combination of both. In total, this budget item supports approximately 200 ships and 1,000 pieces of equipment throughout the acquisition life cycle. Functions include: data routing; action cutout; test and operating mode selection (including casualty back-up modes); power monitoring and control; circuit protection; peripheral equipment isolation; and signal processing, frequency conversion amplification and switching. In summary, the primary purpose is to provide systems intra and interface compatibility. Changes in other elements of the combat and Interior Communication (IC) systems will frequently mandate either conjunctive modification to switchboards via ship change documents (SCDs), ordnance alteration (ORDALT)/field changes (FCs) or partial or complete replacement of existing switchboards. Typical switchboard mods include hardware/field change kits, ORDALT/SCD/FC instructions, technical manual updates and revisions to other supporting documentation. Hull unique switchboard configurations require hull unique documentation. Subsequent alterations to these switchboards require hull unique design, hardware, installation, and checkout procedures. New Switchboards are normally installed during a regular overhaul by a shipyard. Command and control switchboards are currently installed on and are required for almost all surface combatants and amphibious warfare ships. Individual switchboard unit cost varies from ship to ship, depending upon size, complexity, and whether analog or digital interfaces or some combination thereof are utilized. Modifications to existing switchboards via Ship Alterations (SHIPALTs), SCDs, ORDALTs or FCs are quantified by kits or change packages rather than individual units. The number of kits required for different classes of ships are as follows: DDGs/CGs require three to four (3 - 4) per ship, LSDs require two (2) per ship, LPDs require one (1) per ship, MCMs												

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment		P-1 Line Item Number / Title: 0925 / Command and Control Switchboard
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:
require (3) per ship and LHDs require two (2) per ship. The magnitude of modifications also varies, as Cruiser Modernization is considerably more complex than the Amphibious Class hulls. Switchboard hardware is normally procured by the Invitation For Bids (IFB) process, from manufacturers on Qualified Products List (QPL)-17000. There are currently six companies listed on QPL-17000. All contracts awarded are competitive, fixed price.		
[P40A / GE003 ENG UPGRADES/MODS TO EQUIPMENT & TECH DOCUMENTATION]: Combat Systems & Interior Communication Switchboard Engineering and Modifications Upgrades to Equipment, Drawings, Technical Manuals (TMs) Allowance Parts Lists (APLs) and Allowance Equipage Lists (AELs). This line covers the costs to upgrade/modify existing equipment and associated technical documentation to implement and validate upgraded switching configurations essential for the ships' switchboards to properly integrate all elements of the Combat System and Interior Communication interfaces. The upgraded engineering modification drives the procurement of hardware modification kits (i.e., ORDALTs & Field Changes). These engineering modifications are essential to the functional deployment of Battle Force Interoperability.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy							Date: February 2015	
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment					P-1 Line Item Number / Title: 0925 / Command and Control Switchboard			
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:			Other Related Program Elements:		
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
COMMAND AND CONTROL SWITCHBOARD	P-40a		- / 14.561	- / 2.092	- / 1.744	- / 1.744	- / -	- / 1.744
1 / COMMAND AND CONTROL ORDALT/FIELD CHANGE KITS ()	P-3a		- / 47.765	- / 0.344	- / 0.475	- / 0.511	- / -	- / 0.511
Total Gross/Weapon System Cost			- / 62.326	- / 2.436	- / 2.219	- / 2.255	- / -	- / 2.255
Exhibits Schedule			FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
COMMAND AND CONTROL SWITCHBOARD	P-40a		- / -	- / -	- / -	- / -	- / -	- / -
1 / COMMAND AND CONTROL ORDALT/FIELD CHANGE KITS ()	P-3a		- / 0.595	- / 0.560	- / 0.574	- / 0.614	- / -	- / 51.438
Total Gross/Weapon System Cost			- / 2.206	- / 2.247	- / 2.303	- / 2.351	- / -	- / 78.343
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.								
Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.								

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9								P-1 Line Item Number / Title: 0925 / Command and Control Switchboard							Aggregated Items Title: COMMAND AND CONTROL SWITCHBOARD				

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) GE003 ENG UPGRADES/MODS TO EQUIPMENT & TECH DOCUMENTATION																				
1.1) ENGINEERING UPGRADES/MODS TO EQUIPMENT & TECHNICAL DOCUMENTATION	A		-	-	14.561	-	-	2.092	-	-	1.744	-	-	1.744	-	-	-	-	-	1.744
Subtotal: 1) GE003 ENG UPGRADES/MODS TO EQUIPMENT & TECH DOCUMENTATION			-	-	14.561	-	-	2.092	-	-	1.744	-	-	1.744	-	-	-	-	-	1.744
Total			-	-	14.561	-	-	2.092	-	-	1.744	-	-	1.744	-	-	-	-	-	1.744

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2017			FY 2018			FY 2019			FY 2020			To Complete			Total Cost		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) GE003 ENG UPGRADES/MODS TO EQUIPMENT & TECH DOCUMENTATION																				
1.1) ENGINEERING UPGRADES/MODS TO EQUIPMENT & TECHNICAL DOCUMENTATION	A																			
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 1) GE003 ENG UPGRADES/MODS TO EQUIPMENT & TECH DOCUMENTATION			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0925 / Command and Control Switchboard	Modification Number / Title: 1 / COMMAND AND CONTROL ORDALT/FIELD CHANGE KITS

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	47.765	0.344	0.475	0.511	-	0.511	0.595	0.560	0.574	0.614	-	51.438
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	47.765	0.344	0.475	0.511	-	0.511	0.595	0.560	0.574	0.614	-	51.438
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	47.765	0.344	0.475	0.511	-	0.511	0.595	0.560	0.574	0.614	-	51.438
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Combat Systems & Interior Communication Switchboard Engineering and Modifications Upgrades to Equipment, Drawings, Technical Manuals (TMs) Allowance Parts Lists (APLs) and Allowance Equipage Lists (AELs). This line covers the costs to upgrade/modify existing equipment and associated technical documentation to implement and validate upgraded switching configurations essential for the ships' switchboards to properly integrate all elements of the Combat System and Interior Communication interfaces. The upgraded engineering modification drives the procurement of hardware modification kits (i.e., ORDALTs & Field Changes). These engineering modifications are essential to the functional deployment of Battle Force Interoperability.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0925 / Command and Control Switchboard					Modification Number / Title: 1 / COMMAND AND CONTROL ORDALT/FIELD CHANGE KITS				
Models of Systems Affected:				Modification Type:					Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: COMMAND AND CONTROL ORDALT/FIELD CHANGE KITS													
B Kits													
Recurring													
1.1.1) Ordalt/Field Change Kits - NonOrganic ⁽¹⁾		88 / 47.765	15 / 0.344	15 / 0.475	17 / 0.511	- / -	17 / 0.511	16 / 0.595	14 / 0.560	14 / 0.574	14 / 0.614	- / -	193 / 51.438
Subtotal: Recurring		- / 47.765	- / 0.344	- / 0.475	- / 0.511	- / -	- / 0.511	- / 0.595	- / 0.560	- / 0.574	- / 0.614	- / -	- / 51.438
Subtotal: COMMAND AND CONTROL ORDALT/FIELD CHANGE KITS		88 / 47.765	15 / 0.344	15 / 0.475	17 / 0.511	- / -	17 / 0.511	16 / 0.595	14 / 0.560	14 / 0.574	14 / 0.614	- / -	193 / 51.438
Subtotal: Procurement, All Modification Items		- / 47.765	- / 0.344	- / 0.475	- / 0.511	- / -	- / 0.511	- / 0.595	- / 0.560	- / 0.574	- / 0.614	- / -	- / 51.438
Installation													
Modification Item 1 of 1: COMMAND AND CONTROL ORDALT/FIELD CHANGE KITS		- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Subtotal: Installation		- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total													
Total Cost (Procurement + Support + Installation)		47.765	0.344	0.475	0.511	-	0.511	0.595	0.560	0.574	0.614	-	51.438

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015																					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9										P-1 Line Item Number / Title: 0925 / Command and Control Switchboard										Modification Number / Title: 1 / COMMAND AND CONTROL ORDALT/FIELD CHANGE KITS											
Modification Item 1 of 1: COMMAND AND CONTROL ORDALT/FIELD CHANGE KITS																															
Manufacturer Information																															
Manufacturer Name: CACI															Manufacturer Location: OXNARD, CA																
Administrative Leadtime (in Months): 0															Production Leadtime (in Months): 1																
Dates		FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020					
Contract Dates																															
Delivery Dates																															
Manufacturer Name: Valkyrie															Manufacturer Location: Oxnard, CA																
Administrative Leadtime (in Months): 0															Production Leadtime (in Months): 1																
Dates		FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020					
Contract Dates		Feb 2014				Dec 2014				Dec 2015				Dec 2016				Nov 2017				Nov 2018				Nov 2019					
Delivery Dates		Mar 2014				Jan 2015				Jan 2016				Jan 2017				Dec 2017				Dec 2018				Dec 2019					
Installation Information																															
Method of Implementation: AIT:: Installation Name: Ordalt/Field Change Kits																															
Installation Cost		Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total																		
		Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)																		
Prior Years		88 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	88 / 0.000																		
FY 2014		- / -	15 / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	15 / -																		
FY 2015		- / -	- / -	15 / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	15 / -																		
FY 2016		- / -	- / -	- / -	17 / -	- / -	17 / -	- / -	- / -	- / -	- / -	- / -	17 / -																		
FY 2017		- / -	- / -	- / -	- / -	- / -	- / -	16 / -	- / -	- / -	- / -	- / -	16 / -																		
FY 2018		- / -	- / -	- / -	- / -	- / -	- / -	- / -	14 / -	- / -	- / -	- / -	14 / -																		
FY 2019		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	14 / -	- / -	- / -	14 / -																		
FY 2020		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	14 / -	- / -	14 / -																		
To Complete		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
Total		88 / 0.000	15 / -	15 / -	17 / -	- / -	17 / -	16 / -	14 / -	14 / -	14 / -	- / -	193 / -																		
Installation Schedule																															
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	88	-	5	5	5	-	5	5	5	-	3	5	9	2	6	4	4	-	4	3	7	8	1	3	2	6	3	3	2	-	193
Out	88	-	5	5	5	-	5	5	5	-	3	5	9	2	6	4	4	-	4	3	7	8	1	3	2	6	3	3	2	-	193

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0925 / Command and Control Switchboard	Modification Number / Title: 1 / COMMAND AND CONTROL ORDALT/FIELD CHANGE KITS

Footnotes:

⁽¹⁾ FY 2015 funding is for the procurement of 15 units to be installed on the following ship classes: 1 CG-class (3 units), 2 DDG-class (4 units), 1 LHD-Class (2 units) and 2 MCM-Class (6 units). FY 2016 funding is for the procurement of 17 units to be installed on the following ship classes: 1 CG-class (3 units), 3 DDG-class (6 units), 1 LSD-Class (2 units) and 2 MCM-Class (6 units).

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy										Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment							P-1 Line Item Number / Title: 0933 / LHA/LHD Midlife					
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:					Other Related Program Elements:				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	0.000	6.350	14.048	28.571	-	28.571	28.541	24.368	25.248	27.875	17.400	172.401
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	0.000	6.350	14.048	28.571	-	28.571	28.541	24.368	25.248	27.875	17.400	172.401
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	0.000	6.350	14.048	28.571	-	28.571	28.541	24.368	25.248	27.875	17.400	172.401
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: The FY 2016 funding request was reduced by \$3.201 million to account for the availability of prior year execution balances. Funding provides for the procurement of High Efficiency Small-Capacity (HES-C) Air Conditioning Compressors and Brushless Generators for the Power Management Platform (PMP) for the LHD Midlife Program. HES-C provides additional air conditioning capability to support growing electronic cooling requirements. The Brushless Generator replacement will reduce down time, total ownership costs, and maintenance costs associated with antiquated brush type generators. Also replace obsolete main feed pump for main propulsion boiler.												

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy	Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment	P-1 Line Item Number / Title: 0933 / LHA/LHD Midlife

ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:			Other Related Program Elements:		
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
1 / LH001 - LHD Midlife, Brushless Generator for PMP ()	P-3a		- / 0.000	- / 6.350	- / 14.048	- / 11.025	- / -	- / 11.025
2 / LH001 - LHD Midlife HVAC IMPROVEMENTS (HESC) ()	P-3a		- / 0.000	- / -	- / -	- / 1.557	- / -	- / 1.557
3 / LH001 - Main Feed Pump ()	P-3a		- / 0.000	- / -	- / -	- / 0.845	- / -	- / 0.845
4 / LH001 - VSD Fire Pump ()	P-3a		- / 0.000	- / -	- / -	- / 15.144	- / -	- / 15.144
5 / LH001 - Reverse Osmosis ()	P-3a		- / 0.000	- / -	- / -	- / -	- / -	- / -
Total Gross/Weapon System Cost			- / 0.000	- / 6.350	- / 14.048	- / 28.571	- / -	- / 28.571

Exhibits Schedule			FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
1 / LH001 - LHD Midlife, Brushless Generator for PMP ()	P-3a		- / 10.950	- / 10.755	- / 11.008	- / 8.717	- / 6.600	- / 79.453
2 / LH001 - LHD Midlife HVAC IMPROVEMENTS (HESC) ()	P-3a		- / 2.934	- / 8.032	- / 2.281	- / 13.467	- / 6.000	- / 34.271
3 / LH001 - Main Feed Pump ()	P-3a		- / 3.536	- / 5.581	- / 5.636	- / 5.691	- / 2.100	- / 23.389
4 / LH001 - VSD Fire Pump ()	P-3a		- / 11.121	- / -	- / -	- / -	- / -	- / 26.265
5 / LH001 - Reverse Osmosis ()	P-3a		- / -	- / -	- / 6.323	- / -	- / 2.700	- / 9.023
Total Gross/Weapon System Cost			- / 28.541	- / 24.368	- / 25.248	- / 27.875	- / 17.400	- / 172.401

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0933 / LHA/LHD Midlife	Modification Number / Title: 1 / LH001 - LHD Midlife, Brushless Generator for PMP

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	0.000	6.350	14.048	11.025	-	11.025	10.950	10.755	11.008	8.717	6.600	79.453
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	0.000	6.350	14.048	11.025	-	11.025	10.950	10.755	11.008	8.717	6.600	79.453
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	0.000	6.350	14.048	11.025	-	11.025	10.950	10.755	11.008	8.717	6.600	79.453
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Brushless Generator replacement will reduce down time, total ownership costs, and maintenance costs associated with antiquated brush type generators.

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0933 / LHA/LHD Midlife						Modification Number / Title: 1 / LH001 - LHD Midlife, Brushless Generator for PMP			
Models of Systems Affected: LHD Midlife PMP				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
<i>Modification Item 1 of 1:</i> LHD Midlife, Brushless Generator for PMP													
B Kits													
Recurring													
1.1.1) Brushless Generator for PMP - NonOrganic ⁽¹⁾	- / -	- / -	1 / 5.774	1 / 4.335	- / -	1 / 4.335	1 / 4.322	1 / 4.387	1 / 4.600	1 / 4.669	- / -	6 / 28.087	
<i>Subtotal: Recurring</i>	- / 0.000	- / -	- / 5.774	- / 4.335	- / -	- / 4.335	- / 4.322	- / 4.387	- / 4.600	- / 4.669	- / -	- / 28.087	
<i>Subtotal: LH001 - LHD Midlife, Brushless Generator for PMP</i>	- / -	- / -	1 / 5.774	1 / 4.335	- / -	1 / 4.335	1 / 4.322	1 / 4.387	1 / 4.600	1 / 4.669	- / -	6 / 28.087	
<i>Subtotal: Procurement, All Modification Items</i>	- / 0.000	- / -	- / 5.774	- / 4.335	- / -	- / 4.335	- / 4.322	- / 4.387	- / 4.600	- / 4.669	- / -	- / 28.087	
Support (All Modification Items)													
2.1) Non-Recurring Engineering	- / -	- / 6.350	- / 5.774	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 12.124	
<i>Subtotal: Support</i>	- / 0.000	- / 6.350	- / 5.774	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 12.124	
Installation													
<i>Modification Item 1 of 1:</i> LH001 - LHD Midlife, Brushless Generator for PMP	- / 0.000	- / -	- / 2.500	- / 6.690	- / -	- / 6.690	- / 6.628	- / 6.368	- / 6.408	- / 4.048	- / 6.600	- / 39.242	
<i>Subtotal: Installation</i>	- / 0.000	- / -	- / 2.500	- / 6.690	- / -	- / 6.690	- / 6.628	- / 6.368	- / 6.408	- / 4.048	- / 6.600	- / 39.242	
Total													
Total Cost (Procurement + Support + Installation)	0.000	6.350	14.048	11.025	-	11.025	10.950	10.755	11.008	8.717	6.600	79.453	

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Exhibit P-3a, Individual Modification: PB 2016 Navy				Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9		P-1 Line Item Number / Title: 0933 / LHA/LHD Midlife			Modification Number / Title: 1 / LH001 - LHD Midlife, Brushless Generator for PMP		

Modification Item 1 of 1: LH001 - LHD Midlife, Brushless Generator for PMP

Manufacturer Information

Manufacturer Name: NAVSSES				Manufacturer Location: TBD			
Administrative Leadtime (in Months): 2				Production Leadtime (in Months): 12			

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates		Dec 2014	Jul 2016				
Delivery Dates		Dec 2015	Jul 2017				

Installation Information

Method of Implementation: AIT:: Installation Name: Brushless Generator for PMP

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / 2.500	1 / 3.890	- / -	1 / 3.890	- / -	- / -	- / -	- / -	- / -	1 / 6.390
FY 2016	- / -	- / -	- / -	- / 2.800	- / -	- / 2.800	1 / 3.928	- / -	- / -	- / -	- / -	1 / 6.728
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.700	1 / 3.968	- / -	- / -	- / -	1 / 6.668
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.400	1 / 4.008	- / -	- / -	1 / 6.408
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.400	1 / 4.048	- / -	1 / 6.448
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 6.600	1 / 6.600
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / 2.500	1 / 6.690	- / -	1 / 6.690	1 / 6.628	1 / 6.368	1 / 6.408	1 / 4.048	1 / 6.600	6 / 39.242

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	1	-	-	-	-	1	-	1	-	-	1	6
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-	-	-	-	1	2	6

Footnotes:

(1) Four (4) Generators are required to complete a shipset; The FY2015 procurement funding includes one shipset (4 generators) and one additional generator (1 generator) to be used for engineering testing (shock and vibration, etc). The FY2016 procurement funding includes only one shipset (4 generators). FY2016 installation funds include DSA funds required for Advance Planning, shipcheck, and Ship Installation Drawing (SID) development for the FY17 Installation.

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0933 / LHA/LHD Midlife	Modification Number / Title: 2 / LH001 - LHD Midlife HVAC IMPROVEMENTS (HESC)

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	0.000	-	-	1.557	-	1.557	2.934	8.032	2.281	13.467	6.000	34.271
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	0.000	-	-	1.557	-	1.557	2.934	8.032	2.281	13.467	6.000	34.271
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	0.000	-	-	1.557	-	1.557	2.934	8.032	2.281	13.467	6.000	34.271
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

This ship alteration improves the Heating, Ventilation, and Air Conditioning (HVAC) capability for the LHD's as part of the LHD midlife.

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9					P-1 Line Item Number / Title: 0933 / LHA/LHD Midlife					Modification Number / Title: 2 / LH001 - LHD Midlife HVAC IMPROVEMENTS (HESC)			
Models of Systems Affected: LHD Midlife HVAC				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
<i>Modification Item 1 of 1:</i> LH001 - LHD Midlife HVAC IMPROVEMENTS (HESC)													
B Kits													
Recurring													
1.1.1) HVAC IMPROVEMENTS (HESC) - NonOrganic	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 6.000	- / -	2 / 8.000	- / -	3 / 14.000	
<i>Subtotal: Recurring</i>	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / 6.000	- / -	- / 8.000	- / -	- / 14.000	
<i>Subtotal: LH001 - LHD Midlife HVAC IMPROVEMENTS (HESC)</i>	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 6.000	- / -	2 / 8.000	- / -	3 / 14.000	
<i>Subtotal: Procurement, All Modification Items</i>	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / 6.000	- / -	- / 8.000	- / -	- / 14.000	
Support (All Modification Items)													
2.1) Non-Recurring Engineering ⁽²⁾	- / -	- / -	- / -	- / 1.557	- / -	- / 1.557	- / 2.934	- / 2.032	- / -	- / -	- / -	- / 6.523	
<i>Subtotal: Support</i>	- / 0.000	- / -	- / -	- / 1.557	- / -	- / 1.557	- / 2.934	- / 2.032	- / -	- / -	- / -	- / 6.523	
Installation													
<i>Modification Item 1 of 1:</i> LH001 - LHD Midlife HVAC IMPROVEMENTS (HESC)	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.281	- / 5.467	- / 6.000	- / 13.748	
<i>Subtotal: Installation</i>	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.281	- / 5.467	- / 6.000	- / 13.748	
Total													
Total Cost (Procurement + Support + Installation)	0.000	-	-	1.557	-	1.557	2.934	8.032	2.281	13.467	6.000	34.271	

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0933 / LHA/LHD Midlife	Modification Number / Title: 2 / LH001 - LHD Midlife HVAC IMPROVEMENTS (HESC)

Modification Item 1 of 1: LH001 - LHD Midlife HVAC IMPROVEMENTS (HESC)

Manufacturer Information

Manufacturer Name: NAVSSES	Manufacturer Location: TBD
Administrative Leadtime (in Months): 1	Production Leadtime (in Months): 24

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: AIT:: Installation Name: HVAC IMPROVEMENTS (HESC)

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.281	1 / 3.000	- / -	1 / 5.281
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.467	2 / 6.000	2 / 8.467
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.281	1 / 5.467	2 / 6.000	3 / 13.748

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	2	3	
Out	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3	

Footnotes:

(2) FY 2016 funds are required for significant Non-Recurring Engineering for Heating, Ventilation, and Air Conditioning (HVAC) improvements, which are required to resolve obsolescence issues in advance of the ship availability start in 2Q20.

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0933 / LHA/LHD Midlife						Modification Number / Title: 3 / LH001 - Main Feed Pump		
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	0.000	-	-	0.845	-	0.845	3.536	5.581	5.636	5.691	2.100	23.389
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	0.000	-	-	0.845	-	0.845	3.536	5.581	5.636	5.691	2.100	23.389
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	0.000	-	-	0.845	-	0.845	3.536	5.581	5.636	5.691	2.100	23.389
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: [Main Feed Pump] Replacement of obsolete main feed pump with new shock qualified unit to meet service life.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0933 / LHA/LHD Midlife				Modification Number / Title: 3 / LH001 - Main Feed Pump				
Models of Systems Affected:				Modification Type:				Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>
Procurement												
Modification Item 1 of 1: LH001 - Main Feed Pump												
B Kits												
Recurring												
1.1.1) Main Feed Pump - NonOrganic	- / -	- / -	- / -	- / -	- / -	- / -	1 / 1.536	1 / 1.734	1 / 1.769	1 / 1.804	- / -	4 / 6.843
Subtotal: Recurring	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / 1.536	- / 1.734	- / 1.769	- / 1.804	- / -	- / 6.843
Subtotal: LH001 - Main Feed Pump	- / -	- / -	- / -	- / -	- / -	- / -	1 / 1.536	1 / 1.734	1 / 1.769	1 / 1.804	- / -	4 / 6.843
Subtotal: Procurement, All Modification Items	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / 1.536	- / 1.734	- / 1.769	- / 1.804	- / -	- / 6.843
Support (All Modification Items)												
2.1) Non-Recurring Engineering ⁽³⁾	- / -	- / -	- / -	- / 0.845	- / -	- / 0.845	- / -	- / -	- / -	- / -	- / -	- / 0.845
Subtotal: Support	- / 0.000	- / -	- / -	- / 0.845	- / -	- / 0.845	- / -	- / -	- / -	- / -	- / -	- / 0.845
Installation												
Modification Item 1 of 1: LH001 - Main Feed Pump	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / 2.000	- / 3.847	- / 3.867	- / 3.887	- / 2.100	- / 15.701
Subtotal: Installation	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / 2.000	- / 3.847	- / 3.867	- / 3.887	- / 2.100	- / 15.701
Total												
Total Cost (Procurement + Support + Installation)	0.000	-	-	0.845	-	0.845	3.536	5.581	5.636	5.691	2.100	23.389

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015																					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9										P-1 Line Item Number / Title: 0933 / LHA/LHD Midlife										Modification Number / Title: 3 / LH001 - Main Feed Pump											
Modification Item 1 of 1: LH001 - Main Feed Pump																															
Manufacturer Information																															
Manufacturer Name: TBD															Manufacturer Location: TBD																
Administrative Leadtime (in Months): 2															Production Leadtime (in Months): 15																
Dates		FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020					
Contract Dates																															
Delivery Dates																															
Installation Information																															
Method of Implementation: Industrial:: Installation Name: Main Feed Pump																															
Installation Cost		Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total																		
		Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)																		
Prior Years		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2014		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2015		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2016		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2017		- / -	- / -	- / -	- / -	- / -	- / -	- / 2.000	1 / 2.000	- / -	- / -	- / -	1 / 4.000																		
FY 2018		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.847	1 / 2.020	- / -	- / -	1 / 3.867																		
FY 2019		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.847	1 / 2.040	- / -	1 / 3.887																		
FY 2020		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.847	1 / 2.100	1 / 3.947																		
To Complete		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
Total		- / -	- / -	- / -	- / -	- / -	- / -	- / 2.000	1 / 3.847	1 / 3.867	1 / 3.887	1 / 2.100	4 / 15.701																		
Installation Schedule																															
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	1	-	-	1	4
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	2	4
Footnotes: ⁽³⁾ FY2016 Non-Recurring Engineering (NRE) funds are required to select the correct impeller size, the proper pump size to drive it, and perform engineering testing prior to the first procurement in FY17.																															

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Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0933 / LHA/LHD Midlife					Modification Number / Title: 4 / LH001 - VSD Fire Pump			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	0.000	-	-	15.144	-	15.144	11.121	-	-	-	-	26.265
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	0.000	-	-	15.144	-	15.144	11.121	-	-	-	-	26.265
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	0.000	-	-	15.144	-	15.144	11.121	-	-	-	-	26.265
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: [VSD Fire Pumps] Replace steam driven fire pumps with variable speed drive (VSD) electric fire pumps to support service life.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0933 / LHA/LHD Midlife				Modification Number / Title: 4 / LH001 - VSD Fire Pump				
Models of Systems Affected:				Modification Type:				Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>
Procurement												
<i>Modification Item 1 of 1:</i> LH001 - VSD Fire Pump												
B Kits												
Recurring												
1.1.1) VSD Fire Pumps - NonOrganic ⁽⁴⁾	- / -	- / -	- / -	3 / 6.080	- / -	3 / 6.080	1 / 2.085	- / -	- / -	- / -	- / -	4 / 8.165
<i>Subtotal: Recurring</i>	- / 0.000	- / -	- / -	- / 6.080	- / -	- / 6.080	- / 2.085	- / -	- / -	- / -	- / -	- / 8.165
<i>Subtotal: LH001 - VSD Fire Pump</i>	- / -	- / -	- / -	3 / 6.080	- / -	3 / 6.080	1 / 2.085	- / -	- / -	- / -	- / -	4 / 8.165
<i>Subtotal: Procurement, All Modification Items</i>	- / 0.000	- / -	- / -	- / 6.080	- / -	- / 6.080	- / 2.085	- / -	- / -	- / -	- / -	- / 8.165
Installation												
<i>Modification Item 1 of 1:</i> LH001 - VSD Fire Pump	- / 0.000	- / -	- / -	- / 9.064	- / -	- / 9.064	- / 9.036	- / -	- / -	- / -	- / -	- / 18.100
<i>Subtotal: Installation</i>	- / 0.000	- / -	- / -	- / 9.064	- / -	- / 9.064	- / 9.036	- / -	- / -	- / -	- / -	- / 18.100
Total												
Total Cost (Procurement + Support + Installation)	0.000	-	-	15.144	-	15.144	11.121	-	-	-	-	26.265

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Exhibit P-3a, Individual Modification: PB 2016 Navy			Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9		P-1 Line Item Number / Title: 0933 / LHA/LHD Midlife			Modification Number / Title: 4 / LH001 - VSD Fire Pump

Modification Item 1 of 1: LH001 - VSD Fire Pump

Manufacturer Information

Manufacturer Name: NAVSSES			Manufacturer Location: TBD		
Administrative Leadtime (in Months): 0			Production Leadtime (in Months): 9		

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates			Oct 2015				
Delivery Dates			Jul 2016				

Installation Information

Method of Implementation: Inudstrial:: Installation Name: VSD Fire Pumps

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	2 / 9.064	- / -	2 / 9.064	1 / 4.518	- / -	- / -	- / -	- / -	3 / 13.582
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	1 / 4.518	- / -	- / -	- / -	- / -	1 / 4.518
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	2 / 9.064	- / -	2 / 9.064	2 / 9.036	- / -	- / -	- / -	- / -	4 / 18.100

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	2	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	4
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	4

Footnotes:

(4) Two (2) of the three (3) units procured in FY16 will be installed during LHD 2 and LHD 3 FY16 avails; remaining unit (1) will be installed on LHD 4 during scheduled first quarter FY 2017 avail.

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0933 / LHA/LHD Midlife						Modification Number / Title: 5 / LH001 - Reverse Osmosis		
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	0.000	-	-	-	-	-	-	-	6.323	-	2.700	9.023
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	0.000	-	-	-	-	-	-	-	6.323	-	2.700	9.023
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	0.000	-	-	-	-	-	-	-	6.323	-	2.700	9.023
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: [Reverse Osmosis Water Generator] Provides additional water making capability to support crew water requirements and additional corrosion washdown in well deck.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9					P-1 Line Item Number / Title: 0933 / LHA/LHD Midlife					Modification Number / Title: 5 / LH001 - Reverse Osmosis			
Models of Systems Affected:				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
Modification Item 1 of 1: LH001 - Reverse Osmosis													
B Kits													
Recurring													
1.1.1) Reverse Osmosis Water Generator - NonOrganic	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 6.323	- / -	- / -	1 / 6.323	
Subtotal: Recurring	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 6.323	- / -	- / -	- / 6.323	
Subtotal: LH001 - Reverse Osmosis	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 6.323	- / -	- / -	1 / 6.323	
Subtotal: Procurement, All Modification Items	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 6.323	- / -	- / -	- / 6.323	
Installation													
Modification Item 1 of 1: LH001 - Reverse Osmosis	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.700	- / 2.700	
Subtotal: Installation	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.700	- / 2.700	
Total													
Total Cost (Procurement + Support + Installation)	0.000	-	-	-	-	-	-	-	6.323	-	2.700	9.023	

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0933 / LHA/LHD Midlife	Modification Number / Title: 5 / LH001 - Reverse Osmosis

Modification Item 1 of 1: LH001 - Reverse Osmosis

Manufacturer Information

Manufacturer Name: TBD	Manufacturer Location: TBD
Administrative Leadtime (in Months): 3	Production Leadtime (in Months): 18

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: [none specified]:: Installation Name: Reverse Osmosis Water Generator

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / -	- / 2.700	1 / 2.700
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / -	- / 2.700	1 / 2.700

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	
Out	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment							P-1 Line Item Number / Title: 0934 / LCC 19/20 Extended Service Life Program					
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:					Other Related Program Elements:				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	0.000	37.329	22.025	12.313	-	12.313	1.852	2.150	2.170	2.219	-	80.058
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	0.000	37.329	22.025	12.313	-	12.313	1.852	2.150	2.170	2.219	-	80.058
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	0.000	37.329	22.025	12.313	-	12.313	1.852	2.150	2.170	2.219	-	80.058
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	0.022	-	0.022	-	-	-	-	-	0.022
Flyaway Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: LCC EXTENDED SERVICE LIFE PROGRAM Funds provide for the procurement and installation of equipment in support of LCC 19 Class Extended Service Life Program extending this class to a 2039 service life. Funds specifically provided for LCC electrical improvements, including new Ship Service Diesel Generators (SSDGs), switchboards, and brushless Ship Service Turbine Generators (SSTGs), VS-50+ oil water separator for environmental protection, qualified propulsion shaft, and new air search radar to replace obsolete SPS-40 radar.												

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy							Date: February 2015	
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment					P-1 Line Item Number / Title: 0934 / LCC 19/20 Extended Service Life Program			
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:			Other Related Program Elements:		
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
LCC 19/20 Extended Service Life Program	P-40a, P-5a		- / 0.000	- / 3.279	- / -	- / -	- / -	- / -
1 / LD001 - LCC19 Ship Electrical Improvements ()	P-3a		- / 0.000	- / 6.750	- / 12.026	- / 8.631	- / -	- / 8.631
2 / LD001 - LCC19 VS-50+Oil Water Separator. ()	P-3a		- / 0.000	- / 1.800	- / 3.500	- / -	- / -	- / -
4 / LD001 - LCC20 Electrical Improvements. ()	P-3a		- / 0.000	- / 13.500	- / 5.499	- / -	- / -	- / -
5 / LD001 - LCC20 Propulsion Items ()	P-3a		- / 0.000	- / -	- / -	- / -	- / -	- / -
3 / LD001 - LCC 19 Air Search Radar ()	P-3a		- / 0.000	- / 12.000	- / 1.000	- / 3.682	- / -	- / 3.682
Total Gross/Weapon System Cost			- / 0.000	- / 37.329	- / 22.025	- / 12.313	- / -	- / 12.313
Exhibits Schedule			FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
LCC 19/20 Extended Service Life Program	P-40a, P-5a		- / -	- / -	- / -	- / -	- / -	- / -
1 / LD001 - LCC19 Ship Electrical Improvements ()	P-3a		- / -	- / -	- / -	- / -	- / -	- / 27.407
2 / LD001 - LCC19 VS-50+Oil Water Separator. ()	P-3a		- / -	- / -	- / -	- / -	- / -	- / 5.300
4 / LD001 - LCC20 Electrical Improvements. ()	P-3a		- / -	- / -	- / -	- / -	- / -	- / 18.999
5 / LD001 - LCC20 Propulsion Items ()	P-3a		- / 1.852	- / 2.150	- / 2.170	- / 2.219	- / -	- / 8.391
3 / LD001 - LCC 19 Air Search Radar ()	P-3a		- / -	- / -	- / -	- / -	- / -	- / 16.682
Total Gross/Weapon System Cost			- / 1.852	- / 2.150	- / 2.170	- / 2.219	- / -	- / 80.058
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.								
Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.								

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9						P-1 Line Item Number / Title: 0934 / LCC 19/20 Extended Service Life Program									Aggregated Items Title: LCC 19/20 Extended Service Life Program				

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) LCC 20 Propulsion Main Shaft																				
1.1) LCC 20 Propulsion Main Shaft Battle Spare ^{(1)(t)}	A		-	-	-	3,279K	1	3.279	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 1) LCC 20 Propulsion Main Shaft			-	-	0.000	-	-	3.279	-	-	-	-	-	-	-	-	-	-	-	
Total			-	-	0.000	-	-	3.279	-	-	-	-	-	-	-	-	-	-	-	

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2017			FY 2018			FY 2019			FY 2020			To Complete			Total Cost		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) LCC 20 Propulsion Main Shaft																				
1.1) LCC 20 Propulsion Main Shaft Battle Spare ^{(1)(t)}	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 1) LCC 20 Propulsion Main Shaft			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

(t) indicates the presence of a P-5a

Footnotes:

(1) Procures main shaft battle spare for rotatable repair pool.

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Exhibit P-5a, Procurement History and Planning: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0934 / LCC 19/20 Extended Service Life Program				Aggregated Items: LCC 19/20 Extended Service Life Program				
Item Number / Title [DODIC]	OC O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1) LCC 20 Propulsion Main Shaft												
1.1) LCC 20 Propulsion Main Shaft Battle Spare ⁽¹⁾		2014	VARIOIUS / VARIOUS	C / FFP	MSC	Sep 2014	Sep 2017	1	3,279K	N		

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0934 / LCC 19/20 Extended Service Life Program	Modification Number / Title: 1 / LD001 - LCC19 Ship Electrical Improvements

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	0.000	6.750	12.026	8.631	-	8.631	-	-	-	-	-	27.407
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	0.000	6.750	12.026	8.631	-	8.631	-	-	-	-	-	27.407
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	0.000	6.750	12.026	8.631	-	8.631	-	-	-	-	-	27.407
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Provides a ship set (3 total) of 1825KW Ship's Service Emergency Diesel Generators (SS/EDGs) which replace the obsolete SSDGs (air cooled system with a high failure rate). Effort also provides a ship set (3 total) of new brushless SSTGs. The 3 existing brushed SSTGs will be replaced with 3 new brushless SSTGs.

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0934 / LCC 19/20 Extended Service Life Program						Modification Number / Title: 1 / LD001 - LCC19 Ship Electrical Improvements			
Models of Systems Affected: LCC19 Ship Electrical Improvements				Modification Type:						Related RDT&E PEs:			
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
<i>Modification Item 1 of 1:</i> LD001 - LCC19 Ship Electrical Improvements													
A Kits													
Recurring													
1.1.1) Ship Electrical Improvements - NonOrganic ⁽²⁾	- / -	1 / 6.000	2 / 9.826	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 15.826	
<i>Subtotal: Recurring</i>	- / 0.000	- / 6.000	- / 9.826	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 15.826	
<i>Subtotal: LD001 - LCC19 Ship Electrical Improvements</i>	- / -	1 / 6.000	2 / 9.826	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 15.826	
<i>Subtotal: Procurement, All Modification Items</i>	- / 0.000	- / 6.000	- / 9.826	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 15.826	
Installation													
<i>Modification Item 1 of 1:</i> LD001 - LCC19 Ship Electrical Improvements	- / 0.000	- / 0.750	- / 2.200	- / 8.631	- / -	- / 8.631	- / -	- / -	- / -	- / -	- / -	- / 11.581	
<i>Subtotal: Installation</i>	- / 0.000	- / 0.750	- / 2.200	- / 8.631	- / -	- / 8.631	- / -	- / -	- / -	- / -	- / -	- / 11.581	
Total													
Total Cost (Procurement + Support + Installation)	0.000	6.750	12.026	8.631	-	8.631	-	-	-	-	-	27.407	

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0934 / LCC 19/20 Extended Service Life Program	Modification Number / Title: 1 / LD001 - LCC19 Ship Electrical Improvements

Modification Item 1 of 1: LD001 - LCC19 Ship Electrical Improvements

Manufacturer Information

Manufacturer Name: TBD ⁽³⁾				Manufacturer Location: TBD			
Administrative Leadtime (in Months): 10				Production Leadtime (in Months): 21			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Aug 2014	May 2015					
Delivery Dates	May 2016	May 2016					

Installation Information

Method of Implementation: AIT:: Installation Name: Ship Electrical Improvements

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / 0.750	- / 0.400	1 / 2.893	- / -	1 / 2.893	- / -	- / -	- / -	- / -	- / -	1 / 4.043
FY 2015	- / -	- / -	- / 1.800	2 / 5.738	- / -	2 / 5.738	- / -	- / -	- / -	- / -	- / -	2 / 7.538
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / 0.750	- / 2.200	3 / 8.631	- / -	3 / 8.631	- / -	- / -	- / -	- / -	- / -	3 / 11.581

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	3

Footnotes:

⁽²⁾ Procurement of the SS/EDG System (18 month PLT) is in FY14 with install in FY16. Procurement of the SSTG (12 month PLT) is in FY15 with install in FY16.

⁽³⁾ For SS/EDGs - Long Lead Time for shock and integration testing.

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0934 / LCC 19/20 Extended Service Life Program						Modification Number / Title: 2 / LD001 - LCC19 VS-50+Oil Water Separator.		
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	0.000	1.800	3.500	-	-	-	-	-	-	-	-	5.300
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	0.000	1.800	3.500	-	-	-	-	-	-	-	-	5.300
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	0.000	1.800	3.500	-	-	-	-	-	-	-	-	5.300
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: Procurement and installation upgrade to USS BLUE RIDGE (LCC 19) environmental system in support of the Extended Service Life Program. Provides procurement and installation of a VS-50+ oil water separator system.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0934 / LCC 19/20 Extended Service Life Program						Modification Number / Title: 2 / LD001 - LCC19 VS-50+Oil Water Separator.			
Models of Systems Affected: LCC19 VS-50+Oil Water Separator				Modification Type:						Related RDT&E PEs:			
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
<i>Modification Item 1 of 1:</i> LD001 - LCC19 VS-50+Oil Water Separator.													
B Kits													
Recurring													
1.1.1) VS-50+Oil Water Separator - NonOrganic	- / -	1 / 1.300	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 1.300	
<i>Subtotal: Recurring</i>	- / 0.000	- / 1.300	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.300	
<i>Subtotal: LD001 - LCC19 VS-50+Oil Water Separator.</i>	- / -	1 / 1.300	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 1.300	
<i>Subtotal: Procurement, All Modification Items</i>	- / 0.000	- / 1.300	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.300	
Installation													
<i>Modification Item 1 of 1:</i> LD001 - LCC19 VS-50+Oil Water Separator.	- / 0.000	- / 0.500	- / 3.500	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 4.000	
<i>Subtotal: Installation</i>	- / 0.000	- / 0.500	- / 3.500	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 4.000	
Total													
Total Cost (Procurement + Support + Installation)	0.000	1.800	3.500	-	-	-	-	-	-	-	-	5.300	

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0934 / LCC 19/20 Extended Service Life Program	Modification Number / Title: 2 / LD001 - LCC19 VS-50+Oil Water Separator.

Modification Item 1 of 1: LD001 - LCC19 VS-50+Oil Water Separator.

Manufacturer Information

Manufacturer Name: TBD	Manufacturer Location: TBD
Administrative Leadtime (in Months): 9	Production Leadtime (in Months): 13

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Jul 2014						
Delivery Dates	Aug 2015						

Installation Information

Method of Implementation: AIT:: Installation Name: VS-50+Oil Water Separator

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / 0.500	1 / 3.500	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 4.000
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / 0.500	1 / 3.500	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 4.000

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Out	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0934 / LCC 19/20 Extended Service Life Program	Modification Number / Title: 4 / LD001 - LCC20 Electrical Improvements.

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	0.000	13.500	5.499	-	-	-	-	-	-	-	-	18.999
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	0.000	13.500	5.499	-	-	-	-	-	-	-	-	18.999
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	0.000	13.500	5.499	-	-	-	-	-	-	-	-	18.999
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Procurement and installation of upgrade to USS MOUNT WHITNEY (LCC 20) electrical distribution system in support of the Extended Service Life Program. Procures and installs two Emergency Diesel Generators (EDGs).

Total effort consists of 3 EDGs. The first EDG for LCC 20 was procured in FY 2013 in Other Procurement, Navy Line Item 0981, Items Less than \$5 Million. FY 2014 funding from this line item will be used to install that EDG.

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0934 / LCC 19/20 Extended Service Life Program						Modification Number / Title: 4 / LD001 - LCC20 Electrical Improvements.			
Models of Systems Affected: LCC20 Electrical Improvement				Modification Type:						Related RDT&E PEs:			
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
<i>Modification Item 1 of 1:</i> LD001 - LCC20 Electrical Improvements.													
B Kits													
Recurring													
1.1.1) LCC20 Electrical Improvement - NonOrganic ⁽⁴⁾	- / -	2 / 6.500	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 6.500	
<i>Subtotal: Recurring</i>	- / 0.000	- / 6.500	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 6.500	
<i>Subtotal: LD001 - LCC20 Electrical Improvements.</i>	- / -	2 / 6.500	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 6.500	
<i>Subtotal: Procurement, All Modification Items</i>	- / 0.000	- / 6.500	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 6.500	
Installation													
<i>Modification Item 1 of 1:</i> LD001 - LCC20 Electrical Improvements.	- / 0.000	- / 7.000	- / 5.499	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 12.499	
<i>Subtotal: Installation</i>	- / 0.000	- / 7.000	- / 5.499	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 12.499	
Total													
Total Cost (Procurement + Support + Installation)	0.000	13.500	5.499	-	-	-	-	-	-	-	-	18.999	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0934 / LCC 19/20 Extended Service Life Program	Modification Number / Title: 4 / LD001 - LCC20 Electrical Improvements.

Modification Item 1 of 1: LD001 - LCC20 Electrical Improvements.

Manufacturer Information

Manufacturer Name: TBD ⁽⁵⁾				Manufacturer Location: TBD			
Administrative Leadtime (in Months): 2				Production Leadtime (in Months): 6			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	May 2014						
Delivery Dates	Nov 2014						

Installation Information

Method of Implementation: AIT:: Installation Name: LCC20 Electrical Improvement

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / 7.000	2 / 5.499	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 12.499
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / 7.000	2 / 5.499	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 12.499

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Out	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2

Footnotes:

⁽⁴⁾ EDGs procured in FY14 require approximately 4 month land based government testing post delivery. Procurement of two EDGs (6 month PLT) is in FY14 with install in FY14 and FY15.

⁽⁵⁾ Approximate 4 month land based government testing.

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Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0934 / LCC 19/20 Extended Service Life Program					Modification Number / Title: 5 / LD001 - LCC20 Propulsion Items			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	0.000	-	-	-	-	-	1.852	2.150	2.170	2.219	-	8.391
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	0.000	-	-	-	-	-	1.852	2.150	2.170	2.219	-	8.391
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	0.000	-	-	-	-	-	1.852	2.150	2.170	2.219	-	8.391
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: Procurement and installation of upgrades to USS MOUNT WHITNEY (LCC 20) propulsion system in support of the Extended Service Life Program. Procures ship steering system.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0934 / LCC 19/20 Extended Service Life Program						Modification Number / Title: 5 / LD001 - LCC20 Propulsion Items			
Models of Systems Affected: LCC20 Propulsion Items				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
<i>Modification Item 1 of 1:</i> LD001 - LCC20 Propulsion Items													
B Kits													
Recurring													
1.1.1) LCC20 Propulsion Items - NonOrganic	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.904	1 / 0.907	- / -	- / -	- / -	2 / 1.811	
<i>Subtotal: Recurring</i>	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / 0.904	- / 0.907	- / -	- / -	- / -	- / 1.811	
<i>Subtotal: LD001 - LCC20 Propulsion Items</i>	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.904	1 / 0.907	- / -	- / -	- / -	2 / 1.811	
<i>Subtotal: Procurement, All Modification Items</i>	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / 0.904	- / 0.907	- / -	- / -	- / -	- / 1.811	
Installation													
<i>Modification Item 1 of 1:</i> LD001 - LCC20 Propulsion Items	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / 0.948	- / 1.243	- / 2.170	- / 2.219	- / -	- / 6.580	
<i>Subtotal: Installation</i>	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / 0.948	- / 1.243	- / 2.170	- / 2.219	- / -	- / 6.580	
Total													
Total Cost (Procurement + Support + Installation)	0.000	-	-	-	-	-	1.852	2.150	2.170	2.219	-	8.391	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015																						
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9										P-1 Line Item Number / Title: 0934 / LCC 19/20 Extended Service Life Program										Modification Number / Title: 5 / LD001 - LCC20 Propulsion Items												
Modification Item 1 of 1: LD001 - LCC20 Propulsion Items																																
Manufacturer Information																																
Manufacturer Name: Erie Forge															Manufacturer Location: Erie, PA																	
Administrative Leadtime (in Months): 3															Production Leadtime (in Months): 12																	
Dates		FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020						
Contract Dates																																
Delivery Dates																																
Installation Information																																
Method of Implementation: AIT:: Installation Name: LCC20 Propulsion Items																																
Installation Cost		Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total																			
		Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)																			
Prior Years		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																			
FY 2014		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																			
FY 2015		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																			
FY 2016		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																			
FY 2017		- / -	- / -	- / -	- / -	- / -	- / -	- / 0.948	1 / 1.049	- / -	- / -	- / -	1 / 1.997																			
FY 2018		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.194	1 / 2.170	1 / 2.219	- / -	2 / 4.583																			
FY 2019		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																			
FY 2020		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																			
To Complete		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																			
Total		- / -	- / -	- / -	- / -	- / -	- / -	- / 0.948	1 / 1.243	1 / 2.170	1 / 2.219	- / -	3 / 6.580																			
Installation Schedule																																
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	1	-	3
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	1	3

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0934 / LCC 19/20 Extended Service Life Program					Modification Number / Title: 3 / LD001 - LCC 19 Air Search Radar			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	0.000	12.000	1.000	3.682	-	3.682	-	-	-	-	-	16.682
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	0.000	12.000	1.000	3.682	-	3.682	-	-	-	-	-	16.682
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	0.000	12.000	1.000	3.682	-	3.682	-	-	-	-	-	16.682
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: Procurement and installation of upgrade to USS BLUE RIDGE (LCC 19) combat system air search capability in support of the Extended Service Life Program. Provides procurement and installation of an air search radar.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0934 / LCC 19/20 Extended Service Life Program					Modification Number / Title: 3 / LD001 - LCC 19 Air Search Radar				
Models of Systems Affected: LCC 19 Air Search Radar				Modification Type:					Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: LD001 - LCC 19 Air Search Radar													
B Kits													
Recurring													
1.1.1) LCC 19 Air Search Radar - NonOrganic	- / -	1 / 12.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 12.000	
Subtotal: Recurring	- / 0.000	- / 12.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 12.000	
Subtotal: LD001 - LCC 19 Air Search Radar	- / -	1 / 12.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 12.000	
Subtotal: Procurement, All Modification Items	- / 0.000	- / 12.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 12.000	
Installation													
Modification Item 1 of 1: LD001 - LCC 19 Air Search Radar	- / 0.000	- / -	- / 1.000	- / 3.682	- / -	- / 3.682	- / -	- / -	- / -	- / -	- / -	- / 4.682	
Subtotal: Installation	- / 0.000	- / -	- / 1.000	- / 3.682	- / -	- / 3.682	- / -	- / -	- / -	- / -	- / -	- / 4.682	
Total													
Total Cost (Procurement + Support + Installation)	0.000	12.000	1.000	3.682	-	3.682	-	-	-	-	-	16.682	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015																					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9										P-1 Line Item Number / Title: 0934 / LCC 19/20 Extended Service Life Program										Modification Number / Title: 3 / LD001 - LCC 19 Air Search Radar											
Modification Item 1 of 1: LD001 - LCC 19 Air Search Radar																															
Manufacturer Information																															
Manufacturer Name: TBD															Manufacturer Location: TBD																
Administrative Leadtime (in Months): 16															Production Leadtime (in Months): 15																
Dates		FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020					
Contract Dates		Feb 2015																													
Delivery Dates		May 2016																													
Installation Information																															
Method of Implementation: AIT:: Installation Name: LCC 19 Air Search Radar																															
Installation Cost		Prior Years		FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total		FY 2017		FY 2018		FY 2019		FY 2020		To Complete		Total							
		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)							
Prior Years		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2014		- / -		- / -		- / 1.000		1 / 3.682		- / -		1 / 3.682		- / -		- / -		- / -		- / -		- / -		- / -		1 / 4.682					
FY 2015		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2016		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2017		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2018		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2019		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2020		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
To Complete		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
Total		- / -		- / -		- / 1.000		1 / 3.682		- / -		1 / 3.682		- / -		- / -		- / -		- / -		- / -		- / -		1 / 4.682					
Installation Schedule																															
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment							P-1 Line Item Number / Title: 0935 / Pollution Control Equipment					
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:					Other Related Program Elements:				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	385.925	17.514	10.146	16.609	-	16.609	24.117	25.261	25.160	25.684	-	530.416
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	385.925	17.514	10.146	16.609	-	16.609	24.117	25.261	25.160	25.684	-	530.416
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	385.925	17.514	10.146	16.609	-	16.609	24.117	25.261	25.160	25.684	-	530.416
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	0.214	0.320	0.206	-	0.206	0.103	0.100	0.038	-	-	0.981
Flyaway Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

POLLUTION CONTROL SYSTEMS/EQUIPMENT: This item provides funds for the procurement of pollution control systems and equipment that are required by Navy ships in order for them to comply with international regulations, federal laws, DOD Directives and Navy environmental protection regulations. These regulations, laws and directives restrict the discharge of oily waste, sewage, solid waste, plastic waste, medical waste and hazardous waste. Most of these applicable regulations require Navy ships to comply by fixed deadlines. Failure to comply carries potential personal, civil, and criminal liability, and significantly imposes constraints on the operational capabilities of Navy ships. In some instances, the compliance schedule has required an acceleration of the normal schedules in the procurement process.

SHORE BASED POLLUTION EQUIPMENT - (Logistics)

The Shorebased funds provide for equipment required to clean up Navy oil spills on the open sea as required by the Federal Waste Pollution Control Act - Public Law 92-500. The law created a National Oil and Hazardous Substance Pollution Contingency Plan, and designates the Department of Defense as one of the primary agencies responsible for promotion of effective operation of the plan. The Supervisor of Salvage is assigned the responsibility to provide technical expertise, resources, and equipment for cleaning Navy-originated spills of oil and other hazardous material in coastal waters or the open sea. Major items of procurement are:

[P40A / HF040 FIELD SUPPORT SYSTEMS]: HF040 - FIELD SUPPORT SYSTEMS These systems include those auxiliary support systems required to keep the oil spill responders operating in the field during an emergency response. These systems include various equipment and vessels required for command and control, communication, supply, personnel transfer, global positioning system (GPS) asset tracking, repair, towing, deployment, demobilization, and other ancillary requirements of an oil spill response operation. All of these systems range greatly in unit cost depending on which system is procured (i.e., satellite phone versus vessels/boats).

[P40A / HF051 OIL BOOM SYSTEMS]: HF051 - OIL BOOM SYSTEMS These systems consist of inflatable or hard oil booms of various sizes (18 inch, 26 inch, 42 inch) based on the federal requirements for Oil Spill Response Organizations (OSROs), which range in unit cost based on size and type. These systems include all associated equipment required to store, inflate, deploy, recover, and repair the boom. All inflatable boom systems also include shoreline transition booms to cross the beach/breaker area. The systems are packaged in 8' x 8' x 20' shipping containers.

[P40A / HF055 SALVAGE SUPPORT SYSTEMS]: HF055 - SALVAGE SUPPORT SYSTEMS These systems are a collection of small, special-purpose skimmers, dispersant spray systems, containment booms, shoreline transition booms, transfer pumps, storage tanks, sorbents, and ancillary equipment intended as a stand-alone response package for small, salvage-related spills inside and adjacent to ships or inland locations, or special remote tanker offloading locations.

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment		P-1 Line Item Number / Title: 0935 / Pollution Control Equipment
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:
[P40A / HF056 EQUIPMENT CLEAN-UP SYSTEMS]: HF056 - EQUIPMENT CLEAN-UP SYSTEMSThese systems provide a full array of tools and materials required to perform the extensive decontamination needed for response assets and personnel during an operation and prior to demobilization once a spill has concluded.		
[P40A / HF057 OIL HANDLING SYSTEMS]: HF057 - OIL HANDLING SYSTEMSOil handling systems are used to assist in disposal of removed oil and debris. These systems include: vacuum systems, floating hose systems, temporary oil storage bladders, transfer pumping systems, debris handling systems including portable crane systems, incinerator systems, oil/water separator systems, steam generator systems, water injection systems and other material transfer systems. These different systems can range greatly in unit cost based on whether commercial off-the-shelf items or custom built.		
[P40A / HF062 LIGHTERING SYSTEMS]: HF062 - LIGHTERING SYSTEMSThese systems allow for lightering of oil from aboard ships whose transfer systems are inoperative. Various pump sizes and extraction tools selected can pump oil product in almost any emergency scenario. These pumping systems are designed to move large quantities of oil or other hazardous substances, including oil that has been weathered, emulsified, or mixed with other contaminants and become thick and viscous.		
[P40A / HF063 VOSS SKIMMER SYSTEMS]: HF063 - VESSEL OF OPPORTUNITY (VOSS) SKIMMING SYSTEMS The VOSS is an oil skimming system which can be used aboard any vessel with enough deck space to support the operating equipment. It allows for skimming capability in situations where traditional skimmers may not be practicable, such as offshore or in extremely inclement weather. These systems include the ancillary support equipment required to maintain skimmer operations onboard a vessel for an extended period of time.		
[P40A / HF067 - RAPID DEPLOYMENT SKIMMER SYSTEMS]: HF067 - RAPID DEPLOYMENT SKIMMER SYSTEMS These systems are self-propelled skimmers designed for near-shore and open ocean environments and are used in conjunction with containment boom for mechanical recovery of oil on the water. They are designed to be rapidly transportable to the scene of an oil spill.		
[P40A / HF031 POLLUTION CONTROL EQUIPMENT FIELD CHANGES]: HF031 - POLLUTION CONTROL EQUIPMENT FIELD CHANGES - Funds field changes for reliability and maintainability improvements and corrections of conventional pollution control equipment systems.		
Oil Pollution Abatement (OPA) Systems Improvements Existing OPA systems have demonstrated poor operational availability, maintainability, and reliability. This comprehensive effort addresses the entire OPA system, from holding tanks to overboard discharge. The alterations needed to correct these design deficiencies are ship specific and may include, but are not limited to: installation of new tank level sensors; upgrades to the Oily Water Separator (OWS) and the Oil Content Monitor (OCM), correction of OWS suction problems, correction of OCM inlet & outlet piping including related of flush water piping configuration problems, and upgrade of oily waste transfer pump relief valve. LHD-1 Class upgrades include conversion of the existing OWS to the VS-50 OWS. DDG-51 through DDG-88 ships will receive the Oily Waste Membrane System to produce an effluent that meets the 15 ppm maximum oil discharge requirement.		
[P3A / HF024 CFC-114 (R-114) AC CONVERSION]: HF024 - CFC CONVERSION PROGRAMThe production of chlorofluorocarbon(CFC)-based refrigerants (including CFC-12 and CFC-114) was prohibited after 31 DEC 95 by the Clean Air Act of 1990. Presidential Executive Order 12843 of 21 APR 93 calls for federal agencies to "maximize the use of safe alternatives to ozone-depleting substances." OPNAVINST 5090.1C dated 30 OCT 2007 further requires to "reduce the use and emissions of (ozone-depleting substances) to the lowest achievable level." The Navy is currently dependent on CFC-based refrigerants for the mission-critical cooling of (1) vital electronics and weapon systems, (2) food and medical stowage, and (3) inhabited spaces aboard surface ships and submarines. To counter the immediate threat of production cessation on uninterrupted Fleet operations, DoD directed the Defense Logistics Agency to establish a stockpile of CFC-based refrigerants. The stockpile was sized to support Fleet operations until the last CFC-based systems are retired or converted to ozone-friendly refrigerants. This program procures and installs conversion kits on existing CFC-114 Air-Conditioning (A/C) plants onboard surface ships. The CFC-114 conversion programs began in FY 99 and are expected to complete in FY 20. The inventory objective for CFC-114 is 402. Total program cost is estimated at \$425M.		
[P3A / HF024 CFC-114 (R-114) AC CONVERSION]: HF5IN - INSTALLATION OF EQUIPMENT Funding is for installation of equipment for the Fleet Modernization Program installations.		
HF6IN - INSTALLATION OF EQUIPMENT Funding is for installation of equipment for the Fleet Modernization Program installations.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment		P-1 Line Item Number / Title: 0935 / Pollution Control Equipment
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy							Date: February 2015	
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment					P-1 Line Item Number / Title: 0935 / Pollution Control Equipment			
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:			Other Related Program Elements:		
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
Pollution Control Equipment	P-40a, P-5a		- / 72.671	- / 5.100	- / 4.760	- / 10.927	- / -	- / 10.927
1 / HF024 CFC-114 (R-114) AC CONVERSION ()	P-3a		- / 313.254	- / 12.414	- / 5.386	- / 5.682	- / -	- / 5.682
Total Gross/Weapon System Cost			- / 385.925	- / 17.514	- / 10.146	- / 16.609	- / -	- / 16.609
Exhibits Schedule			FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
Pollution Control Equipment	P-40a, P-5a		- / -	- / -	- / -	- / -	- / -	- / -
1 / HF024 CFC-114 (R-114) AC CONVERSION ()	P-3a		- / 4.361	- / 7.784	- / 4.733	- / 0.976	- / -	- / 354.590
Total Gross/Weapon System Cost			- / 24.117	- / 25.261	- / 25.160	- / 25.684	- / -	- / 530.416
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown. Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.								

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9						P-1 Line Item Number / Title: 0935 / Pollution Control Equipment									Aggregated Items Title: Pollution Control Equipment					
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.																				
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) LOGISTICS																				
1.1) HF040 FIELD SUPPORT SYSTEMS ^(†)	A		278,263.16	38	10.574	341,500.00	4	1.366	351,857.14	7	2.463	354,000.00	7	2.478	-	-	-	354,000.00	7	2.478
1.2) HF051 OIL BOOM SYSTEMS ^(†)	A		379,137.93	29	10.995	-	-	-	71,500.00	10	0.715	74,000.00	15	1.110	-	-	-	74,000.00	15	1.110
1.3) HF055 SALVAGE SUPPORT SYSTEMS	A		397,000.00	4	1.588	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.5) HF057 OIL HANDLING SYSTEMS	A		290,142.86	7	2.031	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.6) HF062 LIGHTERING SYSTEMS ^(†)	A		256,111.11	9	2.305	-	-	-	384,000.00	1	0.384	-	-	-	-	-	-	-	-	-
1.7) HF063 VOSS SKIMMER SYSTEMS ^(†)	A		310,166.67	12	3.722	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 1) LOGISTICS			-	-	31.215	-	-	1.366	-	-	3.562	-	-	3.588	-	-	-	-	-	3.588
2) EXPEDITIONARY WARFARE																				
2.1) HF031 POLLUTION CONTROL EQUIPMENT FIELD CHANGES	A		-	-	7.326	-	-	2.119	-	-	-	-	-	5.365	-	-	-	-	-	5.365
2.2) HF830 PRODUCTION ENGINEERING	A		-	-	3.452	-	-	-	-	-	0.020	-	-	-	-	-	-	-	-	-
Subtotal: 2) EXPEDITIONARY WARFARE			-	-	10.778	-	-	2.119	-	-	0.020	-	-	5.365	-	-	-	-	-	5.365
3) SURFACE WARFARE																				
3.1) HF031 POLLUTION CONTROL EQUIPMENT FIELD CHANGES	A		-	-	20.908	-	-	-	-	-	-	-	-	0.703	-	-	-	-	-	0.703
3.2) HF830 PRODUCTION ENGINEERING	A		-	-	6.770	-	-	0.631	-	-	0.123	-	-	0.139	-	-	-	-	-	0.139
Subtotal: 3) SURFACE WARFARE			-	-	27.678	-	-	0.631	-	-	0.123	-	-	0.842	-	-	-	-	-	0.842
4) AIR WARFARE																				
4.1) HF031 POLLUTION	A		-	-	3.000	-	-	0.984	-	-	1.055	-	-	1.132	-	-	-	-	-	1.132

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9								P-1 Line Item Number / Title: 0935 / Pollution Control Equipment							Aggregated Items Title: Pollution Control Equipment				

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
CONTROL EQUIPMENT FIELD CHANGES																				
<i>Subtotal: 4) AIR WARFARE</i>			-	-	3.000	-	-	0.984	-	-	1.055	-	-	1.132	-	-	-	-	-	1.132
Total			-	-	72.671	-	-	5.100	-	-	4.760	-	-	10.927	-	-	-	-	-	10.927

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	FY 2017			FY 2018			FY 2019			FY 2020			To Complete			Total Cost		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) LOGISTICS																				
1.1) HF040 FIELD SUPPORT SYSTEMS ^(†)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1.2) HF051 OIL BOOM SYSTEMS ^(†)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1.3) HF055 SALVAGE SUPPORT SYSTEMS	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1.5) HF057 OIL HANDLING SYSTEMS	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1.6) HF062 LIGHTERING SYSTEMS ^(†)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1.7) HF063 VOSS SKIMMER SYSTEMS ^(†)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 1) LOGISTICS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

2) EXPEDITIONARY WARFARE																				
2.1) HF031 POLLUTION CONTROL EQUIPMENT FIELD CHANGES	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.2) HF830 PRODUCTION ENGINEERING	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: 2) EXPEDITIONARY WARFARE</i>			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

3) SURFACE WARFARE																				

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9						P-1 Line Item Number / Title: 0935 / Pollution Control Equipment									Aggregated Items Title: Pollution Control Equipment					
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2017			FY 2018			FY 2019			FY 2020			To Complete			Total Cost		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
3.1) HF031 POLLUTION CONTROL EQUIPMENT FIELD CHANGES	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.2) HF830 PRODUCTION ENGINEERING	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 3) SURFACE WARFARE			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4) AIR WARFARE																				
4.1) HF031 POLLUTION CONTROL EQUIPMENT FIELD CHANGES	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 4) AIR WARFARE			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(t) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9			P-1 Line Item Number / Title: 0935 / Pollution Control Equipment					Aggregated Items: Pollution Control Equipment				
Item Number / Title [DODIC]	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1) LOGISTICS												
1.1) HF040 FIELD SUPPORT SYSTEMS		2014	Metal Craft Marine, Inc. / Cape Vincent NY	C / IDIQ	WASHINGTON, DC	Apr 2014	Feb 2015	4	341,500.00	Y		
1.1) HF040 FIELD SUPPORT SYSTEMS		2015	Metal Craft Marine, Inc. / Cape Vincent NY	C / IDIQ	WASHINGTON, DC	Feb 2015	Dec 2015	7	351,857.14	Y		
1.1) HF040 FIELD SUPPORT SYSTEMS		2016	Metal Craft Marine, Inc. / Cape Vincent NY	C / IDIQ	WASHINGTON,DC	Oct 2015	Aug 2016	7	354,000.00	N		
1.2) HF051 OIL BOOM SYSTEMS		2015	GPC / VA	C / CPAF	WASHINGTON, DC	Apr 2015	Apr 2016	10	71,500.00	Y		
1.2) HF051 OIL BOOM SYSTEMS		2016	GPC / VA	C / CPAF	WASHINGTON, DC	Apr 2016	Apr 2017	15	74,000.00	Y		
1.6) HF062 LIGHTERING SYSTEMS		2015	GPC / VA	C / CPAF	WASHINGTON, DC	Apr 2015	Jan 2016	1	384,000.00	Y		
1.7) HF063 VOSS SKIMMER SYSTEMS		2013	GPC / VA	C / CPAF	WASHINGTON, DC	Oct 2013	Oct 2014	3	300,000.00	Y		

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0935 / Pollution Control Equipment	Modification Number / Title: 1 / HF024 CFC-114 (R-114) AC CONVERSION

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	313.254	12.414	5.386	5.682	-	5.682	4.361	7.784	4.733	0.976	-	354.590
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	313.254	12.414	5.386	5.682	-	5.682	4.361	7.784	4.733	0.976	-	354.590
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	313.254	12.414	5.386	5.682	-	5.682	4.361	7.784	4.733	0.976	-	354.590
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Navy is currently dependent on CFC-based refrigerants for the mission-critical cooling of (1) vital electronics and weapon systems, (2) food and medical stowage, and (3) inhabited spaces aboard surface ships and submarines. To counter the immediate threat of production cessation on uninterrupted Fleet operations, DoD directed the Defense Logistics Agency to establish a stockpile of CFC-based refrigerants. The stockpile was sized to support Fleet operations until the last CFC-based systems are retired or converted to ozone-friendly refrigerants. This program procures and installs conversion kits on existing CFC-12 Refrigeration and CFC-114 Air-Conditioning (A/C) plants onboard surface ships and submarines. The CFC-114 conversion programs began in FY 99 and are expected to complete in FY20. Inventory Objective for CFC-12 Refrigeration is 560, and the inventory objective for CFC-114 is 402.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0935 / Pollution Control Equipment					Modification Number / Title: 1 / HF024 CFC-114 (R-114) AC CONVERSION				
Models of Systems Affected:				Modification Type:					Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: HF024 CFC-114 (R-114) AC CONVERSION													
B Kits													
Recurring													
1.1.1) HF024 CFC-114 (R-114) AC CONVERSION - NonOrganic ⁽¹⁾	365 / 139.889	10 / 6.299	4 / 2.317	2 / 1.543	- / -	2 / 1.543	4 / 3.306	6 / 5.403	2 / 1.686	- / -	9 / -	402 / 160.443	
Subtotal: Recurring	- / 139.889	- / 6.299	- / 2.317	- / 1.543	- / -	- / 1.543	- / 3.306	- / 5.403	- / 1.686	- / -	- / -	- / 160.443	
Subtotal: HF024 CFC-114 (R-114) AC CONVERSION	365 / 139.889	10 / 6.299	4 / 2.317	2 / 1.543	- / -	2 / 1.543	4 / 3.306	6 / 5.403	2 / 1.686	- / -	9 / -	402 / 160.443	
Subtotal: Procurement, All Modification Items	- / 139.889	- / 6.299	- / 2.317	- / 1.543	- / -	- / 1.543	- / 3.306	- / 5.403	- / 1.686	- / -	- / -	- / 160.443	
Installation													
Modification Item 1 of 1: HF024 CFC-114 (R-114) AC CONVERSION	- / 173.365	- / 6.115	- / 3.069	- / 4.139	- / -	- / 4.139	- / 1.055	- / 2.381	- / 3.047	- / 0.976	- / -	- / 194.147	
Subtotal: Installation	- / 173.365	- / 6.115	- / 3.069	- / 4.139	- / -	- / 4.139	- / 1.055	- / 2.381	- / 3.047	- / 0.976	- / -	- / 194.147	
Total													
Total Cost (Procurement + Support + Installation)	313.254	12.414	5.386	5.682	-	5.682	4.361	7.784	4.733	0.976	-	354.590	

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Exhibit P-3a, Individual Modification: PB 2016 Navy				Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9		P-1 Line Item Number / Title: 0935 / Pollution Control Equipment			Modification Number / Title: 1 / HF024 CFC-114 (R-114) AC CONVERSION		

Modification Item 1 of 1: HF024 CFC-114 (R-114) AC CONVERSION

Manufacturer Information

Manufacturer Name: YORK INTERNATIONAL				Manufacturer Location: PA			
Administrative Leadtime (in Months): 2				Production Leadtime (in Months): 12			

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Mar 2014	Oct 2014	Oct 2015	Oct 2016	Oct 2017	Oct 2018	
Delivery Dates	Mar 2015	Oct 2015	Oct 2016	Oct 2017	Oct 2018	Oct 2019	

Installation Information

Method of Implementation: AIT:: Installation Name: HF024 CFC-114 (R-114) AC CONVERSION

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	354 / 173.365	11 / 6.115	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	365 / 179.480
FY 2014	- / -	- / -	6 / 3.069	4 / 1.958	- / -	4 / 1.958	- / -	- / -	- / -	- / -	- / -	10 / 5.027
FY 2015	- / -	- / -	- / -	4 / 2.181	- / -	4 / 2.181	- / -	- / -	- / -	- / -	- / -	4 / 2.181
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	2 / 1.055	- / -	- / -	- / -	- / -	2 / 1.055
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 2.381	- / -	- / -	- / -	4 / 2.381
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 3.047	- / -	- / -	6 / 3.047
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.976	- / -	2 / 0.976
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	9 / -	9 / -
Total	354 / 173.365	11 / 6.115	6 / 3.069	8 / 4.139	- / -	8 / 4.139	2 / 1.055	4 / 2.381	6 / 3.047	2 / 0.976	9 / -	402 / 194.147

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	354	-	-	9	2	-	2	4	-	2	-	6	-	-	2	-	-	-	-	4	-	-	6	-	-	-	-	2	-	9	402
Out	354	-	-	-	-	-	-	4	7	2	4	2	-	6	-	2	-	-	-	-	-	-	6	-	4	-	-	-	-	11	402

Footnotes:

(1) Average cost per unit in FY15 is lower than FY16-FY18 as result of utilization of reclaimed parts and equipment. Procurement contract is a three-year contract and FY18-FY19 procurements are estimated pending renegotiation.

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment							P-1 Line Item Number / Title: 0941 / Submarine Support Equipment					
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:					Other Related Program Elements:				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	86.882	10.074	11.815	10.498	-	10.498	9.361	9.245	8.096	6.250	-	152.221
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	86.882	10.074	11.815	10.498	-	10.498	9.361	9.245	8.096	6.250	-	152.221
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	86.882	10.074	11.815	10.498	-	10.498	9.361	9.245	8.096	6.250	-	152.221
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: The FY 2016 funding request was reduced by \$0.843 million to account for the availability of prior year execution balances. The Submarine Support Equipment budget provides funding for equipment technical refresh and upgrades that consist of hardware, software, system engineering, integrated logistics support, system test and evaluation, training, data, installation assistance teams and program management. This funding also procures equipment and material required to implement the military high priority Submarine Silencing Program for operating nuclear submarines. This equipment technical refreshes and upgrades are not supported by other NAVSEA program offices and support SSN/SSBN/SSGN Class Submarines and land based laboratories/facilities. PB51N INSTALLATION Funds are for the installation of SSTG Governors on SSN688, SSN21 and SSBN/GN 726 Class submarines, acoustic range array replacement and replacement Ship Control System Processors for SSN21 Class submarines. [P40A / PB001 Seawolf Component Upgrades]: PB001 Seawolf Component Upgrades - Provides funding to purchase tooling required for fabrication of the Bow Dome, fabrication of a new Bow Dome, machining and inspection, storage and installation and technical support from Navy labs. [P40A / PB004 Facilities/Lab Upgrades]: PB004 ACOUSTIC RANGE EQUIPMENT Procures equipment and materials required to implement and support the military high priority Submarine Silencing Program for operating nuclear submarines. TYCOMs have consistently rated the conduct of noise trials as a high priority funding requirement. The requirements for this program are identified in Chief of Naval Operations (CNO) Specific Operational Requirements (SOR) 46-28 and Naval Sea Systems Instruction (NAVSEAINST) C9073.2B. This is the only program in place to procure equipment for the purpose of measuring, monitoring, assessing and improving the detection capability and reducing the detectability of deployed submarines. The equipment is used on test vessels, listening platforms and at the laboratories. This program replaces or refurbishes broken or obsolete acquisition and analysis hardware and software used to ensure ship's safety; and the execution and completion of acoustic trials objectives identified in CNO SOR 46-28 (assessment of ship's acoustic posture, etc.) and NAVSEAINST C9073.2B (Acoustic Surveys Policy). These refurbishments and replacements are especially critical in order to maintain the technological advances recently made in the area of acoustic data acquisition under the Acoustic Measurement Facilities Improvement Program (AMFIP) and to utilize the South Tongue of the Ocean Acoustic Facility (STAFAC). Specific items include hydrophone arrays, towed arrays, ranging and tracking systems, on-board array electronics, noise sources, shore power cables, data fiber optic cables, data analysis systems, workstations, data storage and retrieval, communications systems, analyzers, tape recorders, accelerometers, monitors, etc.												

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment		P-1 Line Item Number / Title: 0941 / Submarine Support Equipment
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:
[P3A - 2 / PB007 SSN21 CL SC PROCESSING UNIT]: PB007 This shipalt will replace SSN 21 Class submarine ship control processing unit. The ship control processors are obsolete and contain electronic components that are no longer supported by industry. [P3A - 3 / PB008 SSTG GOVERNORS SEAWOLF CLASS]: PB008 - This shipalt will replace SSTG Governors in SEAWOLF Class submarines. The SSTG Governors in these submarines are obsolete and contain electronic components that are no longer supported by industry. [P3A - 4 / PB008 MOD 25]: PB008 - This shipalt will replace SSTG Governors in Mod 25 Los Angeles Class submarines. The SSTG Governors in theses submarines are obsolete and contain electronic components that are no longer supported by industry.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy	Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment	P-1 Line Item Number / Title: 0941 / Submarine Support Equipment

ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:			Other Related Program Elements:		
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
Submarine Support Equipment	P-40a		- / 86.882	- / 8.142	- / 5.276	- / 6.752	- / -	- / 6.752
1 / PB004 ACOUSTIC ARRAY ()	P-3a		- / 0.000	- / -	- / 6.539	- / 3.010	- / -	- / 3.010
2 / PB007 SSN21 CL SC PROCESSING UNIT ()	P-3a		- / 0.000	- / -	- / -	- / -	- / -	- / -
3 / PB008 SSTG GOVERNORS SEAWOLF CLASS ()	P-3a		- / 0.000	- / 1.932	- / -	- / 0.736	- / -	- / 0.736
4 / PB008 MOD 25 ()	P-3a		- / 0.000	- / -	- / -	- / -	- / -	- / -
Total Gross/Weapon System Cost			- / 86.882	- / 10.074	- / 11.815	- / 10.498	- / -	- / 10.498

Exhibits Schedule			FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
Submarine Support Equipment	P-40a		- / -	- / -	- / -	- / -	- / -	- / -
1 / PB004 ACOUSTIC ARRAY ()	P-3a		- / -	- / -	- / -	- / -	- / -	- / 9.549
2 / PB007 SSN21 CL SC PROCESSING UNIT ()	P-3a		- / 2.900	- / 0.135	- / -	- / -	- / -	- / 3.035
3 / PB008 SSTG GOVERNORS SEAWOLF CLASS ()	P-3a		- / 0.267	- / -	- / -	- / -	- / -	- / 2.935
4 / PB008 MOD 25 ()	P-3a		- / -	- / 2.000	- / 1.541	- / 0.263	- / -	- / 3.804
Total Gross/Weapon System Cost			- / 9.361	- / 9.245	- / 8.096	- / 6.250	- / -	- / 152.221

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9								P-1 Line Item Number / Title: 0941 / Submarine Support Equipment							Aggregated Items Title: Submarine Support Equipment				

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) PB001 Seawolf Component Upgrades																				
1.2) Bow Dome	A		-	-	11.439	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1.3) Seawolf Component Upgrades	A		-	-	2.883	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 1) PB001 Seawolf Component Upgrades			-	-	14.322	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2) PB004 Facilities/Lab Upgrades																				
2.1) Acoustic Range Replacement Equipment	A		-	-	47.917	-	-	4.085	-	-	1.142	-	-	2.925	-	-	-	-	2.925	
Subtotal: 2) PB004 Facilities/Lab Upgrades			-	-	47.917	-	-	4.085	-	-	1.142	-	-	2.925	-	-	-	-	2.925	
3) PB007 SSN/SSBN HM&E Threshold Modernization ⁽¹⁾																				
3.2) SSN 21 CL SC Proc Design & Dev	A		-	-	11.057	-	-	4.057	-	-	4.134	-	-	3.492	-	-	-	-	3.492	
Subtotal: 3) PB007 SSN/SSBN HM&E Threshold Modernization			-	-	11.057	-	-	4.057	-	-	4.134	-	-	3.492	-	-	-	-	3.492	
4) PB008 SSTG Governors																				
4.1) Design and Shipalt Development Ohio/LA/Seawolf Class	A		-	-	13.586	-	-	-	-	-	-	-	-	0.335	-	-	-	-	0.335	
Subtotal: 4) PB008 SSTG Governors			-	-	13.586	-	-	-	-	-	-	-	-	0.335	-	-	-	-	0.335	
Total			-	-	86.882	-	-	8.142	-	-	5.276	-	-	6.752	-	-	-	-	6.752	

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	FY 2017			FY 2018			FY 2019			FY 2020			To Complete			Total Cost		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) PB001 Seawolf Component Upgrades																				
1.2) Bow Dome	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1.3) Seawolf Component Upgrades	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 1) PB001 Seawolf Component Upgrades			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2) PB004 Facilities/Lab Upgrades																				

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy																Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9								P-1 Line Item Number / Title: 0941 / Submarine Support Equipment								Aggregated Items Title: Submarine Support Equipment				
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2017			FY 2018			FY 2019			FY 2020			To Complete			Total Cost		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
2.1) Acoustic Range Replacement Equipment	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: 2) PB004 Facilities/Lab Upgrades</i>			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3) PB007 SSN/SSBN HM&E Threshold Modernization ⁽¹⁾																				
3.2) SSN 21 CL SC Proc Design & Dev	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: 3) PB007 SSN/SSBN HM&E Threshold Modernization</i>			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4) PB008 SSTG Governors																				
4.1) Design and Shipalt Development Ohio/LA/Seawolf Class	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: 4) PB008 SSTG Governors</i>			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Footnotes:

⁽¹⁾ PB007 This shipalt will replace SSN 21 Class submarine ship control processing unit. The ship control processors are obsolete and contain electronic components that are no longer supported by industry.

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Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0941 / Submarine Support Equipment					Modification Number / Title: 1 / PB004 ACOUSTIC ARRAY			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	0.000	-	6.539	3.010	-	3.010	-	-	-	-	-	9.549
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	0.000	-	6.539	3.010	-	3.010	-	-	-	-	-	9.549
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	0.000	-	6.539	3.010	-	3.010	-	-	-	-	-	9.549
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: Funds provide for submerged North Acoustic Array procurement and installation at STAFAC.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015						
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0941 / Submarine Support Equipment				Modification Number / Title: 1 / PB004 ACOUSTIC ARRAY						
Models of Systems Affected:			Modification Type:						Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total		
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)		
Procurement														
Modification Item 1 of 1: PB004 ACOUSTIC ARRAY														
B Kits														
Non-Recurring														
1.1.1) Acoustic Array - NonOrganic	- / -	- / -	1 / 3.461	1 / 0.679	- / -	1 / 0.679	- / -	- / -	- / -	- / -	- / -	2 / 4.140		
Subtotal: Non-Recurring	- / 0.000	- / -	- / 3.461	- / 0.679	- / -	- / 0.679	- / -	- / -	- / -	- / -	- / -	- / 4.140		
Subtotal: PB004 ACOUSTIC ARRAY	- / -	- / -	1 / 3.461	1 / 0.679	- / -	1 / 0.679	- / -	- / -	- / -	- / -	- / -	2 / 4.140		
Subtotal: Procurement, All Modification Items	- / 0.000	- / -	- / 3.461	- / 0.679	- / -	- / 0.679	- / -	- / -	- / -	- / -	- / -	- / 4.140		
Installation														
Modification Item 1 of 1: PB004 ACOUSTIC ARRAY	- / 0.000	- / -	- / 3.078	- / 2.331	- / -	- / 2.331	- / -	- / -	- / -	- / -	- / -	- / 5.409		
Subtotal: Installation	- / 0.000	- / -	- / 3.078	- / 2.331	- / -	- / 2.331	- / -	- / -	- / -	- / -	- / -	- / 5.409		
Total														
Total Cost (Procurement + Support + Installation)	0.000	-	6.539	3.010	-	3.010	-	-	-	-	-	9.549		

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015																					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9										P-1 Line Item Number / Title: 0941 / Submarine Support Equipment										Modification Number / Title: 1 / PB004 ACOUSTIC ARRAY											
Modification Item 1 of 1: PB004 ACOUSTIC ARRAY																															
Manufacturer Information																															
Manufacturer Name: NSWC CD															Manufacturer Location: BETHESDA, MD																
Administrative Leadtime (in Months): 0															Production Leadtime (in Months): 5																
Dates		FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020					
Contract Dates						Apr 2015				Jan 2016																					
Delivery Dates						Aug 2015				Jun 2016																					
Installation Information																															
Method of Implementation: [none specified]:: Installation Name: Acoustic Array																															
Installation Cost		Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total																		
		Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)																		
Prior Years		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2014		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2015		- / -	- / -	1 / 3.078	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 3.078																		
FY 2016		- / -	- / -	- / -	1 / 2.331	- / -	1 / 2.331	- / -	- / -	- / -	- / -	- / -	1 / 2.331																		
FY 2017		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2018		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2019		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2020		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
To Complete		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
Total		- / -	- / -	1 / 3.078	1 / 2.331	- / -	1 / 2.331	- / -	- / -	- / -	- / -	- / -	2 / 5.409																		
Installation Schedule																															
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Out	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0941 / Submarine Support Equipment				Modification Number / Title: 2 / PB007 SSN21 CL SC PROCESSING UNIT				

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	0.000	-	-	-	-	-	2.900	0.135	-	-	-	3.035
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	0.000	-	-	-	-	-	2.900	0.135	-	-	-	3.035
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	0.000	-	-	-	-	-	2.900	0.135	-	-	-	3.035
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

PB007 This shipalt will replace SSN 21 Class submarine ship control processing unit. The ship control processors are obsolete and contain electronic components that are no longer supported by industry.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0941 / Submarine Support Equipment					Modification Number / Title: 2 / PB007 SSN21 CL SC PROCESSING UNIT			
Models of Systems Affected:				Modification Type:				Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Procurement												
Modification Item 1 of 1: PB007 SSN21 CL SC PROCESSING UNIT												
B Kits												
Recurring												
1.1.1) SSN 21 CL SHIP CONTROL PROCESSING UNIT - NonOrganic	- / -	- / -	- / -	- / -	- / -	- / -	1 / 2.900	- / -	- / -	- / -	- / -	1 / 2.900
Subtotal: Recurring	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / 2.900	- / -	- / -	- / -	- / -	- / 2.900
Subtotal: PB007 SSN21 CL SC PROCESSING UNIT	- / -	- / -	- / -	- / -	- / -	- / -	1 / 2.900	- / -	- / -	- / -	- / -	1 / 2.900
Subtotal: Procurement, All Modification Items	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / 2.900	- / -	- / -	- / -	- / -	- / 2.900
Support (All Modification Items)												
2.1) DSA	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.010	- / -	- / -	- / -	- / 0.010
Subtotal: Support	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.010	- / -	- / -	- / -	- / 0.010
Installation												
Modification Item 1 of 1: PB007 SSN21 CL SC PROCESSING UNIT	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.125	- / -	- / -	- / -	- / 0.125
Subtotal: Installation	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.125	- / -	- / -	- / -	- / 0.125
Total												
Total Cost (Procurement + Support + Installation)	0.000	-	-	-	-	-	2.900	0.135	-	-	-	3.035

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0941 / Submarine Support Equipment	Modification Number / Title: 2 / PB007 SSN21 CL SC PROCESSING UNIT

Modification Item 1 of 1: PB007 SSN21 CL SC PROCESSING UNIT

Manufacturer Information							
Manufacturer Name: NUWC Neport				Manufacturer Location: Newport, RI			
Administrative Leadtime (in Months): 0				Production Leadtime (in Months): 12			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates				Jul 2017			
Delivery Dates				Jul 2018			

Installation Information

Method of Implementation: AIT:: Installation Name: SSN 21 CL SHIP CONTROL PROCESSING UNIT

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.125	- / -	- / -	- / -	1 / 0.125
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.125	- / -	- / -	- / -	1 / 0.125

Installation Schedule																															
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0941 / Submarine Support Equipment	Modification Number / Title: 3 / PB008 SSTG GOVERNORS SEAWOLF CLASS

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	0.000	1.932	-	0.736	-	0.736	0.267	-	-	-	-	2.935
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	0.000	1.932	-	0.736	-	0.736	0.267	-	-	-	-	2.935
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	0.000	1.932	-	0.736	-	0.736	0.267	-	-	-	-	2.935
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

PB008 - SHIPALT WILL REPLACE SSTG GOVERNORS IN SEAWOLF CLASS SUBMARINES. THE SSTG GOVERNORS IN THESE SUBMARINES ARE OBSOLETE AND CONTAIN ELECTRONIC COMPONENTS THAT ARE NO LONGER SUPPORTED BY INDUSTRY.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0941 / Submarine Support Equipment				Modification Number / Title: 3 / PB008 SSTG GOVERNORS SEAWOLF CLASS				
Models of Systems Affected:				Modification Type:				Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>
Procurement												
<i>Modification Item 1 of 1:</i> PB008 SSTG GOVERNORS SEAWOLF CLASS												
B Kits												
Recurring												
1.1.1) SSTG GOVERNORS SEAWOLF CLASS PROCUREMENT - NonOrganic	- / -	2 / 1.424	- / -	1 / 0.736	- / -	1 / 0.736	- / -	- / -	- / -	- / -	- / -	3 / 2.160
<i>Subtotal: Recurring</i>	- / 0.000	- / 1.424	- / -	- / 0.736	- / -	- / 0.736	- / -	- / -	- / -	- / -	- / -	- / 2.160
<i>Subtotal: PB008 SSTG GOVERNORS SEAWOLF CLASS</i>	- / -	2 / 1.424	- / -	1 / 0.736	- / -	1 / 0.736	- / -	- / -	- / -	- / -	- / -	3 / 2.160
<i>Subtotal: Procurement, All Modification Items</i>	- / 0.000	- / 1.424	- / -	- / 0.736	- / -	- / 0.736	- / -	- / -	- / -	- / -	- / -	- / 2.160
Support (All Modification Items)												
2.1) DSA	- / -	- / 0.102	- / -	- / -	- / -	- / -	- / 0.053	- / -	- / -	- / -	- / -	- / 0.155
<i>Subtotal: Support</i>	- / 0.000	- / 0.102	- / -	- / -	- / -	- / -	- / 0.053	- / -	- / -	- / -	- / -	- / 0.155
Installation												
<i>Modification Item 1 of 1:</i> PB008 SSTG GOVERNORS SEAWOLF CLASS	- / 0.000	- / 0.406	- / -	- / -	- / -	- / -	- / 0.214	- / -	- / -	- / -	- / -	- / 0.620
<i>Subtotal: Installation</i>	- / 0.000	- / 0.406	- / -	- / -	- / -	- / -	- / 0.214	- / -	- / -	- / -	- / -	- / 0.620
Total												
Total Cost (Procurement + Support + Installation)	0.000	1.932	-	0.736	-	0.736	0.267	-	-	-	-	2.935

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0941 / Submarine Support Equipment	Modification Number / Title: 3 / PB008 SSTG GOVERNORS SEAWOLF CLASS

Modification Item 1 of 1: PB008 SSTG GOVERNORS SEAWOLF CLASS

Manufacturer Information

Manufacturer Name: Electric Boat-Misc	Manufacturer Location: Groton, CT
Administrative Leadtime (in Months): 0	Production Leadtime (in Months): 4

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	May 2014		May 2016				
Delivery Dates	Aug 2014		Aug 2016				

Installation Information

Method of Implementation: [none specified]:: Installation Name: SSTG GOVERNORS SEAWOLF CLASS PROCURMENT

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	2 / 0.406	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.406
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.214	- / -	- / -	- / -	- / -	1 / 0.214
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	2 / 0.406	- / -	- / -	- / -	- / -	1 / 0.214	- / -	- / -	- / -	- / -	3 / 0.620

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	2	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
Out	-	-	-	-	2	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0941 / Submarine Support Equipment					Modification Number / Title: 4 / PB008 MOD 25			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	0.000	-	-	-	-	-	-	2.000	1.541	0.263	-	3.804
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	0.000	-	-	-	-	-	-	2.000	1.541	0.263	-	3.804
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	0.000	-	-	-	-	-	-	2.000	1.541	0.263	-	3.804
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: PB008 MOD 25 - SHIPALT WILL REPLACE SSTG GOVERNORS IN MOD 25 LOS ANGELES CLASS SUBMARINES. THE SSTG GOVERNORS IN THESE SUBMARINES ARE OBSOLETE AND CONTAIN ELECTRONIC COMPONENTS THAT ARE NO LONGER SUPPORTED BY INDUSTRY.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0941 / Submarine Support Equipment				Modification Number / Title: 4 / PB008 MOD 25				
Models of Systems Affected:				Modification Type:				Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Procurement												
Modification Item 1 of 1: PB008 MOD 25												
B Kits												
Recurring												
1.1.1) MOD 25 PROCUREMENT - NonOrganic	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 2.000	1 / 1.021	- / -	- / -	3 / 3.021
Subtotal: Recurring	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.000	- / 1.021	- / -	- / -	- / 3.021
Subtotal: PB008 MOD 25	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 2.000	1 / 1.021	- / -	- / -	3 / 3.021
Subtotal: Procurement, All Modification Items	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.000	- / 1.021	- / -	- / -	- / 3.021
Support (All Modification Items)												
2.1) DSA	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.086	- / 0.042	- / -	- / 0.128
Subtotal: Support	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.086	- / 0.042	- / -	- / 0.128
Installation												
Modification Item 1 of 1: PB008 MOD 25	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.434	- / 0.221	- / -	- / 0.655
Subtotal: Installation	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.434	- / 0.221	- / -	- / 0.655
Total												
Total Cost (Procurement + Support + Installation)	0.000	-	-	-	-	-	-	2.000	1.541	0.263	-	3.804

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Exhibit P-3a, Individual Modification: PB 2016 Navy			Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9		P-1 Line Item Number / Title: 0941 / Submarine Support Equipment			Modification Number / Title: 4 / PB008 MOD 25

Modification Item 1 of 1: PB008 MOD 25

Manufacturer Information

Manufacturer Name: Electric Boat-Misc			Manufacturer Location: Groton, CT		
Administrative Leadtime (in Months): 0			Production Leadtime (in Months): 12		

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates					Jan 2018	Jan 2019	
Delivery Dates					Jan 2019	Jan 2020	

Installation Information

Method of Implementation: [none specified]:: Installation Name: MOD 25 PROCUREMENT

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.434	- / -	- / -	2 / 0.434
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.221	- / -	1 / 0.221
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.434	1 / 0.221	- / -	3 / 0.655

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	1	-	-	-	-	3
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	1	-	-	-	-	3

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy										Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment							P-1 Line Item Number / Title: 0942 / Virginia Class Support Equipment					
ID Code (A=Service Ready, B=Not Service Ready) : A				Program Elements for Code B Items:				Other Related Program Elements: 0204281N, 0604558N				
Line Item MDAP/MAIS Code: 516			Item MDAP/MAIS Code(s):									
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	1,093.563	69.341	70.689	35.747	-	35.747	56.262	49.263	49.672	50.743	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	1,093.563	69.341	70.689	35.747	-	35.747	56.262	49.263	49.672	50.743	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	1,093.563	69.341	70.689	35.747	-	35.747	56.262	49.263	49.672	50.743	Continuing	Continuing
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	1.892	1.467	1.856	-	1.856	2.067	1.710	1.862	1.910	Continuing	Continuing
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:
The FY 2016 funding request was reduced by \$20.752 million to account for the availability of prior year execution balances.

This provides a wide range of material required to operate, test, support and maintain the viability of VIRGINIA SSN-774 Class Submarines. The "Major Shore Spares" component includes rotatable pool and insurance spares. Propulsor rotatable pool assets support planned maintenance during scheduled availabilities by decreasing equipment turn-around time/availability duration. Rotatable pool program equipment includes the high pressure air compressor, various pump/motor assemblies, radar mast, ventilation fans and Thin Line Towed Array components and other components. Insurance spares (which include a main propulsion unit, and ship service turbine generator) support unplanned equipment replacement due to casualty or emergent maintenance requirements. Insurance spares availability reduces the likelihood an operating ship will be materially impaired for an undetermined period or the construction schedule extended.

This funding line also includes upgrading the afloat acoustic system required to conduct TECHEVAL/OPEVAL satisfactorily, efficiently and with minimal risk of equipment failure. Some Test and Evaluation (T&E) Measuring Equipment upgrades to underwater acoustic ranges are necessary to support class acoustic profiles T&E. Also included in the Vertical Launch System (VLS) Peculiar Support Equipment (PSE) are primarily All-Up Round Simulators (AURS)/All-Up Round (AUR) Ballast Cans necessary to conduct TECHEVAL/OPEVAL and provide ballast for ship operation.

The wireless LAN provides a shipwide (forward of the reactor compartment) intranet (NIPRNET) that significantly enhances the quality of the work by facilitating electronic correspondence, personnel data management, collaborative services, interactive whiteboard, multi-user chat and access to these sites: FTMPS/NTMPS, CHCS, prescriptions, MYPAY-DFAS, EPMAC, BUPERS, EMAIL, FTSCCLANT, SUBMEPP and NKO.

Maintenance Planning System funds will be used to help ship programs identify, plan and execute maintenance activities as well as improve efficiently at all levels (performed by ship's force as well as organizational/depot level) by creating a set of tools to provide a robust, disconnected and comprehensive training and maintenance solution delivering dynamic content. This set of tools and the associated ship-to-shore data environment will reduce O&MN funding over time. This will be fielded as part of the Non-Tactical Data Processing System (NTDPS) to VIRGINIA Class submarines.

Funding for survival equipment ensures compliance to CNO requirements for crew life support and survivability for several days. Procurement includes LiOH canisters, Submarine Escape Immersion Equipment (SEIE) suits and oxygen (O2) candles.

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy			Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment		P-1 Line Item Number / Title: 0942 / Virginia Class Support Equipment	
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:		Other Related Program Elements: 0204281N, 0604558N
Line Item MDAP/MAIS Code: 516	Item MDAP/MAIS Code(s):		
Ship Control Tactical Lab Set for Redesign Configuration procures the Acceptance Test Lab to support VIRGINIA Class upgrade of new ship control hardware development and qualification. Procurement includes a full tactical set of hardware for the lab. Finally, the continuous ship upgrades necessary to maintain class viability of the earlier ships are included in this funding line. This is particularly important for Commercial Off-the-Shelf (COTS) Technology Refreshment and Technology Upgrades for Non-Propulsion Electronic Systems (NPES). The class level of modernization and capability rests on available resources. [P3A - 3 / TI-02 Baseline Upgrade]: .			

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy	Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment	P-1 Line Item Number / Title: 0942 / Virginia Class Support Equipment

ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements: 0204281N, 0604558N

Line Item MDAP/MAIS Code: 516	Item MDAP/MAIS Code(s):

Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
Virginia Class Support Equipment	P-40a		- / 649.818	- / 21.352	- / 12.215	- / 5.490	- / -	- / 5.490
1 / H1RC6 - Major Shore Spares (Various)	P-3a		- / 193.835	- / 12.850	- / 7.387	- / -	- / -	- / -
2 / HRC11 - VA Class Support Equipment (Various)	P-3a		- / 24.845	- / -	- / -	- / -	- / -	- / -
3 / HRC13 - Hotel Services (Various)	P-3a		- / 181.673	- / 15.260	- / 32.360	- / 9.100	- / -	- / 9.100
4 / HRC13 - Infrastructure Upgrades (Various)	P-3a		- / 1.307	- / 7.666	- / 4.792	- / 9.862	- / -	- / 9.862
5 / HRC13 - Non-Tactical Data Processing System (Various)	P-3a		- / 15.406	- / 5.313	- / 5.402	- / 2.600	- / -	- / 2.600
6 / HRC13 - SHIPALT SA4612K (K Alt)	P-3a		- / 18.924	- / -	- / -	- / -	- / -	- / -
7 / HRC13 - Ship Control System (SCS) Modernization Backfit (Various)	P-3a		- / 7.755	- / 6.900	- / 8.533	- / 8.695	- / -	- / 8.695
Total Gross/Weapon System Cost			- / 1,093.563	- / 69.341	- / 70.689	- / 35.747	- / -	- / 35.747

Exhibits Schedule			FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
Virginia Class Support Equipment	P-40a		- / -	- / -	- / -	- / -	- / -	- / -
1 / H1RC6 - Major Shore Spares (Various)	P-3a		- / 7.025	- / 7.265	- / 7.403	- / 7.544	Continuing	Continuing
2 / HRC11 - VA Class Support Equipment (Various)	P-3a		- / -	- / -	- / -	- / -	- / -	- / 24.845
3 / HRC13 - Hotel Services (Various)	P-3a		- / 29.600	- / -	- / -	- / -	- / -	- / 267.993
4 / HRC13 - Infrastructure Upgrades (Various)	P-3a		- / 6.444	- / 13.678	- / 12.989	- / 13.276	- / -	- / 70.014
5 / HRC13 - Non-Tactical Data Processing System (Various)	P-3a		- / 2.658	- / 5.699	- / 5.807	- / 5.917	- / -	- / 48.802
6 / HRC13 - SHIPALT SA4612K (K Alt)	P-3a		- / -	- / -	- / -	- / -	- / -	- / 18.924
7 / HRC13 - Ship Control System (SCS) Modernization Backfit (Various)	P-3a		- / 8.860	- / 3.746	- / 1.222	- / 1.245	- / -	- / 46.956
Total Gross/Weapon System Cost			- / 56.262	- / 49.263	- / 49.672	- / 50.743	Continuing	Continuing

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9						P-1 Line Item Number / Title: 0942 / Virginia Class Support Equipment									Aggregated Items Title: Virginia Class Support Equipment					
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.																				
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) All Prior Years																				
1.1) All Prior Years (APY)	A		-	-	567.801	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 1) All Prior Years			-	-	567.801	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2) H1RC2 TEST & EVALUATION EQUIPMENT																				
2.1) Test & Evaluation Measuring Equipment	A		-	-	22.258	-	-	1.864	-	-	1.938	-	-	1.975	-	-	-	-	1.975	
Subtotal: 2) H1RC2 TEST & EVALUATION EQUIPMENT			-	-	22.258	-	-	1.864	-	-	1.938	-	-	1.975	-	-	-	-	1.975	
3) H1RC03 VLS/VPT Peculiar Support Equipment																				
3.1) VLS/VPT Peculiar Support Equipment	A		-	-	-	-	-	-	-	-	3.100	-	-	-	-	-	-	-	-	
Subtotal: 3) H1RC03 VLS/ VPT Peculiar Support Equipment			-	-	0.000	-	-	-	-	-	3.100	-	-	-	-	-	-	-	-	
4) H1RC13 TECH INSERTION TECH REFRESH & UPGRADES																				
4.1) HM&E Tech Refresh	A		-	-	4.140	-	-	1.430	-	-	1.780	-	-	0.500	-	-	-	-	0.500	
4.2) NPES Tech Refresh	A		-	-	4.458	-	-	1.542	-	-	1.940	-	-	0.500	-	-	-	-	0.500	
4.3) Shipboard Mobile Computing NTDPs (ULAN + SW Enclave + PDOCS + Upgrades)	A		-	-	6.368	-	-	2.208	-	-	3.378	-	-	2.446	-	-	-	-	2.446	
4.4) System Level Activities PSA/Post PSA	A		-	-	5.254	-	-	1.822	-	-	-	-	-	-	-	-	-	-	-	
4.5) HM&E and CFE NPES Modernization	A		-	-	31.985	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4.6) Misc. Upgrades, Tech Refresh ⁽¹⁾	A		-	-	6.047	-	-	12.486	-	-	0.079	-	-	0.069	-	-	-	-	0.069	
Subtotal: 4) H1RC13 TECH INSERTION TECH REFRESH & UPGRADES			-	-	58.252	-	-	19.488	-	-	7.177	-	-	3.515	-	-	-	-	3.515	
5) HRC14 SURVIVAL EQUIPMENT FOR SEA RIDERS																				
5.1) Survival Equipment for Sea Trial Riders	A		-	-	1.507	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 5) HRC14 SURVIVAL EQUIPMENT FOR SEA RIDERS			-	-	1.507	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9								P-1 Line Item Number / Title: 0942 / Virginia Class Support Equipment							Aggregated Items Title: Virginia Class Support Equipment				

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Total			-	-	649.818	-	-	21.352	-	-	12.215	-	-	5.490	-	-	-	-	-	5.490

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2017			FY 2018			FY 2019			FY 2020			To Complete			Total Cost		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) All Prior Years																				
1.1) All Prior Years (APY)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 1) All Prior Years			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2) H1RC2 TEST & EVALUATION EQUIPMENT																				
2.1) Test & Evaluation Measuring Equipment	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 2) H1RC2 TEST & EVALUATION EQUIPMENT			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3) H1RC03 VLS/VPT Peculiar Support Equipment																				
3.1) VLS/VPT Peculiar Support Equipment	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 3) H1RC03 VLS/VPT Peculiar Support Equipment			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4) H1RC13 TECH INSERTION TECH REFRESH & UPGRADES																				
4.1) HM&E Tech Refresh	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4.2) NPES Tech Refresh	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4.3) Shipboard Mobile Computing NTDPS (ULAN + SW Enclave + PDOCS + Upgrades)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4.4) System Level Activities PSA/Post PSA	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4.5) HM&E and CFE NPES Modernization	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4.6) Misc. Upgrades, Tech Refresh ⁽¹⁾	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 4) H1RC13 TECH INSERTION TECH REFRESH & UPGRADES			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5) HRC14 SURVIVAL EQUIPMENT FOR SEA RIDERS																				

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9							P-1 Line Item Number / Title: 0942 / Virginia Class Support Equipment							Aggregated Items Title: Virginia Class Support Equipment						
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2017			FY 2018			FY 2019			FY 2020			To Complete			Total Cost		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
5.1) Survival Equipment for Sea Trial Riders	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 5) HRC14 SURVIVAL EQUIPMENT FOR SEA RIDERS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Footnotes:

(1) Note: FY14 cost increased due to deferred HSWG on SSN 774 as engineering changes and other updates were required to allow the ship to maintain operational ability.

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Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0942 / Virginia Class Support Equipment					Modification Number / Title: 1 / H1RC6 - Major Shore Spares			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	193.835	12.850	7.387	-	-	-	7.025	7.265	7.403	7.544	Continuing	Continuing
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	193.835	12.850	7.387	-	-	-	7.025	7.265	7.403	7.544	Continuing	Continuing
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	193.835	12.850	7.387	-	-	-	7.025	7.265	7.403	7.544	Continuing	Continuing
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: Procure equipment and materials necessary to support the VIRGINIA Class submarine program. Materials are as large as spare rotors and as small as spare anodes and fasteners. Quantity is variable and would skew any attempt to determine a unit cost. VIRGINIA Class rotatable pool rotors are replaced during each Extended Dry-docking Selected Restricted Availability (EDSRA). The rotors are removed, refurbished, and placed into a pool. There is no set installation schedule as rotors, once available, are installed on subsequent availabilities.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015						
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0942 / Virginia Class Support Equipment				Modification Number / Title: 1 / H1RC6 - Major Shore Spares						
Models of Systems Affected: VA Class Submarine			Modification Type: Various						Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total		
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)		
Procurement														
Modification Item 1 of 1: H1RC6 - Major Shore Spares														
B Kits														
Non-Recurring														
1.1.1) H1RC6 Prior Years - Organic	- / 172.620	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 172.620		
1.1.2) Propulsor - Rotatable Pool - Organic	1 / 7.442	2 / 12.850	1 / 7.387	- / -	- / -	- / -	1 / 7.025	1 / 7.265	1 / 7.403	1 / 7.544	Continuing	Continuing		
1.1.3) Propulsor - ILS Parts - Organic	- / 8.998	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 8.998		
1.1.4) Misc. Insurance Spares (planes, rudders, etc.) - Organic	- / 1.025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.025		
1.1.5) Misc. Rotatable Pool (fans, pumps, motors, etc.) - Organic	- / 3.750	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 3.750		
Subtotal: Non-Recurring	- / 193.835	- / 12.850	- / 7.387	- / -	- / -	- / -	- / 7.025	- / 7.265	- / 7.403	- / 7.544	Continuing	Continuing		
Subtotal: H1RC6 - Major Shore Spares	1 / 193.835	2 / 12.850	1 / 7.387	- / -	- / -	- / -	1 / 7.025	1 / 7.265	1 / 7.403	1 / 7.544	Continuing	Continuing		
Subtotal: Procurement, All Modification Items	- / 193.835	- / 12.850	- / 7.387	- / -	- / -	- / -	- / 7.025	- / 7.265	- / 7.403	- / 7.544	Continuing	Continuing		
Installation														
Subtotal: Installation	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -		
Total														
Total Cost (Procurement + Support + Installation)	193.835	12.850	7.387	-	-	-	7.025	7.265	7.403	7.544	Continuing	Continuing		

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Exhibit P-3a, Individual Modification: PB 2016 Navy					Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9			P-1 Line Item Number / Title: 0942 / Virginia Class Support Equipment			Modification Number / Title: 1 / H1RC6 - Major Shore Spares	
Modification Item 1 of 1: H1RC6 - Major Shore Spares							
Manufacturer Information							
Manufacturer Name: Naval Foundary & Propeller Center - Spare Rotor ⁽²⁾				Manufacturer Location: Philadelphia, PA			
Administrative Leadtime (in Months): 0				Production Leadtime (in Months): 32			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates		Feb 2015	Feb 2016				
Delivery Dates		Aug 2017	Aug 2018				
Manufacturer Name: Naval Foundary & Propeller Center-Hub Scoot Bar Set ⁽³⁾				Manufacturer Location: Philadelphia, PA			
Administrative Leadtime (in Months): 0				Production Leadtime (in Months): 33			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							
Manufacturer Name: NRL ⁽⁴⁾				Manufacturer Location: Key West, FL			
Administrative Leadtime (in Months): 0				Production Leadtime (in Months): 6			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							
Manufacturer Name: BAE Systems LP-Fasteners ⁽⁵⁾				Manufacturer Location: Louisville, KY			
Administrative Leadtime (in Months): 0				Production Leadtime (in Months): 18			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							
Manufacturer Name: BAE Systems LP-SHIPALT HW ⁽⁶⁾				Manufacturer Location: Louisville, KY			
Administrative Leadtime (in Months): 0				Production Leadtime (in Months): 17			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							
Manufacturer Name: BAE Systems LP-Spare Ropeguard ⁽⁷⁾				Manufacturer Location: Louisville, KY			
Administrative Leadtime (in Months): 0				Production Leadtime (in Months): 18			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							

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Exhibit P-3a, Individual Modification: PB 2016 Navy						Date: February 2015	
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9			P-1 Line Item Number / Title: 0942 / Virginia Class Support Equipment			Modification Number / Title: 1 / H1RC6 - Major Shore Spares	
Modification Item 1 of 1: H1RC6 - Major Shore Spares							
Manufacturer Information							
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Delivery Dates							
Manufacturer Name: BAE Systems LP-Ropeguard Trailing Edge Kit ⁽⁸⁾				Manufacturer Location: Louisville, KY			
Administrative Leadtime (<i>in Months</i>): 0				Production Leadtime (<i>in Months</i>): 18			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							
Manufacturer Name: BAE Systems LP-Snubber Shim Kit ⁽⁹⁾				Manufacturer Location: Louisville, KY			
Administrative Leadtime (<i>in Months</i>): 0				Production Leadtime (<i>in Months</i>): 18			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							
Manufacturer Name: NSWC Carderock/ARL ⁽¹⁰⁾				Manufacturer Location: Carderock, MD/State College, PA			
Administrative Leadtime (<i>in Months</i>): 0				Production Leadtime (<i>in Months</i>): 8			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							
Manufacturer Name: Electric Boat-CO-H2 Burner ⁽¹¹⁾				Manufacturer Location: Groton, CT			
Administrative Leadtime (<i>in Months</i>): 0				Production Leadtime (<i>in Months</i>): 15			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							
Manufacturer Name: Electric Boat-ILPE Blower/Motor ⁽¹²⁾				Manufacturer Location: Groton, CT			
Administrative Leadtime (<i>in Months</i>): 0				Production Leadtime (<i>in Months</i>): 3			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							
Manufacturer Name: Electric Boat-Sanitary Pump/Motor ⁽¹³⁾				Manufacturer Location: Groton, CT			
Administrative Leadtime (<i>in Months</i>): 0				Production Leadtime (<i>in Months</i>): 7			

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Exhibit P-3a, Individual Modification: PB 2016 Navy						Date: February 2015	
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9			P-1 Line Item Number / Title: 0942 / Virginia Class Support Equipment			Modification Number / Title: 1 / H1RC6 - Major Shore Spares	
Modification Item 1 of 1: H1RC6 - Major Shore Spares							
Manufacturer Information							
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							
Manufacturer Name: Electric Boat-Misc ⁽¹⁴⁾				Manufacturer Location: Groton, CT			
Administrative Leadtime (<i>in Months</i>): 0				Production Leadtime (<i>in Months</i>): 4			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							
Manufacturer Name: BAE Systems LP-SHIPALT Hardware ⁽¹⁵⁾				Manufacturer Location: Louisville, KY			
Administrative Leadtime (<i>in Months</i>): 0				Production Leadtime (<i>in Months</i>): 12			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							
Installation Information							
Method of Implementation (Organic): Not Installed - Propulsor - Rotatable Pool						Installation Quantity: 8	
Footnotes: ⁽²⁾ Spare Rotor ⁽³⁾ Hub Scoot Bar Set ⁽⁴⁾ Spare Anodes ⁽⁵⁾ Spare Fasteners ⁽⁶⁾ SHIPALT Hardware ⁽⁷⁾ Spare Ropeguard ⁽⁸⁾ Ropeguard Trailing Edge Kit ⁽⁹⁾ Snubber Shim Kit ⁽¹⁰⁾ Hardware & Engineering Services ⁽¹¹⁾ CO-H2 Burner ⁽¹²⁾ ILPE Blower/Motor ⁽¹³⁾ Sanitary Pump/Motor							

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0942 / Virginia Class Support Equipment	Modification Number / Title: 1 / H1RC6 - Major Shore Spares
(14) Miscellaneous (15) SHIPALT Hardware		

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0942 / Virginia Class Support Equipment						Modification Number / Title: 2 / HRC11 - VA Class Support Equipment		

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	24.845	-	-	-	-	-	-	-	-	-	-	24.845
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	24.845	-	-	-	-	-	-	-	-	-	-	24.845
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	24.845	-	-	-	-	-	-	-	-	-	-	24.845
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: Procure materials necessary to establish In-Service Engineering Agents (ISEA) lab assets. There are no installation costs associated with this material.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0942 / Virginia Class Support Equipment				Modification Number / Title: 2 / HRC11 - VA Class Support Equipment					
Models of Systems Affected: VA Class Submarines				Modification Type: Various				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: HRC11 - VA Class Support Equipment													
B Kits													
Non-Recurring													
1.1.2) HRC11 Prior Years - Organic	- / 12.185	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 12.185	
1.1.3) Thin Line Towed Array Handling System Tester - Organic	- / 0.400	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.400	
1.1.4) Main Shaft/Propulsion Change Out - Organic	- / 2.178	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.178	
1.1.8) Weapon and Launcher Test Set - Organic	- / 0.300	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.300	
Subtotal: Non-Recurring	- / 15.063	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 15.063	
Subtotal: HRC11 - VA Class Support Equipment	- / 15.063	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 15.063	
Subtotal: Procurement, All Modification Items	- / 15.063	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 15.063	
Support (All Modification Items)													
2.1) Light Weight Wide Aperture Array Lab	- / 2.300	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.300	
2.2) MK71 Tube Support Facility	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
2.3) VA Payload Tube Lab/Facility	- / 6.882	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 6.882	
2.4) Multiple Lab/Facility Upgrade	- / 0.600	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.600	
Subtotal: Support	- / 9.782	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 9.782	
Installation													
Subtotal: Installation	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Total													
Total Cost (Procurement + Support + Installation)	24.845	-	-	-	-	-	-	-	-	-	-	24.845	

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Exhibit P-3a, Individual Modification: PB 2016 Navy					Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9			P-1 Line Item Number / Title: 0942 / Virginia Class Support Equipment			Modification Number / Title: 2 / HRC11 - VA Class Support Equipment	
Modification Item 1 of 1: HRC11 - VA Class Support Equipment							
Manufacturer Information							
Manufacturer Name: Electric Boat/NUWC Newport ⁽¹⁶⁾				Manufacturer Location: Groton, CT/Newport, RI			
Administrative Leadtime (<i>in Months</i>): 0				Production Leadtime (<i>in Months</i>): 3			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							
Manufacturer Name: Electric Boat ⁽¹⁷⁾				Manufacturer Location: Groton, CT			
Administrative Leadtime (<i>in Months</i>): 0				Production Leadtime (<i>in Months</i>): 3			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							
Installation Information							
Method of Implementation (Organic): No Quantities Associated with Install					Installation Quantity: 0		
Footnotes: ⁽¹⁶⁾ ISEA Labs Material ⁽¹⁷⁾ VA Payload Tube Lab/Facility							

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Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0942 / Virginia Class Support Equipment					Modification Number / Title: 3 / HRC13 - Hotel Services			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	181.673	15.260	32.360	9.100	-	9.100	29.600	-	-	-	-	267.993
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	181.673	15.260	32.360	9.100	-	9.100	29.600	-	-	-	-	267.993
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	181.673	15.260	32.360	9.100	-	9.100	29.600	-	-	-	-	267.993
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: Provide procurement of materials necessary to modernize VIRGINIA Class Submarine Blocks I & II (774-783) infrastructure (i.e. power, cabling, cooling, and arrangements of the ship for the entire Government Furnished Equipment (GFE)/ Contractor Furnished Equipment (CFE) NPES configuration). This combination of Hull, Mechanical and Electrical (HM&E) alterations to VIRGINIA Class submarines is collectively referred to as the "Hotel Services" modification. This Hotel Service modification is necessary to accommodate modernization to major combat system alterations (i.e. A-RCI, AN/BYG-1, and ISIS) and are completed concurrently with those major combat system alterations. TI-02 baseline systems Hotel Services modernizations are completed during Post Shakedown Availability (PSA) for SSN777 and SSN779-783 and during EDSRA or TYCOM Operational Availability (TOA) for SSN774-SSN776 and SSN778. Block III and follow ships do not require this significant HM&E infrastructure upgrade as the baseline design for those ships accounts for the necessary power, cabling, cooling, etc. required to host upgrades to major combat systems. Note: Actual costs associated with the HSWG installation on SSN 775 during EDSRA (FY12-13) have necessitated the Department to increase planned installation budget on current and future installations (Budgeted: FY15-776, FY17-778 and Planned FY18: 774).												

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015						
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0942 / Virginia Class Support Equipment				Modification Number / Title: 3 / HRC13 - Hotel Services						
Models of Systems Affected: VA Class Submarines				Modification Type: Various					Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total		
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)		
Procurement														
Modification Item 1 of 1: HRC13 - Hotel Services														
A Kits														
Non-Recurring														
1.1.1) Design - Organic	- / 31.473	- / 2.760	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 34.233		
1.1.2) TI-02 Baseline Upgrade - NonOrganic	8 / 70.200	- / -	- / -	1 / 9.100	- / -	1 / 9.100	- / -	- / -	- / -	- / -	- / -	9 / 79.300		
Subtotal: Non-Recurring	- / 101.673	- / 2.760	- / -	- / 9.100	- / -	- / 9.100	- / -	- / -	- / -	- / -	- / -	- / 113.533		
Subtotal: HRC13 - Hotel Services	8 / 101.673	- / 2.760	- / -	1 / 9.100	- / -	1 / 9.100	- / -	- / -	- / -	- / -	- / -	9 / 113.533		
Subtotal: Procurement, All Modification Items	- / 101.673	- / 2.760	- / -	- / 9.100	- / -	- / 9.100	- / -	- / -	- / -	- / -	- / -	- / 113.533		
Installation														
Modification Item 1 of 1: HRC13 - Hotel Services	- / 80.000	- / 12.500	- / 32.360	- / -	- / -	- / -	- / 29.600	- / -	- / -	- / -	- / -	- / 154.460		
Subtotal: Installation	- / 80.000	- / 12.500	- / 32.360	- / -	- / -	- / -	- / 29.600	- / -	- / -	- / -	- / -	- / 154.460		
Total														
Total Cost (Procurement + Support + Installation)	181.673	15.260	32.360	9.100	-	9.100	29.600	-	-	-	-	267.993		

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015																					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9										P-1 Line Item Number / Title: 0942 / Virginia Class Support Equipment										Modification Number / Title: 3 / HRC13 - Hotel Services											
Modification Item 1 of 1: HRC13 - Hotel Services																															
Manufacturer Information																															
Manufacturer Name: Electric Boat-VA Platform Mod ⁽¹⁸⁾															Manufacturer Location: Groton, CT																
Administrative Leadtime (in Months): 0															Production Leadtime (in Months): 9																
Dates		FY 2014			FY 2015			FY 2016			FY 2017			FY 2018			FY 2019			FY 2020											
Contract Dates					Oct 2014			Oct 2015																							
Delivery Dates					Jul 2015			Jul 2016																							
Manufacturer Name: Electric Boat-Design Organic ⁽¹⁹⁾															Manufacturer Location: Groton, CT																
Administrative Leadtime (in Months): 0															Production Leadtime (in Months): 3																
Dates		FY 2014			FY 2015			FY 2016			FY 2017			FY 2018			FY 2019			FY 2020											
Contract Dates		Mar 2014									Mar 2017																				
Delivery Dates		Jun 2014									Jun 2017																				
Installation Information																															
Method of Implementation: AIT:: Installation Name: TI-02 Baseline Upgrade																															
Installation Cost		Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total																		
		Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)																		
Prior Years		6 / 80.000	1 / 12.500	1 / 32.360	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	8 / 124.860																		
FY 2014		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2015		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2016		- / -	- / -	- / -	- / -	- / -	- / -	1 / 29.600	- / -	- / -	- / -	- / -	1 / 29.600																		
FY 2017		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2018		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2019		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2020		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
To Complete		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
Total		6 / 80.000	1 / 12.500	1 / 32.360	- / -	- / -	- / -	1 / 29.600	- / -	- / -	- / -	- / -	9 / 154.460																		
Installation Schedule																															
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	6	1	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9
Out	6	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	9

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0942 / Virginia Class Support Equipment	Modification Number / Title: 3 / HRC13 - Hotel Services
Footnotes: (18) VA Platform Modernization TI-02 Baseline Upgrade (19) VA Platform Modernization - Design Organic		

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0942 / Virginia Class Support Equipment				Modification Number / Title: 4 / HRC13 - Infrastructure Upgrades			

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	1.307	7.666	4.792	9.862	-	9.862	6.444	13.678	12.989	13.276	-	70.014
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	1.307	7.666	4.792	9.862	-	9.862	6.444	13.678	12.989	13.276	-	70.014
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	1.307	7.666	4.792	9.862	-	9.862	6.444	13.678	12.989	13.276	-	70.014
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Provide procurement of materials necessary to modernize VIRGINIA Class unique Contractor Furnished Equipment (CFE) to sustain interfaces and technology baseline with the connecting Government Furnished sub-systems contained in the Non-Propulsion Electronics System suite. These sub-systems include; Portable Ship Control System (PSCS), Total Ship Monitoring System, Circuit D, Ship Control System, Light Weight Wide Aperture Array and Interior Communication System.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015						
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0942 / Virginia Class Support Equipment				Modification Number / Title: 4 / HRC13 - Infrastructure Upgrades						
Models of Systems Affected: VA Class Submarines			Modification Type: Various						Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total		
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)		
Procurement														
Modification Item 1 of 1: HRC13 - Infrastructure Upgrades														
A Kits														
Recurring														
1.1.1) Design - Organic	- / 1.307	- / 1.656	- / 1.349	- / -	- / -	- / -	- / -	- / 1.477	- / 1.505	- / 1.533	- / -	- / 8.827		
Subtotal: Recurring	- / 1.307	- / 1.656	- / 1.349	- / -	- / -	- / -	- / -	- / 1.477	- / 1.505	- / 1.533	- / -	- / 8.827		
Non-Recurring														
1.2.1) Infrastructure Updates (from TI-08 and beyond baseline) - NonOrganic	- / -	1 / 6.010	- / -	1 / 6.354	- / -	1 / 6.354	1 / 6.444	1 / 6.573	1 / 6.698	1 / 6.825	- / -	6 / 38.904		
1.2.2) Infrastructure Updates NRE (Block IV) - Organic	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.985	- / 1.074	- / 1.135	- / -	- / 4.194		
Subtotal: Non-Recurring	- / 0.000	- / 6.010	- / -	- / 6.354	- / -	- / 6.354	- / 6.444	- / 8.558	- / 7.772	- / 7.960	- / -	- / 43.098		
Subtotal: HRC13 - Infrastructure Upgrades	- / 1.307	1 / 7.666	- / 1.349	1 / 6.354	- / -	1 / 6.354	1 / 6.444	1 / 10.035	1 / 9.277	1 / 9.493	- / -	6 / 51.925		
Subtotal: Procurement, All Modification Items	- / 1.307	- / 7.666	- / 1.349	- / 6.354	- / -	- / 6.354	- / 6.444	- / 10.035	- / 9.277	- / 9.493	- / -	- / 51.925		
Installation														
Modification Item 1 of 1: HRC13 - Infrastructure Upgrades	- / 0.000	- / -	- / 3.443	- / 3.508	- / -	- / 3.508	- / -	- / 3.643	- / 3.712	- / 3.783	- / -	- / 18.089		
Subtotal: Installation	- / 0.000	- / -	- / 3.443	- / 3.508	- / -	- / 3.508	- / -	- / 3.643	- / 3.712	- / 3.783	- / -	- / 18.089		
Total														
Total Cost (Procurement + Support + Installation)	1.307	7.666	4.792	9.862	-	9.862	6.444	13.678	12.989	13.276	-	70.014		

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015																					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9										P-1 Line Item Number / Title: 0942 / Virginia Class Support Equipment										Modification Number / Title: 4 / HRC13 - Infrastructure Upgrades											
Modification Item 1 of 1: HRC13 - Infrastructure Upgrades																															
Manufacturer Information																															
Manufacturer Name: Electric Boat-Infrastructure Upgrades ⁽²⁰⁾													Manufacturer Location: Groton, CT																		
Administrative Leadtime (in Months): 0													Production Leadtime (in Months): 10																		
Dates		FY 2014			FY 2015			FY 2016			FY 2017			FY 2018			FY 2019			FY 2020											
Contract Dates		Jan 2014			Oct 2014						Oct 2016																				
Delivery Dates		Oct 2014			Aug 2015						Aug 2017																				
Manufacturer Name: Electric Boat-Infrastrucutre Upgrades Design ⁽²¹⁾													Manufacturer Location: Groton, CT																		
Administrative Leadtime (in Months): 0													Production Leadtime (in Months): 3																		
Dates		FY 2014			FY 2015			FY 2016			FY 2017			FY 2018			FY 2019			FY 2020											
Contract Dates		Jan 2014			Jan 2015			Jan 2016			Jan 2017																				
Delivery Dates		Mar 2014			Mar 2015			Mar 2016			Mar 2017																				
Installation Information																															
Method of Implementation: AIT:: Installation Name: Infrastructure Updates (from TI-08 and beyond baseline)																															
Installation Cost		Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total																		
		Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)																		
Prior Years		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2014		- / -	- / -	1 / 3.443	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 3.443																		
FY 2015		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2016		- / -	- / -	- / -	1 / 3.508	- / -	1 / 3.508	- / -	- / -	- / -	- / -	- / -	1 / 3.508																		
FY 2017		- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 3.643	- / -	- / -	- / -	1 / 3.643																		
FY 2018		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 3.712	- / -	- / -	1 / 3.712																		
FY 2019		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 3.783	- / -	1 / 3.783																		
FY 2020		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
To Complete		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
Total		- / -	- / -	1 / 3.443	1 / 3.508	- / -	1 / 3.508	- / -	1 / 3.643	1 / 3.712	1 / 3.783	- / -	5 / 18.089																		
Installation Schedule																															
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4						
In	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	-	5
Out	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	1	-	-	-	1	-	-	5

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0942 / Virginia Class Support Equipment	Modification Number / Title: 4 / HRC13 - Infrastructure Upgrades

Footnotes:

(20) Infrastructure Upgrades from TI-08 and beyond baseline

(21) Infrastructure Upgrades Design

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Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0942 / Virginia Class Support Equipment					Modification Number / Title: 5 / HRC13 - Non-Tactical Data Processing System				
Resource Summary		Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)		-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)		15.406	5.313	5.402	2.600	-	2.600	2.658	5.699	5.807	5.917	-	48.802
Less PY Advance Procurement (\$ in Millions)		-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)		15.406	5.313	5.402	2.600	-	2.600	2.658	5.699	5.807	5.917	-	48.802
Plus CY Advance Procurement (\$ in Millions)		-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)		15.406	5.313	5.402	2.600	-	2.600	2.658	5.699	5.807	5.917	-	48.802
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)													
Initial Spares (\$ in Millions)		-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)		-	-	-	-	-	-	-	-	-	-	-	-
Description: Provide software and hardware updates, software licenses and technical and logistics support to the Non-Tactical Data Processing System (NTDPS).													

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LI 0942 - Virginia Class Support Equipment
Navy

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Exhibit P-3a, Individual Modification: PB 2016 Navy					Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9			P-1 Line Item Number / Title: 0942 / Virginia Class Support Equipment			Modification Number / Title: 5 / HRC13 - Non-Tactical Data Processing System	
Modification Item 1 of 1: HRC13 - Non-Tactical Data Processing System							
Manufacturer Information							
Manufacturer Name: Progeny Systems				Manufacturer Location: Manassas, VA			
Administrative Leadtime (<i>in Months</i>): 0				Production Leadtime (<i>in Months</i>): 10			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Mar 2014	Mar 2015	Mar 2016	Mar 2017			
Delivery Dates	Dec 2014	Dec 2015	Dec 2016	Dec 2017			
Manufacturer Name: Progeny Systems				Manufacturer Location: Manassas , VA			
Administrative Leadtime (<i>in Months</i>): 0				Production Leadtime (<i>in Months</i>): 3			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							
Installation Information							
Method of Implementation (Organic): No Quantities Associated with Install					Installation Quantity: 0		

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0942 / Virginia Class Support Equipment	Modification Number / Title: 6 / HRC13 - SHIPALT SA4612K

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	18.924	-	-	-	-	-	-	-	-	-	-	18.924
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	18.924	-	-	-	-	-	-	-	-	-	-	18.924
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	18.924	-	-	-	-	-	-	-	-	-	-	18.924
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

HM&E and CFE NPES Modernization develops alteration design documentation, alteration material procurement and kitting, alteration planning and execution for various in-service VA Class submarines. It does not include Hotel Services Working Group (HSWG) and Participating Acquisition Resource Manager (PARM) sponsored alterations. Alteration SA4612K removes the damping tile restraining layer from all Main Ballast Tanks (MBTs) and external free flood areas to prevent blockage of the MBT grates.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015						
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0942 / Virginia Class Support Equipment				Modification Number / Title: 6 / HRC13 - SHIPALT SA4612K						
Models of Systems Affected: VA Class Submarine			Modification Type: K Alt						Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total		
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)		
Procurement														
Modification Item 1 of 1: HRC13 - SHIPALT SA4612K														
B Kits														
Non-Recurring														
1.1.1) SHIPALT SA4612K - NonOrganic	2 / 0.133	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.133		
Subtotal: Non-Recurring	- / 0.133	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.133		
Subtotal: HRC13 - SHIPALT SA4612K	2 / 0.133	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.133		
Subtotal: Procurement, All Modification Items	- / 0.133	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.133		
Installation														
Modification Item 1 of 1: HRC13 - SHIPALT SA4612K	- / 18.791	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 18.791		
Subtotal: Installation	- / 18.791	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 18.791		
Total														
Total Cost (Procurement + Support + Installation)	18.924	-	-	-	-	-	-	-	-	-	-	18.924		

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015																					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9										P-1 Line Item Number / Title: 0942 / Virginia Class Support Equipment										Modification Number / Title: 6 / HRC13 - SHIPALT SA4612K											
Modification Item 1 of 1: HRC13 - SHIPALT SA4612K																															
Manufacturer Information																															
Manufacturer Name: TBD															Manufacturer Location: TBD																
Administrative Leadtime (in Months): 0															Production Leadtime (in Months): 0																
Dates		FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020					
Contract Dates																															
Delivery Dates																															
Installation Information																															
Method of Implementation: AIT:: Installation Name: SHIPALT SA4612K																															
Installation Cost		Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total																		
		<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>																	
Prior Years		2 / 18.791	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 18.791																		
FY 2014		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2015		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2016		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2017		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2018		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2019		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2020		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
To Complete		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
Total		2 / 18.791	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 18.791																		
Installation Schedule																															
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Out	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0942 / Virginia Class Support Equipment	Modification Number / Title: 7 / HRC13 - Ship Control System (SCS) Modernization Backfit

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	7.755	6.900	8.533	8.695	-	8.695	8.860	3.746	1.222	1.245	-	46.956
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	7.755	6.900	8.533	8.695	-	8.695	8.860	3.746	1.222	1.245	-	46.956
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	7.755	6.900	8.533	8.695	-	8.695	8.860	3.746	1.222	1.245	-	46.956
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Procure and install obsolescence redesign for Ship Control System (SCS) on Block I and II. The material procurement in FY14-17 includes long lead items for four shipsets for backfit (SSN776-SSN779).

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9					P-1 Line Item Number / Title: 0942 / Virginia Class Support Equipment					Modification Number / Title: 7 / HRC13 - Ship Control System (SCS) Modernization Backfit			
Models of Systems Affected: VA Class Submarines					Modification Type: Various					Related RDT&E PEs:			
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>
Procurement													
<i>Modification Item 1 of 1: HRC13 - Ship Control System (SCS) Modernization Backfit</i>													
A Kits													
Non-Recurring													
1.1.1) Modification Non-Recurring - Organic	- / 3.300	- / 2.000	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.222	- / 1.245	- / -	- / 7.767	
<i>Subtotal: Non-Recurring</i>	- / 3.300	- / 2.000	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.222	- / 1.245	- / -	- / 7.767	
B Kits													
Non-Recurring													
2.1.1) Material and Install - NonOrganic	1 / 3.700	1 / 4.900	1 / 4.993	1 / 5.088	- / -	1 / 5.088	1 / 5.185	- / -	- / -	- / -	- / -	5 / 23.866	
<i>Subtotal: Non-Recurring</i>	- / 3.700	- / 4.900	- / 4.993	- / 5.088	- / -	- / 5.088	- / 5.185	- / -	- / -	- / -	- / -	- / 23.866	
<i>Subtotal: HRC13 - Ship Control System (SCS) Modernization Backfit</i>	1 / 7.000	1 / 6.900	1 / 4.993	1 / 5.088	- / -	1 / 5.088	1 / 5.185	- / -	- / 1.222	- / 1.245	- / -	5 / 31.633	
<i>Subtotal: Procurement, All Modification Items</i>	- / 7.000	- / 6.900	- / 4.993	- / 5.088	- / -	- / 5.088	- / 5.185	- / -	- / 1.222	- / 1.245	- / -	- / 31.633	
Installation													
<i>Modification Item 1 of 1: HRC13 - Ship Control System (SCS) Modernization Backfit</i>													
	- / 0.755	- / -	- / 3.540	- / 3.607	- / -	- / 3.607	- / 3.675	- / 3.746	- / -	- / -	- / -	- / 15.323	
<i>Subtotal: Installation</i>	- / 0.755	- / -	- / 3.540	- / 3.607	- / -	- / 3.607	- / 3.675	- / 3.746	- / -	- / -	- / -	- / 15.323	
Total													
Total Cost (Procurement + Support + Installation)	7.755	6.900	8.533	8.695	-	8.695	8.860	3.746	1.222	1.245	-	46.956	

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0942 / Virginia Class Support Equipment				Modification Number / Title: 7 / HRC13 - Ship Control System (SCS) Modernization Backfit				
Modification Item 1 of 1: HRC13 - Ship Control System (SCS) Modernization Backfit												
Manufacturer Information												
Manufacturer Name: Electric Boat-Procurement ⁽²²⁾						Manufacturer Location: Groton, CT						
Administrative Leadtime <i>(in Months)</i> : 0						Production Leadtime <i>(in Months)</i> : 13						
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020					
Contract Dates	Nov 2013	Nov 2014	Nov 2015	Nov 2016								
Delivery Dates	Dec 2014	Dec 2015	Dec 2016	Dec 2017								
Manufacturer Name: Electric Boat-Install ⁽²³⁾						Manufacturer Location: Groton, CT						
Administrative Leadtime <i>(in Months)</i> : 0						Production Leadtime <i>(in Months)</i> : 3						
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020					
Contract Dates						Jan 2019						
Delivery Dates						Apr 2019						
Installation Information												
Method of Implementation: AIT:: Installation Name: Material and Install												
Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>
Prior Years	0 / 0.755	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.755
FY 2014	- / -	- / -	1 / 3.540	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 3.540
FY 2015	- / -	- / -	- / -	1 / 3.607	- / -	1 / 3.607	- / -	- / -	- / -	- / -	- / -	1 / 3.607
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	1 / 3.675	- / -	- / -	- / -	- / -	1 / 3.675
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 3.746	- / -	- / -	- / -	1 / 3.746
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	0 / 0.755	- / -	1 / 3.540	1 / 3.607	- / -	1 / 3.607	1 / 3.675	1 / 3.746	- / -	- / -	- / -	4 / 15.323

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015									
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9					P-1 Line Item Number / Title: 0942 / Virginia Class Support Equipment					Modification Number / Title: 7 / HRC13 - Ship Control System (SCS) Modernization Backfit									

Modification Item 1 of 1: HRC13 - Ship Control System (SCS) Modernization Backfit

Installation Information

Method of Implementation: AIT:: Installation Name: Material and Install

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	4
Out	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	4

Footnotes:
(22) SCS Backfit Procurement
(23) SCS Backfit Install

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment							P-1 Line Item Number / Title: 0944 / LCS Class Support Equipment					
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:					Other Related Program Elements:				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	8.566	47.078	25.742	48.399	-	48.399	90.113	84.384	89.685	85.860	-	479.827
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	8.566	47.078	25.742	48.399	-	48.399	90.113	84.384	89.685	85.860	-	479.827
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	8.566	47.078	25.742	48.399	-	48.399	90.113	84.384	89.685	85.860	-	479.827
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	1.683	2.250	2.693	-	2.693	2.232	2.101	2.067	-	-	13.026
Flyaway Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: The FY 2016 funding request was reduced by \$24.634 million to account for the availability of prior year execution balances. This budget provides for the procurement of long-lead major end items required for Littoral Combat Ship (LCS) repairs for both variants of ships, while production lines are still active. The Spares procurement mitigates major long-lead replacement times due to unplanned system failures and increases operability of vital Fleet assets.												

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy							Date: February 2015	
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment					P-1 Line Item Number / Title: 0944 / LCS Class Support Equipment			
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:			Other Related Program Elements:		
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
LCS Class Support Equipment	P-40a, P-5a, P-21		- / 8.566	- / 47.078	- / 25.742	- / 48.399	- / -	- / 48.399
Total Gross/Weapon System Cost			- / 8.566	- / 47.078	- / 25.742	- / 48.399	- / -	- / 48.399
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.								
Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.								
Justification: ----- LN001 - LCS Battle Spares This line procures battle spares to ensure their availability in the event of a catastrophe, failure, or major casualty to key systems. Systems exacting shore based spares include gas turbines, diesel engines and generators, propulsion waterjets and waterjet tunnels, reduction gears, auxiliary power unit (APU), and machinery plant control & monitoring system (MPCMS). Spares are determined using the LCS Reliability, Maintainability, Availability (RMA) Plan, NAVSEA RMA guidance, critical application of equipment, and vendor data. LN002 - LCS Water Jet Spares The LCS class ships are propelled by waterjets (WJ). These items are removable and then sent to a depot to be repaired. This line procures WJ units including the Impeller, the major WJ component. These items will be designated 2S cog material and support a rotatable pool for life cycle sustainment. There are two LCS hull designs, Freedom Variant and Independence Variant, both composed of four (4) WJs. The Freedom Variant uses Rolls-Royce WJs and the Independence Variant uses Wartsila Lips WJs. Note: the waterjet assemblies are mounted externally on the ships transom. LN003 - Engineering Services Provides engineering and technical support for LCS Class Support Equipment. Develop Technical Data Package (TDPs) and associated depot level repair parts lists/installation requirements. LN004 - Habitability Modification Beginning in FY16 - Install Habitability Modifications increasing the permanent berths to 98 on the Freedom and Independence Variants and will be implemented during PSA for LCS 5-20. The change addresses the following: Living Spaces: Berthing, Refrigeration, Provision Stores, Endurance; Laundry / Potable Water, Generation, and Storage; Solid waste processing of plastics using USN standard shredder and compressed melter unit (CMU); HVAC Duct and Venting Adjustments / Weights / Speed and Endurance / Electrical, ship service; Life Saving and Safety: Life Boats/Rafts. LN005 - LCS Ships Class Safety Design Changes Beginning in FY16 - Ship Modifications to support back-fit of Stern Ramp modifications to the Freedom Class and installation of Bridge Wings on the Independence Class. LN006 - LCS Ships Class Ancillary Equipment Beginning in FY17 - Connective equipment and parts necessary to ensure fit and function of (procured) Class Support Equipment when installed.								

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9							P-1 Line Item Number / Title: 0944 / LCS Class Support Equipment								Aggregated Items Title: LCS Class Support Equipment					
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.																				
Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) LN001 LCS Battle Spares																				
1.1) MAIN PROPULSION DIESEL ENGINE (INDEPENDENCE VARIANT) ^(†)	A		-	-	-	5,200K	1	5.200	-	-	-	-	-	-	-	-	-	-	-	-
1.2) MT-30 GAS TURBINE ENGINE (FREEDOM VARIANT) ^(†)	A		5,000K	1	5.000	-	-	-	-	-	-	4,114K	1	4.114	-	-	-	4,114K	1	4.114
1.3) SHIPS SERVICE DIESEL GENERATOR (INDEPENDENCE VARIANT) ^(†)	A		-	-	-	1,000K	2	2.000	-	-	-	1,200K	1	1.200	-	-	-	1,200K	1	1.200
1.4) LAUNCH, RECOVERY, AND HANDLING SYSTEM (FREEDOM VARIANT) ^(†)	A		-	-	-	3,400K	1	3.400	-	-	-	-	-	-	-	-	-	-	-	-
1.5) INTEGRATED BRIDGE SYSTEM ^(†)	A		-	-	-	900,000.00	1	0.900	924,500.00	2	1.849	-	-	-	-	-	-	-	-	-
1.6) MAIN PROPULSION HM&E EQUIPMENT	A		-	-	-	-	-	-	-	-	3.000	-	-	-	-	-	-	-	-	-
1.7) MT-30 GAS TURBINE ENGINE ANCILLARY EQUIPMENT (FREEDOM VARIANT) ^(†)	A		-	-	-	3,800K	1	3.800	-	-	-	-	-	-	-	-	-	-	-	-
1.8) MAIN PROP. CONTRL & MONITORING SYS (MPCMS)/ ENGINEERING CONTRL SYS (ECS) ^(†)	A		-	-	-	-	-	-	-	-	-	750,000.00	1	0.750	-	-	-	750,000.00	1	0.750
1.9) TWIN-BOOM EXPANDABLE CRANE (INDEPENDENCE VARIANT) ^(†)	A		-	-	-	-	-	-	3,700K	1	3.700	-	-	-	-	-	-	-	-	-
1.10) TRS-3D RADAR (FREEDOM VARIANT) ^(†)	A		-	-	-	-	-	-	1,300K	1	1.300	1,400K	1	1.400	-	-	-	1,400K	1	1.400

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9								P-1 Line Item Number / Title: 0944 / LCS Class Support Equipment							Aggregated Items Title: LCS Class Support Equipment				

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1.11) SEA GIRAFFE 3D RADAR (INDEPENDENCE VARIANT) ^(†)	A		-	-	-	-	-	-	1,244K	1	1.244	1,400K	1	1.400	-	-	-	1,400K	1	1.400
1.12) MULT. AIRCRAFT NOSE & TAILGEAR INTEGRATED SYS (INDEPENDENCE VAR) ^(†)	A		-	-	-	-	-	-	-	-	-	975,000.00	1	0.975	-	-	-	975,000.00	1	0.975
1.13) REDUCTION GEAR (FREEDOM VARIANT) ^(†)	A		-	-	-	12,350K	1	12.350	-	-	-	-	-	-	-	-	-	-	-	-
1.14) REDUCTION GEAR (INDEPENDENCE VARIANT) ^(†)	A		-	-	-	-	-	-	6,449K	1	6.449	-	-	-	-	-	-	-	-	-
1.16) AUXILIARY POWER UNIT ^(†)	A		-	-	-	1,500K	1	1.500	-	-	-	1,696K	1	1.696	-	-	-	1,696K	1	1.696
1.17) MAIN PROPULSION DIESEL ENGINE (FREEDOM VARIANT) ^(†)	A		-	-	-	5,299K	1	5.299	5,299K	1	5.299	-	-	-	-	-	-	-	-	-
1.18) WATERJET TUNNELS ^(†)	A		-	-	-	1,000K	1	1.000	1,000K	1	1.000	1,025K	1	1.025	-	-	-	1,025K	1	1.025
1.19) SHIPS SERVICE DIESEL GENERATOR (FREEDOM VARIANT) ^(†)	A		-	-	-	1,700K	1	1.700	1,700K	1	1.700	1,825K	1	1.825	-	-	-	1,825K	1	1.825
<i>Subtotal: 1) LN001 LCS Battle Spares</i>			-	-	5.000	-	-	37.149	-	-	25.541	-	-	14.385	-	-	-	-	-	14.385
2) LN002 LCS Water jet Spares																				
2.1) WATERJET ASSEMBLY (FREEDOM VARIANT) ^(†)	A		1,700K	1	1.700	2,311K	3	6.933	-	-	-	-	-	-	-	-	-	-	-	-
2.2) WATERJET IMPELLER (INDEPENDENCE VARIANT) ^(†)	A		622,000.00	3	1.866	749,000.00	4	2.996	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: 2) LN002 LCS Water jet Spares</i>			-	-	3.566	-	-	9.929	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9									P-1 Line Item Number / Title: 0944 / LCS Class Support Equipment						Aggregated Items Title: LCS Class Support Equipment				

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
3) LN003 Engineering Services (TDPs & installation planning)																				
3.1) Engineering Services (TDPs & installation planning)	A		-	-	-	-	-	-	-	-	0.201	-	-	0.204	-	-	-	-	-	0.204
3.2) Modernization Design/Eng Changes for LCS 4	A		-	-	-	-	-	-	-	-	-	-	-	3.600	-	-	-	-	-	3.600
3.3) AFSB SOF Mods MLP-AFSB 3 Rev	A		-	-	-	-	-	-	-	-	-	-	-	5.710	-	-	-	-	-	5.710
Subtotal: 3) LN003 Engineering Services (TDPs & installation planning)			-	-	0.000	-	-	-	-	-	0.201	-	-	9.514	-	-	-	-	-	9.514
4) LN004 Habitability Modification																				
4.1) HABITABILITY MOD (FRE VARIANT) ^(†)	A		-	-	-	-	-	-	-	-	-	4,525K	2	9.050	-	-	-	4,525K	2	9.050
4.2) HABITABILITY MOD (IND VARIANT) ^(†)	A		-	-	-	-	-	-	-	-	-	4,525K	2	9.050	-	-	-	4,525K	2	9.050
Subtotal: 4) LN004 Habitability Modification			-	-	0.000	-	-	-	-	-	-	-	-	18.100	-	-	-	-	-	18.100
5) LN005 LCS Ship Class Safety Design Changes																				
5.1) Stern Ramp (FRE Variant) ^(†)	A		-	-	-	-	-	-	-	-	-	600,000.00	2	1.200	-	-	-	600,000.00	2	1.200
5.2) Bridge Wings (IND Variant) ^(†)	A		-	-	-	-	-	-	-	-	-	2,600K	2	5.200	-	-	-	2,600K	2	5.200
Subtotal: 5) LN005 LCS Ship Class Safety Design Changes			-	-	0.000	-	-	-	-	-	-	-	-	6.400	-	-	-	-	-	6.400
Total			-	-	8.566	-	-	47.078	-	-	25.742	-	-	48.399	-	-	-	-	-	48.399

(†) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9			P-1 Line Item Number / Title: 0944 / LCS Class Support Equipment					Aggregated Items: LCS Class Support Equipment				
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1) LN001 LCS Battle Spares												
1.1) MAIN PROPULSION DIESEL ENGINE (INDEPENDENCE VARIANT) ^(†)		2014	MTU / GERMANY	C / FFP	NAVSUP/WSS	Mar 2015	Mar 2016	1	5,200K	Y		Nov 2013
1.2) MT-30 GAS TURBINE ENGINE (FREEDOM VARIANT) ^(†)		2013	ROLLS ROYCE / WALEPOLE, MA	C / FFP	NAVSUP/WSS	May 2014	May 2016	1	5,000K	Y		Feb 2014
1.2) MT-30 GAS TURBINE ENGINE (FREEDOM VARIANT) ^(†)		2016	ROLLS ROYCE / WALEPOLE, MA	C / FFP	NAVSUP/WSS	May 2016	May 2018	1	4,114K	Y		Nov 2015
1.3) SHIPS SERVICE DIESEL GENERATOR (INDEPENDENCE VARIANT) ^(†)		2014	MTU / GERMANY	C / FFP	NAVSUP/WSS	Mar 2015	Mar 2016	2	1,000K	Y		Nov 2013
1.3) SHIPS SERVICE DIESEL GENERATOR (INDEPENDENCE VARIANT) ^(†)		2016	MTU / GERMANY	C / FFP	NAVSUP/WSS	May 2016	May 2017	1	1,200K	Y		Nov 2015
1.4) LAUNCH, RECOVERY, AND HANDLING SYSTEM (FREEDOM VARIANT) ^(†)		2014	Lockheed Martin / MD	C / FFP	NAVSUP/WSS	Apr 2015	Apr 2016	1	3,400K	Y		Nov 2013
1.5) INTEGRATED BRIDGE SYSTEM ^(†)		2014	SPERRY / Charlottesville, VA	C / FFP	NAVSUP/WSS	Apr 2015	Apr 2016	1	900,000.00	Y		Nov 2013
1.5) INTEGRATED BRIDGE SYSTEM ^(†)		2015	SPERRY / Charlottesville, VA	C / FFP	NAVSUP/WSS	Apr 2015	Apr 2016	2	924,500.00	Y		Nov 2014
1.7) MT-30 GAS TURBINE ENGINE ANCILLARY EQUIPMENT (FREEDOM VARIANT) ^(†)		2014	ROLLS ROYCE / WALEPOLE, MA	C / FFP	NAVSEA	May 2015	May 2017	1	3,800K	Y		Nov 2013
1.8) MAIN PROP. CONTRL & MONITORING SYS (MPCMS)/ ENGINEERING CONTRL SYS (ECS)		2016	TBD / TBD	C / CPFF	NAVSUP/WSS	Sep 2016	Mar 2018	1	750,000.00	Y		Nov 2015
1.9) TWIN-BOOM EXPANDABLE CRANE (INDEPENDENCE VARIANT)		2015	Maritime Applied Physics Corporation / Baltimore, MD	C / FFP	NAVSUP/WSS	Jul 2015	Jan 2017	1	3,700K	Y		Nov 2014
1.10) TRS-3D RADAR (FREEDOM VARIANT)		2015	EADS North America / Herdon, VA	C / FFP	NAVSEA	May 2015	Nov 2016	1	1,300K	Y		Nov 2014
1.10) TRS-3D RADAR (FREEDOM VARIANT)		2016	EADS North America / Herdon, VA	C / FFP	NAVSEA	Jan 2016	Jul 2017	1	1,400K	Y		May 2015
1.11) SEA GIRAFFE 3D RADAR (INDEPENDENCE VARIANT)		2015	Saab Sensis Corporation / Reston, VA	C / FFP	NAVSEA	May 2015	Nov 2016	1	1,244K	Y		Nov 2014
1.11) SEA GIRAFFE 3D RADAR (INDEPENDENCE VARIANT)		2016	Saab Sensis Corporation / Reston, VA	C / FFP	NAVSEA	Jan 2016	Jul 2017	1	1,400K	Y		May 2015

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Exhibit P-5a, Procurement History and Planning: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9			P-1 Line Item Number / Title: 0944 / LCS Class Support Equipment					Aggregated Items: LCS Class Support Equipment				
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.12) MULT. AIRCRAFT NOSE & TAILGEAR INTEGRATED SYS (INDEPENDENCE VAR)		2016	TBD / TBD	C / TBD	NAVSUP/WSS	Sep 2016	Mar 2018	1	975,000.00	Y		Nov 2015
1.13) REDUCTION GEAR (FREEDOM VARIANT) ^(†)		2014	Lockheed Martin / MD	C / FFP	NAVSEA	Mar 2015	Mar 2016	1	12,350K	Y		Nov 2013
1.14) REDUCTION GEAR (INDEPENDENCE VARIANT) ^(†)		2015	RENK Corporation / Duncan, SC	C / FFP	NAVSUP/WSS	May 2015	Feb 2017	1	6,449K	Y		Nov 2014
1.16) AUXILLARY POWER UNIT		2014	Lockheed Martin / MD	C / FFP	NAVSEA	Sep 2014	Mar 2016	1	1,500K	Y		Nov 2013
1.16) AUXILLARY POWER UNIT		2016	Lockheed Martin / MD	C / FFP	NAVSEA	Jan 2016	Jul 2017	1	1,696K	Y		Jun 2015
1.17) MAIN PROPULSION DIESEL ENGINE (FREEDOM VARIANT) ^(†)		2014	Lockheed Martin / MD	C / FFP	NAVSEA	Nov 2014	May 2016	1	5,299K	Y		Nov 2013
1.17) MAIN PROPULSION DIESEL ENGINE (FREEDOM VARIANT)		2015	Lockheed Martin / MD	C / FFP	NAVSEA	May 2015	Nov 2016	1	5,299K	Y		Nov 2014
1.18) WATERJET TUNNELS ^(†)		2014	ROLLS ROYCE / WALEPOLE, MA	C / FFP	NAVSEA	May 2015	May 2016	1	1,000K	Y		Nov 2013
1.18) WATERJET TUNNELS		2015	ROLLS ROYCE / WALEPOLE, MA	C / FFP	NAVSEA	May 2015	May 2016	1	1,000K	Y		Nov 2014
1.18) WATERJET TUNNELS		2016	ROLLS ROYCE / WALEPOLE, MA	C / FFP	NAVSEA	May 2016	May 2017	1	1,025K	Y		Nov 2015
1.19) SHIPS SERVICE DIESEL GENERATOR (FREEDOM VARIANT) ^(†)		2014	Fincantieri / Washington, DC	C / FFP	NAVSEA	Apr 2015	Apr 2016	1	1,700K	Y		Nov 2013
1.19) SHIPS SERVICE DIESEL GENERATOR (FREEDOM VARIANT) ^(†)		2015	Fincantieri / Washington, DC	C / FFP	NAVSEA	Apr 2015	Apr 2016	1	1,700K	Y		Nov 2014
1.19) SHIPS SERVICE DIESEL GENERATOR (FREEDOM VARIANT) ^(†)		2016	Fincantieri / Washington, DC	C / FFP	NAVSEA	May 2016	May 2017	1	1,825K	Y		May 2015
2) LN002 LCS Water jet Spares												
2.1) WATERJET ASSEMBLY (FREEDOM VARIANT) ^(†)		2013	Rolls Royce / MS	C / FFP	NAVSUP/WSS	May 2014	May 2016	1	1,700K	Y		Feb 2014
2.1) WATERJET ASSEMBLY (FREEDOM VARIANT) ^(†)		2014	Rolls Royce / MS	C / FFP	NAVSUP/WSS	Nov 2014	Nov 2016	3	2,311K	Y		Feb 2014
2.2) WATERJET IMPELLER (INDEPENDENCE VARIANT) ^(†)		2013	Wartsilla / VA	C / FFP	NAVSUP/WSS	May 2014	May 2016	3	622,000.00	Y		Feb 2014
2.2) WATERJET IMPELLER (INDEPENDENCE VARIANT) ^(†)		2014	Wartsilla / VA	C / FFP	NAVSUP/WSS	Sep 2014	Sep 2016	4	749,000.00	Y		Feb 2014
4) LN004 Habitability Modification												

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Exhibit P-5a, Procurement History and Planning: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0944 / LCS Class Support Equipment				Aggregated Items: LCS Class Support Equipment				
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
4.1) HABITABILITY MOD (FRE VARIANT) ^(†)		2016	FRE Variant (LM) / Marinette, WI	C / CPAF	NAVSEA	Oct 2015	Jan 2016	2	4,525K	N		Aug 2014
4.2) HABITABILITY MOD (IND VARIANT) ^(†)		2016	IND Variant (Austal) / Mobile, AL	C / CPAF	NAVSEA	Oct 2015	Jan 2016	2	4,525K	N		Aug 2014
5) LN005 LCS Ship Class Safety Design Changes												
5.1) Stern Ramp (FRE Variant)		2016	FRE Variant (LM) / Marinette, WI	C / CPAF	NAVSEA	Oct 2015	Jan 2016	2	600,000.00	N		Aug 2014
5.2) Bridge Wings (IND Variant)		2016	IND Variant (Austal) / Mobile, AL	C / CPAF	NAVSEA	Oct 2015	Jan 2016	2	2,600K	N		Aug 2014

^(†) indicates the presence of a P-21

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Exhibit P-21, Production Schedule: PB 2016 Navy																			Date: February 2015																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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1) LN001 LCS Battle Spares																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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Exhibit P-21, Production Schedule: PB 2016 Navy																			Date: February 2015																	
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9									P-1 Line Item Number / Title: 0944 / LCS Class Support Equipment														Aggregated Items: LCS Class Support Equipment													
Items (Units in Each)							Fiscal Year 2014														Fiscal Year 2015															
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2013	BAL DUE AS OF 1 OCT	Calendar Year 2014														Calendar Year 2015															
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L					
	17	2013	NAVY		3	-	3									A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3				
	17	2014	NAVY		4	-	4										A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4				
4) LN004 Habitability Modification																																				
4.1) HABITABILITY MOD (FRE VARIANT)																																				
	18	2016	NAVY		2	-	2																									2				
4.2) HABITABILITY MOD (IND VARIANT)																																				
	19	2016	NAVY		2	-	2																									2				
								O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L				

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Exhibit P-21, Production Schedule: PB 2016 Navy																Date: February 2015																			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9										P-1 Line Item Number / Title: 0944 / LCS Class Support Equipment										Aggregated Items: LCS Class Support Equipment															
Items (Units in Each)							Fiscal Year 2016										Fiscal Year 2017																		
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEP T PRIOR TO 1 OCT 2015	BAL DUE AS OF 1 OCT	Calendar Year 2016										Calendar Year 2017										B A L								
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y		J U N	J U L	A U G	S E P				
1) LN001 LCS Battle Spares																																			
1.1) MAIN PROPULSION DIESEL ENGINE (INDEPENDENCE VARIANT)																																			
	5	2014	NAVY	1	-	1	-	-	-	-	-	-	1																			-			
1.2) MT-30 GAS TURBINE ENGINE (FREEDOM VARIANT)																																			
	6	2013	NAVY	1	-	1	-	-	-	-	-	-	-	1																			-		
	6	2016	NAVY	1	-	1								A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1			
1.3) SHIPS SERVICE DIESEL GENERATOR (INDEPENDENCE VARIANT)																																			
	7	2014	NAVY	2	-	2	-	-	-	-	-	1	-	-	1																			-	
	7	2016	NAVY	1	-	1								A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1		-			
1.4) LAUNCH, RECOVERY, AND HANDLING SYSTEM (FREEDOM VARIANT)																																			
	8	2014	NAVY	1	-	1	-	-	-	-	-	-	1																			-			
1.5) INTEGRATED BRIDGE SYSTEM																																			
	9	2014	NAVY	1	-	1	-	-	-	-	-	-	1																			-			
	9	2015	NAVY	2	-	2	-	-	-	-	-	-	1	-	-	1																			-
1.7) MT-30 GAS TURBINE ENGINE ANCILLARY EQUIPMENT (FREEDOM VARIANT)																																			
	10	2014	NAVY	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1			-		
1.13) REDUCTION GEAR (FREEDOM VARIANT)																																			
	11	2014	NAVY	1	-	1	-	-	-	-	-	-	1																			-			
1.14) REDUCTION GEAR (INDEPENDENCE VARIANT)																																			
	12	2015	NAVY	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1			-				
1.17) MAIN PROPULSION DIESEL ENGINE (FREEDOM VARIANT)																																			
	13	2014	NAVY	1	-	1	-	-	-	-	-	-	-	1																			-		
1.18) WATERJET TUNNELS																																			
	14	2014	NAVY	1	-	1	-	-	-	-	-	-	-	1																			-		
1.19) SHIPS SERVICE DIESEL GENERATOR (FREEDOM VARIANT)																																			
	15	2014	NAVY	1	-	1	-	-	-	-	-	-	1																			-			
	15	2015	NAVY	1	-	1	-	-	-	-	-	-	1																			-			
	15	2016	NAVY	1	-	1								A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1			-			
2) LN002 LCS Water jet Spares																																			
2.1) WATERJET ASSEMBLY (FREEDOM VARIANT)																																			
	16	2013	NAVY	1	-	1	-	-	-	-	-	-	-	1																			-		
	16	2014	NAVY	3	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3			-					
2.2) WATERJET IMPELLER (INDEPENDENCE VARIANT)																																			
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L				

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Exhibit P-21, Production Schedule: PB 2016 Navy																				Date: February 2015														
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9										P-1 Line Item Number / Title: 0944 / LCS Class Support Equipment										Aggregated Items: LCS Class Support Equipment														
Items <i>(Units in Each)</i>							Fiscal Year 2016										Fiscal Year 2017																	
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2015	BAL DUE AS OF 1 OCT	Calendar Year 2016										Calendar Year 2017																	
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L			
	17	2013	NAVY	3	-	3	-	-	-	-	-	-	-	3															-					
	17	2014	NAVY	4	-	4	-	-	-	-	-	-	-	-	-	-	-	4															-	
4) LN004 Habitability Modification																																		
4.1) HABITABILITY MOD (FRE VARIANT)																																		
	18	2016	NAVY	2	-	2	A	-	-	-	1	-	-	-	-	1																	-	
4.2) HABITABILITY MOD (IND VARIANT)																																		
	19	2016	NAVY	2	-	2	A	-	-	-	1	-	-	-	-	-	1																	-
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L			

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Exhibit P-21, Production Schedule: PB 2016 Navy																				Date: February 2015													
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9										P-1 Line Item Number / Title: 0944 / LCS Class Support Equipment										Aggregated Items: LCS Class Support Equipment													
Items (Units in Each)							Fiscal Year 2018												Fiscal Year 2019														
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEP T P R I O R T O 1 O C T 2 0 1 7	BAL DUE AS OF 1 OCT	Calendar Year 2018												Calendar Year 2019													B A L	
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			
1) LN001 LCS Battle Spares																																	
1.1) MAIN PROPULSION DIESEL ENGINE (INDEPENDENCE VARIANT)																																	
	5	2014	NAVY	1	1	-																											-
1.2) MT-30 GAS TURBINE ENGINE (FREEDOM VARIANT)																																	
	6	2013	NAVY	1	1	-																											-
	6	2016	NAVY	1	-	1	-	-	-	-	-	-	-	-	1																		-
1.3) SHIPS SERVICE DIESEL GENERATOR (INDEPENDENCE VARIANT)																																	
	7	2014	NAVY	2	2	-																											-
	7	2016	NAVY	1	1	-																											-
1.4) LAUNCH, RECOVERY, AND HANDLING SYSTEM (FREEDOM VARIANT)																																	
	8	2014	NAVY	1	1	-																											-
1.5) INTEGRATED BRIDGE SYSTEM																																	
	9	2014	NAVY	1	1	-																											-
	9	2015	NAVY	2	2	-																											-
1.7) MT-30 GAS TURBINE ENGINE ANCILLARY EQUIPMENT (FREEDOM VARIANT)																																	
	10	2014	NAVY	1	1	-																											-
1.13) REDUCTION GEAR (FREEDOM VARIANT)																																	
	11	2014	NAVY	1	1	-																											-
1.14) REDUCTION GEAR (INDEPENDENCE VARIANT)																																	
	12	2015	NAVY	1	1	-																											-
1.17) MAIN PROPULSION DIESEL ENGINE (FREEDOM VARIANT)																																	
	13	2014	NAVY	1	1	-																											-
1.18) WATERJET TUNNELS																																	
	14	2014	NAVY	1	1	-																											-
1.19) SHIPS SERVICE DIESEL GENERATOR (FREEDOM VARIANT)																																	
	15	2014	NAVY	1	1	-																											-
	15	2015	NAVY	1	1	-																											-
	15	2016	NAVY	1	1	-																											-
2) LN002 LCS Water jet Spares																																	
2.1) WATERJET ASSEMBLY (FREEDOM VARIANT)																																	
	16	2013	NAVY	1	1	-																											-
	16	2014	NAVY	3	3	-																											-
2.2) WATERJET IMPELLER (INDEPENDENCE VARIANT)																																	
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L		

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Exhibit P-21, Production Schedule: PB 2016 Navy																			Date: February 2015															
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9										P-1 Line Item Number / Title: 0944 / LCS Class Support Equipment										Aggregated Items: LCS Class Support Equipment														
Items (Units in Each)							Fiscal Year 2018										Fiscal Year 2019																	
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2017	BAL DUE AS OF 1 OCT	Calendar Year 2018										Calendar Year 2019																	
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L			
	17	2013	NAVY		3	3	-																											-
	17	2014	NAVY		4	4	-																											-
4) LN004 Habitability Modification																																		
4.1) HABITABILITY MOD (FRE VARIANT)																																		
	18	2016	NAVY		2	2	-																											-
4.2) HABITABILITY MOD (IND VARIANT)																																		
	19	2016	NAVY		2	2	-	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L		

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Exhibit P-21, Production Schedule: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9					P-1 Line Item Number / Title: 0944 / LCS Class Support Equipment				Aggregated Items: LCS Class Support Equipment			
		Production Rates (Each / Year)			Procurement Leadtime (Months)							
MFR Ref #	MFR Name - Location	MSR For 2016	1-8-5 For 2016	MAX For 2016	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1
1	MTU - GERMANY	-	-	-	12	-	12	12	12	-	12	12
2	ROLLS ROYCE - WALEPOLE, MA	-	-	-	24	-	24	24	24	-	24	24
3	MTU - GERMANY	-	-	-	12	-	12	12	12	-	12	12
4	Lockheed Martin - MD	-	-	-	12	-	12	12	12	-	12	12
5	SPERRY - Charlottesville, VA	-	-	-	12	-	12	12	12	-	12	12
6	ROLLS ROYCE - WALEPOLE, MA	-	-	-	24	-	24	24	24	-	24	24
7	Lockheed Martin - MD	-	-	-	12	-	12	12	12	-	12	12
8	RENK Corporation - Duncan, SC	-	-	-	21	-	21	21	21	21	-	21
9	Lockheed Martin - MD	-	-	-	18	-	18	18	18	-	18	18
10	ROLLS ROYCE - WALEPOLE, MA	-	-	-	12	-	12	12	12	-	12	12
11	Fincantieri - Washington, DC	-	-	-	12	-	12	12	12	-	12	12
12	Rolls Royce - MS	-	-	-	24	-	24	24	24	-	24	24
13	Wartsilla - VA	-	-	-	24	-	24	24	24	-	24	24
14	FRE Variant (LM) - Marinette, WI	-	-	-	-	-	3	3	-	-	-	-
15	IND Variant (Austal) - Mobile, AL	-	-	-	-	-	3	3	-	-	-	-

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy										Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment							P-1 Line Item Number / Title: 0945 / Submarine Batteries					
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:					Other Related Program Elements:				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	276.684	37.000	36.352	23.072	-	23.072	25.085	17.779	15.499	15.921	Continuing	Continuing
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	276.684	37.000	36.352	23.072	-	23.072	25.085	17.779	15.499	15.921	Continuing	Continuing
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	276.684	37.000	36.352	23.072	-	23.072	25.085	17.779	15.499	15.921	Continuing	Continuing
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: The FY 2016 funding request was reduced by \$2.885 million to account for the availability of prior year execution balances. Procurement of Valve Regulated Lead Acid (VRLA) batteries and Shipalt installation to modify submarines from use of legacy flooded battery (no longer in production at former sole source manufacturer) to new design VRLA battery. Initial installations of VRLA battery also requires the installation of an Automatic Battery Monitoring system (ABMS). The budget procures and installs initial VRLA batteries for 31 SSN688 Class, 3 SSN21 Class, 4 SSGN Class, 10 SSBN Class and 6 SSN774 Class Submarines. Batteries have a finite life and are consumables. Therefore, the budget also procures replacement VRLA batteries at a notional 6 year replacement cycle. Procurement with ABMS are new installation and procurement without ABMS are life cycle replacements. Installation of replacement batteries is funded by the Submarine Type Commander. [P40A / HM002 - LOS ANGELES Class Main Storage Battery]: Procurement of a low maintenance sealed lead acid battery which involves adapting commercial Valve Regulated Lead Acid (VRLA) technology to submarines. This replaces flooded battery technology for which the industrial base ceased manufacture and support of in FY05. Installation of VRLA battery requires extensive battery well modification (SHIPALT) unique for each submarine class. All dates for VRLA installation on Los Angeles Class submarines are based on the FMPMIS schedule of Mar 2014. Installation unit costs vary due to the availability types, location of installation and submarine type. Ships are shown below in the FY of installation funding. Availability Types: DMP Depot Modernization Period EOH Engineered Overhaul DSRA Drydocking Selected Restricted Availability Prior Years SSN 768 DMP SSN 770 DMP SSN 723 EOH SSN 725 EOH SSN 767 DSRA SSN 762 DSRA SSN 750 EOH SSN 763 DMP SSN 772 DMP SSN 764 DSRA SSN 721 EOH SSN 751 EOH SSN 766 DSRA SSN 755 EOH SSN 724 EOH SSN 773 DMP SSN 719 DSRA SSN 761 DSRA SSN 722 EOH SSN 752 EOH SSN 720 DSR SSN 771 DSR SSN 754 EOH SSN 753 EOH SSN 769 DSRA SSN 757 EOH SSN 758 EOH SSN 756 EOH SSN 760 EOH FY15 - SSN 759 EOH, SSN 765 EOH [P40A / HM008 - OHIO Class Main Storage Battery]: Procurement of a low maintenance sealed lead acid battery which involves adapting commercial Valve Regulated Lead Acid (VRLA) technology to submarines. This replaces flooded battery technology for which the industrial base ceased manufacture and support of in FY05. Installation of VRLA battery requires extensive battery well modification												

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy			Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment		P-1 Line Item Number / Title: 0945 / Submarine Batteries	
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:		Other Related Program Elements:
(SHIPALT) unique for each submarine class. All dates for VRLA installation on Ohio Class submarines are based on the FMPMIS schedule of Mar 2014. Installation unit costs vary due to the availability types, location of installation and submarine type. Ships are shown below in the FY of installation funding.			
Availability Types: ERO Engineered Refueling Overhaul ERP Extended Refit Period MMP Major Maintenance Period			
Prior Years SSBN 740 ERP SSBN 743 ERP SSBN 741 ERP SSBN 735 ERO (SCN Procurement) SSBN 742 ERP SSBN 737 ERO SSGN 729 MMP SSBN 736 ERO SSBN 738 ERO SSGN 726 ERP SSGN 728 MMP SSBN 739 ERO			
FY15 - SSGN 727 ERP			
FY16 - None			
FY17 - SSBN 730 ERP			
[P40A / HM009 - SEAWOLF Class Main Storage Battery]: Procurement of a low maintenance sealed lead acid battery which involves adapting commercial Valve Regulated Lead Acid (VRLA) technology to submarines. This replaces flooded battery technology for which the industrial base ceased manufacture and support of in FY05. Installation of VRLA battery requires extensive battery well modification (SHIPALT) unique for each submarine class. All dates for VRLA installation on SEAWOLF Class submarines are based on the FMPMIS schedule of Mar 2014. Installation unit costs vary due to the availability types, location of installation and submarine type. SEAWOLF class installation of VRLA Shipalt was completed in FY08.			
Availability Types: DPMA Drydocking Phased Maintenance Availability Special Non-CNO Scheduled Availability			
Prior Years SSN 22 Special SSN 21 Special SSN 23 DPMA			
[P40A / HM010 - VIRGINIA Class Main Storage Battery]: Procurement of a low maintenance sealed lead acid battery which involves adapting commercial Valve Regulated Lead Acid (VRLA) technology to submarines. This replaces flooded battery technology for which the industrial base ceased manufacture and support of in FY05. Installation of VRLA battery requires extensive battery well modification (SHIPALT) unique for each submarine class. All dates for VRLA installation on Virginia Class submarines are based on the FMPMIS schedule of Mar 2014. Installation unit costs vary due to the availability types, location of installation and submarine type. Ships are shown below in the FY of installation funding.			
Availability Types: EDSRA Extended Drydocking Selected Restricted Availability			
Prior Years - SSN 774 EDSRA SSN 775 EDSRA			
FY15 - SSN 776 EDSRA			
FY16 - SSN 777 EDSRA			

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment		P-1 Line Item Number / Title: 0945 / Submarine Batteries
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:
FY17 - SSN 778 EDSRA FY18 - SSN 779 EDSRA [P40A / HM830 - Production Engineering]: NSWCR Crane, as the designated procurement activity and in-service engineering agent (ISEA) monitors battery performance and establishes replacement schedules with the fleet. NSWCR Crane is also tasked with leading a Government & Industry Root Cause Analysis (RCA) team to identify and address causes for premature capacity decline seen with VLRA batteries. NSWCR Crane conducts qualification testing of VRLA cells which, in addition to being a Performance Specification requirement, has proven very beneficial to the Navy in detecting battery deficiencies that can be corrected before installation, thus alleviating critical emergent fleet impact. Funding is provided for Puget Sound and Portsmouth Naval Shipyards responsibilities for the flooded battery inventory storage, maintenance and inventory management, SHIPALT support, and AIT management. In addition, costs for Planning Yard SHIPALT completion and Lead Yard Services are funded through this line. Beginning in FY13, additional funding will be provided to Puget Sound and Portsmouth Naval Shipyards in order to operate and maintain VRLA battery test facilities. These facilities will be used for testing that will ensure that batteries are fully operational prior to installation, isolate underperforming cells, and to determine the end of life profile which will reduce impacts to the fleet caused by unexpected battery capacity declines. [P3A / HM002 LOS ANGELES Class Main Battery VRLA & ABMS]: INSTALLATION - HM5IN Installation funds are provided to the AITs to accomplish execution of new VRLA battery installations in submarines. Installation of replacement batteries is funded by the TYCOM. Installation unit costs will vary due to the availability types, location of installation, and submarine type.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy						Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment				P-1 Line Item Number / Title: 0945 / Submarine Batteries				
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:			Other Related Program Elements:		
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
Equipment	P-40a, P-5a		- / 62.283	- / 21.024	- / 16.989	- / 13.902	- / -	- / 13.902
1 / HM002 LOS ANGELES Class Main Battery VRLA & ABMS (SHIPALT)	P-3a		- / 134.810	- / 11.689	- / 7.992	- / -	- / -	- / -
2 / HM008 OHIO CLASS MAIN STORAGE BATTERY VRLA + ABMS (SHIPALT)	P-3a		- / 65.423	- / 2.657	- / 5.229	- / 2.104	- / -	- / 2.104
3 / HM010 VIRGINIA Class Main Storage Battery VRLA (SHIPALT)	P-3a		- / 14.168	- / 1.630	- / 6.142	- / 7.066	- / -	- / 7.066
Total Gross/Weapon System Cost			- / 276.684	- / 37.000	- / 36.352	- / 23.072	- / -	- / 23.072
Exhibits Schedule			FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
Equipment	P-40a, P-5a		- / -	- / -	- / -	- / -	- / -	- / -
1 / HM002 LOS ANGELES Class Main Battery VRLA & ABMS (SHIPALT)	P-3a		- / -	- / -	- / -	- / -	- / -	- / 154.491
2 / HM008 OHIO CLASS MAIN STORAGE BATTERY VRLA + ABMS (SHIPALT)	P-3a		- / 3.874	- / -	- / -	- / -	- / -	- / 79.287
3 / HM010 VIRGINIA Class Main Storage Battery VRLA (SHIPALT)	P-3a		- / 5.204	- / 3.918	- / -	- / -	- / -	- / 38.128
Total Gross/Weapon System Cost			- / 25.085	- / 17.779	- / 15.499	- / 15.921	Continuing	Continuing
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.								
Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.								

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9								P-1 Line Item Number / Title: 0945 / Submarine Batteries							Aggregated Items Title: Equipment ⁽¹⁾				

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) HM002 - LOS ANGELES Class Main Storage Battery																				
1.1) VRLA LOS ANGELES ^(†)	A		2,056K	2	4.113	584,600.00	2	1.169	602,750.00	4	2.411	621,333.33	3	1.864	-	-	-	621,333.33	3	1.864
1.2) VRLA Los Angeles Material	A		-	-	7.571	-	-	2.549	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 1) HM002 - LOS ANGELES Class Main Storage Battery			-	-	11.684	-	-	3.718	-	-	2.411	-	-	1.864	-	-	-	-	-	1.864
2) HM008 - OHIO Class Main Storage Battery																				
2.1) VRLA OHIO ^(†)	A		1,788K	3	5.363	2,530K	2	5.061	948,161.00	2	1.896	977,554.00	2	1.955	-	-	-	977,554.00	2	1.955
2.2) VRLA OHIO Material	A		-	-	7.226	-	-	2.130	-	-	2.072	-	-	1.916	-	-	-	-	-	1.916
Subtotal: 2) HM008 - OHIO Class Main Storage Battery			-	-	12.589	-	-	7.191	-	-	3.968	-	-	3.871	-	-	-	-	-	3.871
3) HM009 - SEAWOLF Class Main Storage Battery																				
3.1) VRLA Seawolf	A		649,333.33	3	1.948	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.2) VRLA Seawolf + ABMS	A		1,179K	3	3.536	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 3) HM009 - SEAWOLF Class Main Storage Battery			-	-	5.484	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4) HM010 - VIRGINIA Class Main Storage Battery																				
4.1) VIRGINIA ^(†)	A		-	-	-	1,368K	1	1.368	-	-	-	639,421.00	1	0.639	-	-	-	639,421.00	1	0.639
4.2) VRLA VIRGINIA Material	A		-	-	-	-	-	3.974	-	-	5.536	-	-	2.813	-	-	-	-	-	2.813
Subtotal: 4) HM010 - VIRGINIA Class Main Storage Battery			-	-	0.000	-	-	5.342	-	-	5.536	-	-	3.452	-	-	-	-	-	3.452
5) HM830 - Production Engineering																				
5.1) Production Engineering	A		-	-	32.526	-	-	4.773	-	-	5.074	-	-	4.715	-	-	-	-	-	4.715
Subtotal: 5) HM830 - Production Engineering			-	-	32.526	-	-	4.773	-	-	5.074	-	-	4.715	-	-	-	-	-	4.715
Total			-	-	62.283	-	-	21.024	-	-	16.989	-	-	13.902	-	-	-	-	-	13.902

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2017			FY 2018			FY 2019			FY 2020			To Complete			Total Cost		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) HM002 - LOS ANGELES Class Main Storage Battery																				

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9								P-1 Line Item Number / Title: 0945 / Submarine Batteries							Aggregated Items Title: Equipment ⁽¹⁾				

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2017			FY 2018			FY 2019			FY 2020			To Complete			Total Cost		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1.1) VRLA LOS ANGELES ^(†)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1.2) VRLA Los Angeles Material	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 1) HM002 - LOS ANGELES Class Main Storage Battery			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2) HM008 - OHIO Class Main Storage Battery																				
2.1) VRLA OHIO ^(†)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2.2) VRLA OHIO Material	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 2) HM008 - OHIO Class Main Storage Battery			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3) HM009 - SEAWOLF Class Main Storage Battery																				
3.1) VRLA Seawolf	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3.2) VRLA Seawolf + ABMS	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 3) HM009 - SEAWOLF Class Main Storage Battery			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4) HM010 - VIRGINIA Class Main Storage Battery																				
4.1) VIRGINIA ^(†)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4.2) VRLA VIRGINIA Material	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 4) HM010 - VIRGINIA Class Main Storage Battery			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5) HM830 - Production Engineering																				
5.1) Production Engineering	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 5) HM830 - Production Engineering			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

(†) indicates the presence of a P-5a

Footnotes:

⁽¹⁾ (1) Material funds identified are for ancillary material required to set up for and support installations. Starting in FY12, these funds are moved from installation to procurement and shown as separate line items to better reflect the required funding profile. (2) FY14 VRLA OHIO and VIRGINIA replacement batteries (without ABMS) included replacement trays to support life cycle replacement logistics.

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Exhibit P-5a, Procurement History and Planning: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0945 / Submarine Batteries				Aggregated Items: Equipment ⁽¹⁾				
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
1) HM002 - LOS ANGELES Class Main Storage Battery												
1.1) VRLA LOS ANGELES		2014 (2)	ENERSYS & GNB (Exide) / Warrensburg, MO & Ft. Smith , AR	C / IDIQ	NSWC CRANENSWC CRANENSWC CRANE	Jan 2014	Jan 2015	2	584,600.00	Y		
1.1) VRLA LOS ANGELES		2015	ENERSYS & GNB (Exide) / Warrensburg, MO & Ft. Smith , AR	C / IDIQ	NSWC CRANENSWC CRANENSWC CRANECRANENSWC CRANE	Feb 2015	Feb 2016	4	602,750.00	Y		
1.1) VRLA LOS ANGELES		2016	ENERSYS & GNB (Exide) / Warrensburg, MO & Ft. Smith , AR	C / IDIQ	NSWC CRANENSWC CRANENSWC CRANECRANENSWC CRANE	Feb 2016	Feb 2017	3	621,333.33	Y		
2) HM008 - OHIO Class Main Storage Battery												
2.1) VRLA OHIO		2013	ENERSYS & GNB (Exide) / Warrensburg, MO & Ft. Smith , AR	C / IDIQ	NSWC CRANE	Mar 2013	Mar 2014	2	1,588K	Y		
2.1) VRLA OHIO		2014	ENERSYS & GNB (Exide) / Warrensburg, MO & Ft. Smith , AR	C / IDIQ	NSWC CRANE	Dec 2013	Dec 2014	2	2,530K	Y		
2.1) VRLA OHIO		2015	ENERSYS & GNB (Exide) / Warrensburg, MO & Ft. Smith , AR	C / IDIQ	NSWC CRANE	Jan 2015	Jan 2016	2	948,161.00	Y		
2.1) VRLA OHIO		2016	ENERSYS & GNB (Exide) / Warrensburg, MO & Ft. Smith , AR	C / IDIQ	NSWC CRANE	Feb 2016	Feb 2017	2	977,554.00	Y		
4) HM010 - VIRGINIA Class Main Storage Battery												
4.1) VIRGINIA		2014	ENERSYS & GNB (Exide) / Warrensburg, MO & Ft. Smith , AR	C / IDIQ	NSWC CRANE	Jan 2014	Jan 2015	1	1,368K	Y		
4.1) VIRGINIA		2016	ENERSYS & GNB (Exide) / Warrensburg, MO & Ft. Smith , AR	C / IDIQ	NSWC CRANE	Feb 2016	Feb 2017	1	639,421.00	Y		
Footnotes: ⁽²⁾ (1) Production Lead time is 6-12 months for all classes. (2) FY14-FY17 VRLA battery procurements, for all classes, will be on a C/FP (IDIQ) contract which will be a split award between Enersys & GNB (Exide). The initial contract award took place in March 2013. Delivery orders will be placed, as needed, for additional procurement thereafter.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0945 / Submarine Batteries	Modification Number / Title: 1 / HM002 LOS ANGELES Class Main Battery VRLA & ABMS

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	134.810	11.689	7.992	-	-	-	-	-	-	-	-	154.491
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	134.810	11.689	7.992	-	-	-	-	-	-	-	-	154.491
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	134.810	11.689	7.992	-	-	-	-	-	-	-	-	154.491
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

VRLA Shipalt is required to modify LA Class submarines from use of legacy flooded battery (no longer in production at former sole source manufacturer) to new design VRLA battery. Installation unit costs may vary depending on location and type of availability. Replacement batteries are not shown because installations are funded by TYCOM.

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9					P-1 Line Item Number / Title: 0945 / Submarine Batteries					Modification Number / Title: 1 / HM002 LOS ANGELES Class Main Battery VRLA & ABMS			
Models of Systems Affected: LOS ANGELES CLASS MAIN STORAGE BATTERY VRLA LOS ANGELES + ABMS					Modification Type: SHIPALT					Related RDT&E PEs:			
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
Modification Item 1 of 1: HM002 LOS ANGELES Class Main Battery VRLA & ABMS													
B Kits													
Recurring													
1.1.1) HM002 LOS ANGELES CLASS BATTERY VRLA & ABMS INSTALL - NonOrganic ⁽³⁾	29 / 21.574	2 / 1.700	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	31 / 23.274	
Subtotal: Recurring	- / 21.574	- / 1.700	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 23.274	
Subtotal: HM002 LOS ANGELES Class Main Battery VRLA & ABMS	29 / 21.574	2 / 1.700	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	31 / 23.274	
Subtotal: Procurement, All Modification Items	- / 21.574	- / 1.700	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 23.274	
Installation													
Modification Item 1 of 1: HM002 LOS ANGELES Class Main Battery VRLA & ABMS	- / 113.236	- / 9.989	- / 7.992	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 131.217	
Subtotal: Installation	- / 113.236	- / 9.989	- / 7.992	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 131.217	
Total													
Total Cost (Procurement + Support + Installation)	134.810	11.689	7.992	-	-	-	-	-	-	-	-	154.491	

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015																					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9										P-1 Line Item Number / Title: 0945 / Submarine Batteries										Modification Number / Title: 1 / HM002 LOS ANGELES Class Main Battery VRLA & ABMS											
Modification Item 1 of 1: HM002 LOS ANGELES Class Main Battery VRLA & ABMS																															
Manufacturer Information																															
Manufacturer Name: ENERSYS ⁽⁴⁾															Manufacturer Location: WARRENSURG. MO																
Administrative Leadtime (in Months): 3															Production Leadtime (in Months): 12																
Dates		FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020					
Contract Dates																															
Delivery Dates																															
Manufacturer Name: ENERSYS & GNB (Exide)															Manufacturer Location: WARRENSURG. MO & Ft. Smith, AR																
Administrative Leadtime (in Months): 3															Production Leadtime (in Months): 12																
Dates		FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020					
Contract Dates		Jan 2014																													
Delivery Dates		Nov 2014																													
Installation Information																															
Method of Implementation: AIT:: Installation Name: HM002 LOS ANGELES CLASS BATTERY VRLA & ABMS INSTALL																															
Installation Cost		Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total																		
		Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)																		
Prior Years		26 / 113.236	3 / 9.989	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	29 / 123.225																		
FY 2014		- / -	- / -	2 / 7.992	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 7.992																		
FY 2015		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2016		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2017		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2018		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2019		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2020		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
To Complete		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
Total		26 / 113.236	3 / 9.989	2 / 7.992	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	31 / 131.217																		
Installation Schedule																															
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	26	-	1	1	1	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31
Out	25	-	1	-	1	1	1	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0945 / Submarine Batteries	Modification Number / Title: 1 / HM002 LOS ANGELES Class Main Battery VRLA & ABMS

Footnotes:

⁽³⁾ (1) Installation funds must be in place at the start of availability. The availability start date can be up to six (6) months prior to battery delivery. (2) In FY12 and later, a realignment of ancillary material costs from Installation to Procurement took place as noted in the P-40A remarks.

⁽⁴⁾ Production Leadtime can range from 6-12 months

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0945 / Submarine Batteries	Modification Number / Title: 2 / HM008 OHIO CLASS MAIN STORAGE BATTERY VRLA + ABMS

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	65.423	2.657	5.229	2.104	-	2.104	3.874	-	-	-	-	79.287
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	65.423	2.657	5.229	2.104	-	2.104	3.874	-	-	-	-	79.287
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	65.423	2.657	5.229	2.104	-	2.104	3.874	-	-	-	-	79.287
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

VRLA Shipalt is required to modify OHIO Class submarines from use of legacy flooded battery (no longer in production at former sole source manufacturer) to new design VRLA battery. Installation unit costs may vary depending on location and type of availability. Replacement batteries are not shown because installations are funded by TYCOM.

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0945 / Submarine Batteries						Modification Number / Title: 2 / HM008 OHIO CLASS MAIN STORAGE BATTERY VRLA + ABMS			
Models of Systems Affected: OHIO CLASS MAIN STORAGE BATTERY VRLA + ABMS				Modification Type: SHIPALT				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
<i>Modification Item 1 of 1:</i> HM008 OHIO CLASS MAIN STORAGE BATTERY VRLA + ABMS													
B Kits													
Recurring													
1.1.1) HM008 OHIO CLASS MAIN STORAGE BATTERY VRLA + ABMS - NonOrganic ⁽⁵⁾	12 / 24.500	- / -	1 / 2.046	1 / 2.104	- / -	1 / 2.104	- / -	- / -	- / -	- / -	- / -	14 / 28.650	
<i>Subtotal: Recurring</i>	- / 24.500	- / -	- / 2.046	- / 2.104	- / -	- / 2.104	- / -	- / -	- / -	- / -	- / -	- / 28.650	
<i>Subtotal: HM008 OHIO CLASS MAIN STORAGE BATTERY VRLA + ABMS</i>	12 / 24.500	- / -	1 / 2.046	1 / 2.104	- / -	1 / 2.104	- / -	- / -	- / -	- / -	- / -	14 / 28.650	
<i>Subtotal: Procurement, All Modification Items</i>	- / 24.500	- / -	- / 2.046	- / 2.104	- / -	- / 2.104	- / -	- / -	- / -	- / -	- / -	- / 28.650	
Installation													
<i>Modification Item 1 of 1:</i> HM008 OHIO CLASS MAIN STORAGE BATTERY VRLA + ABMS	- / 40.923	- / 2.657	- / 3.183	- / -	- / -	- / -	- / 3.874	- / -	- / -	- / -	- / -	- / 50.637	
<i>Subtotal: Installation</i>	- / 40.923	- / 2.657	- / 3.183	- / -	- / -	- / -	- / 3.874	- / -	- / -	- / -	- / -	- / 50.637	
Total													
Total Cost (Procurement + Support + Installation)	65.423	2.657	5.229	2.104	-	2.104	3.874	-	-	-	-	79.287	

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015																					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9										P-1 Line Item Number / Title: 0945 / Submarine Batteries										Modification Number / Title: 2 / HM008 OHIO CLASS MAIN STORAGE BATTERY VRLA + ABMS											
Modification Item 1 of 1: HM008 OHIO CLASS MAIN STORAGE BATTERY VRLA + ABMS																															
Manufacturer Information																															
Manufacturer Name: ENERSYS ⁽⁶⁾															Manufacturer Location: WARRENSURG. MO																
Administrative Leadtime (in Months): 3															Production Leadtime (in Months): 12																
Dates		FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020					
Contract Dates																															
Delivery Dates																															
Manufacturer Name: ENERSYS & GNB (Exide)															Manufacturer Location: WARRENSURG. MO & Ft. Smith, AR																
Administrative Leadtime (in Months): 3															Production Leadtime (in Months): 12																
Dates		FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020					
Contract Dates						Nov 2014				Jan 2016																					
Delivery Dates						Sep 2015				Jan 2017																					
Installation Information																															
Method of Implementation: AIT:: Installation Name: HM008 OHIO CLASS MAIN STORAGE BATTERY VRLA + ABMS																															
Installation Cost		Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total																		
		Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)																		
Prior Years		11 / 40.923	1 / 2.657	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	12 / 43.580																		
FY 2014		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2015		- / -	- / -	1 / 3.183	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 3.183																		
FY 2016		- / -	- / -	- / -	- / -	- / -	- / -	1 / 3.874	- / -	- / -	- / -	- / -	1 / 3.874																		
FY 2017		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2018		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2019		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2020		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
To Complete		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
Total		11 / 40.923	1 / 2.657	1 / 3.183	- / -	- / -	- / -	1 / 3.874	- / -	- / -	- / -	- / -	14 / 50.637																		
Installation Schedule																															
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	11	-	-	1	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14
Out	9	1	1	-	-	1	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	14

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0945 / Submarine Batteries	Modification Number / Title: 2 / HM008 OHIO CLASS MAIN STORAGE BATTERY VRLA + ABMS

Footnotes:

⁽⁵⁾ (1) Installation funds must be in place at the start of availability. The availability start date can be up to six (6) months prior to battery delivery. (2) The delivery date identified at the top of the page is the battery delivery date and not the start of the availability. (3) In FY12 and later, a realignment of ancillary material costs from Installation to Procurement took place as noted in the P-40A remarks.

⁽⁶⁾ Production Leadtime can range from 6-12 months

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0945 / Submarine Batteries	Modification Number / Title: 3 / HM010 VIRGINIA Class Main Storage Battery VRLA

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	14.168	1.630	6.142	7.066	-	7.066	5.204	3.918	-	-	-	38.128
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	14.168	1.630	6.142	7.066	-	7.066	5.204	3.918	-	-	-	38.128
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	14.168	1.630	6.142	7.066	-	7.066	5.204	3.918	-	-	-	38.128
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

VRLA Shipalt is required to modify VIRGINIA Class submarines from use of legacy flooded battery (no longer in production at former sole source manufacturer) to new design VRLA battery. Installation unit cost may vary depending on location and type of availability. Replacement batteries are not shown because installations are funded by TYCOM.

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0945 / Submarine Batteries						Modification Number / Title: 3 / HM010 VIRGINIA Class Main Storage Battery VRLA			
Models of Systems Affected: VIRGINIA Class Main Storage Battery VRLA + ABMS				Modification Type: SHIPALT				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
<i>Modification Item 1 of 1:</i> HM010 VIRGINIA Class Main Storage Battery VRLA													
B Kits													
Recurring													
1.1.1) HM010 VIRGINIA Class Main Storage Battery VRLA - NonOrganic ⁽⁷⁾	2 / 3.288	1 / 1.630	1 / 1.653	1 / 1.679	- / -	1 / 1.679	1 / 1.710	- / -	- / -	- / -	- / -	6 / 9.960	
<i>Subtotal: Recurring</i>	- / 3.288	- / 1.630	- / 1.653	- / 1.679	- / -	- / 1.679	- / 1.710	- / -	- / -	- / -	- / -	- / 9.960	
<i>Subtotal: HM010 VIRGINIA Class Main Storage Battery VRLA</i>	2 / 3.288	1 / 1.630	1 / 1.653	1 / 1.679	- / -	1 / 1.679	1 / 1.710	- / -	- / -	- / -	- / -	6 / 9.960	
<i>Subtotal: Procurement, All Modification Items</i>	- / 3.288	- / 1.630	- / 1.653	- / 1.679	- / -	- / 1.679	- / 1.710	- / -	- / -	- / -	- / -	- / 9.960	
Installation													
<i>Modification Item 1 of 1:</i> HM010 VIRGINIA Class Main Storage Battery VRLA	- / 10.880	- / -	- / 4.489	- / 5.387	- / -	- / 5.387	- / 3.494	- / 3.918	- / -	- / -	- / -	- / 28.168	
<i>Subtotal: Installation</i>	- / 10.880	- / -	- / 4.489	- / 5.387	- / -	- / 5.387	- / 3.494	- / 3.918	- / -	- / -	- / -	- / 28.168	
Total													
Total Cost (Procurement + Support + Installation)	14.168	1.630	6.142	7.066	-	7.066	5.204	3.918	-	-	-	38.128	

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0945 / Submarine Batteries	Modification Number / Title: 3 / HM010 VIRGINIA Class Main Storage Battery VRLA

Modification Item 1 of 1: HM010 VIRGINIA Class Main Storage Battery VRLA

Manufacturer Information							
Manufacturer Name: ENERSYS & GNB (Exide)				Manufacturer Location: WARRENSURG. MO & Ft. Smith, AR			
Administrative Leadtime (in Months): 3				Production Leadtime (in Months): 12			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Jan 2014	May 2015	Apr 2016				
Delivery Dates	Jan 2015	May 2016	Apr 2017				

Installation Information

Method of Implementation: AIT:: Installation Name: HM010 VIRGINIA Class Main Storage Battery VRLA

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	2 / 10.880	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 10.880
FY 2014	- / -	- / -	1 / 4.489	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 4.489
FY 2015	- / -	- / -	- / -	1 / 5.387	- / -	1 / 5.387	- / -	- / -	- / -	- / -	- / -	1 / 5.387
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	1 / 3.494	- / -	- / -	- / -	- / -	1 / 3.494
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 3.918	- / -	- / -	- / -	1 / 3.918
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	2 / 10.880	- / -	1 / 4.489	1 / 5.387	- / -	1 / 5.387	1 / 3.494	1 / 3.918	- / -	- / -	- / -	6 / 28.168

Installation Schedule																															
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	2	-	-	-	-	-	-	1	-	-	1	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	6	
Out	2	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	6	

Footnotes:

⁽⁷⁾ (1) Installation funds must be in place at the start of availability. The availability start date can be up to six (6) months prior to battery delivery. (2) The delivery date identified at the top of the page is the battery delivery date and not the start of the availability. (3) In FY12 and later, a realignment of ancillary material costs from Installation to Procurement took place as noted in the P-40A remarks.

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment								P-1 Line Item Number / Title: 0946 / LPD Class Support Equipment				
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:					Other Related Program Elements:				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	26.835	20.425	39.519	55.283	-	55.283	61.469	59.295	74.794	76.206	60.052	473.878
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	26.835	20.425	39.519	55.283	-	55.283	61.469	59.295	74.794	76.206	60.052	473.878
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	26.835	20.425	39.519	55.283	-	55.283	61.469	59.295	74.794	76.206	60.052	473.878
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-
Description: The FY 2016 funding request was reduced by \$1.661 million to account for the availability of prior year execution balances.												
This budget provides funding for the in service LPD 17 class program support equipment. Previous funding for LPD 17 class support equipment (FY12 and earlier) was provided under line item OPN 0981, Items Less Than \$5 Million. Funding is required to upgrade mission critical electronic and HM&E systems including the Engineering Control Systems (ECS), Ship Control Systems (SCS), Degaussing Systems, Shipboard Wide-Area Network (SWAN), commercial software products for ECS, SCS, C4ISR and Administrative Communications.												
CJ2IN - Installation of Equipment Funding is for installation of equipment in support of the Fleet Modernization Program (FMP).												
[P40A / CJ010 - Schoolhouse TTE]: CJ010 - SCHOOLHOUSE TTE Funding for Schoolhouse Technical Training Equipment (TTE) is for the infrastructure and equipment to set up the schoolhouses for multiple systems such as ECS and SCS 60Hz and Ship Service Diesel Generators (SSDG). The schoolhouses will provide critical training to sailors in operation and maintenance of those systems.												
[P40A / CJ020 - Shore Based Spares]: CJ020 SHORE BASED SPARES Shore-Based Spares funding is required for procurement of Shore-Based Spares in support of the LPD 17 class deployed assets. Shore-Based Spares are critical long lead time items that will be staged shoreside in case of catastrophic failure.												
[P3A / CJ030 - HW/SW Obsolescence]: CJ030 LPD 17 HW/SW OBSOLESCENCE HW/SW Obsolescence effort addresses hardware obsolescence/technology refreshment issues, and class upgrades focused on increased capabilities, force protection, and safety. Funding will support procurement of hardware and software changes to the systems listed: - Command Information Display System (CIDS) 23TV, Replace projectors with LED Projectors - Engineering Control Systems (ECS) - Windows XP upgrade - Ship Control Systems (SCS) - Windows XP upgrade/SCS Tech Refresh, Digital Rudder Angle Display Information System (DRADIS) - Magnetic Signature Control System (MSCS) - Windows XP upgrade, DCA Redesign. - HM&E Network - HM&E Network Upgrades												

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment		P-1 Line Item Number / Title: 0946 / LPD Class Support Equipment
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:
- Wire-free Portable Communication System (WPCS) - Uninterrupted Power Supply (UPS) Upgrade, Low Power Amplifier Upgrade, Main Site Upgrade. - 27TV - 27TV System Upgrade - Advanced Fire and Smoke Sensor System (AFSS) - AFSS System Upgrade. - Integrated Voice Communication System (IVCS) - IVCS system upgrades (local cutout switches, AFT lookout comm mod, obsolete terminal replacement, FWD/AFT KITE), Software version 7.2.2 - 1MC Announcing System - Digital Microphone Control Station - Navigational Data Distribution System (NDDS) [P3A - 2 / CJ040 HM&E Electrical Modifications]: CJ040 HM&E ELECTRICAL MODIFICATIONS HME Modernization funding is provided to correct mission, safety and reliability issues on electrical systems and ultimately resolve maintenance intensive system concerns. HM&E Electrical Modifications include: SWAN UPS- Space Based UPS Reduction [P3A - 3 / CJ050 - HM&E Survivability Modifications]: CJ050 HM&E SURVIVABILITY MODIFICATIONS HME Modernization funding is provided to correct mission, safety and reliability issues on HM&E systems (impacting ship survivability) and ultimately resolve maintenance intensive system concerns. HM&E Survivability Modifications include: Damage Control Action Management System (DCAMS) 1.1 upgrade, Smoke Ejection System (SES) Redesign, Night Vision Device (NVD) Well Deck Upgrades, Composite Ventilation Louvers and Screens. [P3A - 4 / CJ060 - HM&E Mechanical/Auxiliary Modifications]: CJ060 HM&E MECHANICAL/AUXILIARY MODIFICATIONS HME Modernization funding is provided to correct mission, safety and reliability issues on mechanical and auxiliary systems and ultimately resolve maintenance intensive system concerns. HM&E Mechanical/Auxiliary Modifications include: MIDE Bulkhead Shaft Seal, Helo Hangar Door Control Modifications, VCHT Ejector Pump PLC Upgrade, 2nd Pass Reverse Osmosis (RO) Unit Upgrade, RO Unit Potable Water EDG Recirculation Capability, Aviation Maintenance Bridge Crane Replacement, Knuckleboom Crane Improvements, Geislinger Coupling Improvements, Scullery Improvements and Gaylord System Improvements. [P3A - 5 / CJ070 SWAN-CANES Integration]: CJ070 SWAN-CANES Integration The results of the Shipboard Wide Area Network (SWAN) / Consolidated Afloat Networks and Enterprise Services (CANES) study directed the replacement of the C4I capability of the LPD 17 Class SWAN with CANES and the conversion of the non-C4I SWAN into a new HM&E Network. SWAN funding is required to field the new HM&E Network in support of the CANES installation. SWAN funding is also required to sustain the legacy SWAN, until its replacement, to address SWAN obsolescence, reliability issues, performance concerns, and emergent Fleet requirements including enabling Cryptologic Log On (CLO), eradicating Windows XP, replacing aging obsolete network hardware (e.g., servers and core switches), and maintaining the Information Assurance posture of the Common Operating Environment (COE). SWAN sustainment modifications will be conducted in parallel with HM&E Network conversion and will be phased out as CANES installations begin.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy						Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment				P-1 Line Item Number / Title: 0946 / LPD Class Support Equipment				
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:			Other Related Program Elements:		
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
LPD Class Support Equipment	P-40a		- / 4.200	- / 2.200	- / 4.500	- / 1.850	- / -	- / 1.850
1 / CJ030 - HW/SW Obsolescence ()	P-3a		- / 6.941	- / 4.333	- / 6.830	- / 7.207	- / -	- / 7.207
2 / CJ040 HM&E Electrical Modifications ()	P-3a		- / 0.000	- / -	- / -	- / 2.244	- / -	- / 2.244
3 / CJ050 - HM&E Survivability Modifications ()	P-3a		- / 0.048	- / 0.072	- / 0.736	- / 1.288	- / -	- / 1.288
4 / CJ060 - HM&E Mechanical/Auxiliary Modifications ()	P-3a		- / 6.546	- / 12.820	- / 23.063	- / 29.148	- / -	- / 29.148
5 / CJ070 SWAN-CANES Integration ()	P-3a		- / 9.100	- / 1.000	- / 4.390	- / 13.546	- / -	- / 13.546
Total Gross/Weapon System Cost			- / 26.835	- / 20.425	- / 39.519	- / 55.283	- / -	- / 55.283
Exhibits Schedule			FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
LPD Class Support Equipment	P-40a		- / -	- / -	- / -	- / -	- / -	- / -
1 / CJ030 - HW/SW Obsolescence ()	P-3a		- / 1.885	- / 10.669	- / 23.962	- / 27.863	- / 31.868	- / 121.558
2 / CJ040 HM&E Electrical Modifications ()	P-3a		- / 3.366	- / 2.992	- / 5.236	- / 5.366	- / 2.244	- / 21.448
3 / CJ050 - HM&E Survivability Modifications ()	P-3a		- / 2.875	- / 3.641	- / 4.666	- / 1.591	- / 1.178	- / 16.095
4 / CJ060 - HM&E Mechanical/Auxiliary Modifications ()	P-3a		- / 32.321	- / 35.450	- / 33.263	- / 31.593	- / 21.553	- / 225.757
5 / CJ070 SWAN-CANES Integration ()	P-3a		- / 17.128	- / 2.820	- / 2.880	- / 2.944	- / -	- / 53.808
Total Gross/Weapon System Cost			- / 61.469	- / 59.295	- / 74.794	- / 76.206	- / 60.052	- / 473.878
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.								
Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.								

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9								P-1 Line Item Number / Title: 0946 / LPD Class Support Equipment							Aggregated Items Title: LPD Class Support Equipment				

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) CJ010 - Schoolhouse TTE																				
1.1) Schoolhouse TTE	A		-	-	1.200	-	-	-	-	-	1.000	-	-	0.086	-	-	-	-	-	0.086
Subtotal: 1) CJ010 - Schoolhouse TTE			-	-	1.200	-	-	-	-	-	1.000	-	-	0.086	-	-	-	-	-	0.086
2) CJ020 - Shore Based Spares																				
2.1) Shore Based Spares	A		-	-	3.000	-	-	2.200	-	-	3.500	-	-	1.764	-	-	-	-	-	1.764
Subtotal: 2) CJ020 - Shore Based Spares			-	-	3.000	-	-	2.200	-	-	3.500	-	-	1.764	-	-	-	-	-	1.764
Total			-	-	4.200	-	-	2.200	-	-	4.500	-	-	1.850	-	-	-	-	-	1.850

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2017			FY 2018			FY 2019			FY 2020			To Complete			Total Cost		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) CJ010 - Schoolhouse TTE																				
1.1) Schoolhouse TTE	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 1) CJ010 - Schoolhouse TTE			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2) CJ020 - Shore Based Spares																				
2.1) Shore Based Spares	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 2) CJ020 - Shore Based Spares			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0946 / LPD Class Support Equipment	Modification Number / Title: 1 / CJ030 - HW/SW Obsolescence

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	6.941	4.333	6.830	7.207	-	7.207	1.885	10.669	23.962	27.863	31.868	121.558
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	6.941	4.333	6.830	7.207	-	7.207	1.885	10.669	23.962	27.863	31.868	121.558
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	6.941	4.333	6.830	7.207	-	7.207	1.885	10.669	23.962	27.863	31.868	121.558
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

[HW/SW Obsolescence] HW/SW Obsolescence effort addresses hardware obsolescence/technology refreshment issues, and class upgrades focused on increased capabilities, force protection, and safety.

Funding will support procurement of hardware and software changes to the systems listed:

- Command Information Display System (CIDS) 23TV - Replace projectors with LED Projectors
- Engineering Control Systems (ECS) - Windows XP upgrade
- Ship Control Systems (SCS) - Windows XP upgrade/SCS Tech Refresh, Digital Rudder Angle Display Information System (DRADIS)
- Magnetic Signature Control System (MSCS) - Windows XP upgrade
- Wire-free Portable Communication System (WPCS) - Uninterrupted Power Supply (UPS) Upgrade, Low Power Amplifier Upgrade
- 27TV - 27TV System Upgrade
- Advanced Fire and Smoke Sensor System (AFSS) - AFSS System Upgrade
- Integrated Voice Communication System (IVCS)- IVCS system upgrades (local cutout switches, AFT lookout comm mod, obsolete terminal replacement, FWD/AFT KITE), Software version 7.2.2.
- 1MC Announcing System - Digital Microphone Control Station 1MC improvements
- Navigational Data Distribution System (NDDS)

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0946 / LPD Class Support Equipment				Modification Number / Title: 1 / CJ030 - HW/SW Obsolescence					
Models of Systems Affected: HW/SW Obsolescence				Modification Type:					Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: CJ030 - HW/SW Obsolescence													
B Kits													
Recurring													
1.1.1) HW/SW Obsolescence - NonOrganic ⁽¹⁾	27 / 6.941	15 / 2.254	29 / 4.510	16 / 2.696	- / -	16 / 2.696	1 / 0.115	9 / 10.519	14 / 12.981	11 / 15.427	14 / 9.754	136 / 65.197	
Subtotal: Recurring	- / 6.941	- / 2.254	- / 4.510	- / 2.696	- / -	- / 2.696	- / 0.115	- / 10.519	- / 12.981	- / 15.427	- / 9.754	- / 65.197	
Subtotal: CJ030 - HW/SW Obsolescence	27 / 6.941	15 / 2.254	29 / 4.510	16 / 2.696	- / -	16 / 2.696	1 / 0.115	9 / 10.519	14 / 12.981	11 / 15.427	14 / 9.754	136 / 65.197	
Subtotal: Procurement, All Modification Items	- / 6.941	- / 2.254	- / 4.510	- / 2.696	- / -	- / 2.696	- / 0.115	- / 10.519	- / 12.981	- / 15.427	- / 9.754	- / 65.197	
Installation													
Modification Item 1 of 1: CJ030 - HW/SW Obsolescence	- / 0.000	- / 2.079	- / 2.320	- / 4.511	- / -	- / 4.511	- / 1.770	- / 0.150	- / 10.981	- / 12.436	- / 22.114	- / 56.361	
Subtotal: Installation	- / 0.000	- / 2.079	- / 2.320	- / 4.511	- / -	- / 4.511	- / 1.770	- / 0.150	- / 10.981	- / 12.436	- / 22.114	- / 56.361	
Total													
Total Cost (Procurement + Support + Installation)	6.941	4.333	6.830	7.207	-	7.207	1.885	10.669	23.962	27.863	31.868	121.558	

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Exhibit P-3a, Individual Modification: PB 2016 Navy			Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9		P-1 Line Item Number / Title: 0946 / LPD Class Support Equipment			Modification Number / Title: 1 / CJ030 - HW/SW Obsolescence

Modification Item 1 of 1: CJ030 - HW/SW Obsolescence

Manufacturer Information							
Manufacturer Name: Raytheon Co.				Manufacturer Location: San Diego, CA			
Administrative Leadtime (in Months): 3				Production Leadtime (in Months): 8			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Apr 2014	Apr 2015	Jan 2016				
Delivery Dates	Dec 2014	Dec 2015	Sep 2016				

Installation Information

Method of Implementation: AIT:: Installation Name: HW/SW Obsolescence

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	16 / 2.079	11 / 0.847	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	27 / 2.926
FY 2014	- / -	- / -	15 / 1.473	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	15 / 1.473
FY 2015	- / -	- / -	- / -	29 / 4.511	- / -	29 / 4.511	- / -	- / -	- / -	- / -	- / -	29 / 4.511
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	16 / 1.770	- / -	- / -	- / -	- / -	16 / 1.770
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.150	- / -	- / -	- / -	1 / 0.150
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	9 / 10.981	- / -	- / -	9 / 10.981
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	14 / 12.436	- / -	14 / 12.436
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	11 / 9.730	11 / 9.730
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	14 / 12.384	14 / 12.384
Total	- / -	16 / 2.079	26 / 2.320	29 / 4.511	- / -	29 / 4.511	16 / 1.770	1 / 0.150	9 / 10.981	14 / 12.436	25 / 22.114	136 / 56.361

Installation Schedule																															
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020					
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	-	6	-	-	10	-	13	7	6	-	20	-	9	2	12	1	1	1	-	-	-	-	4	1	4	8	-	3	3	25	136
Out	-	-	-	6	-	10	-	-	20	15	-	20	-	-	2	7	6	1	-	-	1	-	-	4	1	4	1	-	10	28	136

Footnotes:

(1) HW/SW Obsolescence (CJ030) includes funding for procurement and installation of equipment to correct obsolescence issues on (11) mission critical systems. Fielding plan varies by hull configuration and includes up to (17) alterations of varying scope, cost and hull applicability. In each FY, PMS 470 is procuring for and executing a different number of LPD 17 Class CNO availabilities. Each ship requires a different number of alterations to be installed, and these alteration packages vary in scope and cost based on individual ship configurations. Because of this, unit costs vary between FYs. Significant changes since PB 15 budget due to LPD 17 Class availability shifts between fiscal years due to ship's operational schedule. FY14 procurement funds (2) shipsets of equipment for install during (2) FY15 availabilities on LPD 20 and LPD 22. FY15 procurement funds (3) shipsets of equipment for install during (3) FY16 availabilities on LPD 21, LPD 23 and LPD 24. FY16 procurement funds (6) shipsets of equipment for install

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0946 / LPD Class Support Equipment	Modification Number / Title: 1 / CJ030 - HW/SW Obsolescence
during (6) FY17 availabilities on LPD 17, LPD 18, LPD 19, LPD 20, LPD 22 and LPD 25. Average unit cost of these procurements varies due to scope of the specific alterations which make up each shipset package, which is determined by individual hull configurations and length/ type of CNO availability that the install will take place during.		

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0946 / LPD Class Support Equipment					Modification Number / Title: 2 / CJ040 HM&E Electrical Modifications			

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	0.000	-	-	2.244	-	2.244	3.366	2.992	5.236	5.366	2.244	21.448
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	0.000	-	-	2.244	-	2.244	3.366	2.992	5.236	5.366	2.244	21.448
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	0.000	-	-	2.244	-	2.244	3.366	2.992	5.236	5.366	2.244	21.448
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

[HM&E Electrical Upgrades] HME Modernization funding is provided to correct mission, safety and reliability, issues on electrical systems and ultimately resolve maintenance intensive system concerns. HM&E Electrical Modifications include:
SWAN UPS- Space Based UPS Reduction

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0946 / LPD Class Support Equipment				Modification Number / Title: 2 / CJ040 HM&E Electrical Modifications					
Models of Systems Affected: HM&E Electrical Modifications				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: CJ040 HM&E Electrical Modifications													
B Kits													
Recurring													
1.1.1) HM&E Electrical Upgrades - NonOrganic ⁽²⁾	- / -	- / -	- / -	3 / 2.244	- / -	3 / 2.244	- / 1.116	3 / 2.992	3 / 3.027	1 / 3.015	1 / 0.748	11 / 13.142	
Subtotal: Recurring	- / 0.000	- / -	- / -	- / 2.244	- / -	- / 2.244	- / 1.116	- / 2.992	- / 3.027	- / 3.015	- / 0.748	- / 13.142	
Subtotal: CJ040 HM&E Electrical Modifications	- / -	- / -	- / -	3 / 2.244	- / -	3 / 2.244	- / 1.116	3 / 2.992	3 / 3.027	1 / 3.015	1 / 0.748	11 / 13.142	
Subtotal: Procurement, All Modification Items	- / 0.000	- / -	- / -	- / 2.244	- / -	- / 2.244	- / 1.116	- / 2.992	- / 3.027	- / 3.015	- / 0.748	- / 13.142	
Installation													
Modification Item 1 of 1: CJ040 HM&E Electrical Modifications	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / 2.250	- / -	- / 2.209	- / 2.351	- / 1.496	- / 8.306	
Subtotal: Installation	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / 2.250	- / -	- / 2.209	- / 2.351	- / 1.496	- / 8.306	
Total													
Total Cost (Procurement + Support + Installation)	0.000	-	-	2.244	-	2.244	3.366	2.992	5.236	5.366	2.244	21.448	

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0946 / LPD Class Support Equipment	Modification Number / Title: 2 / CJ040 HM&E Electrical Modifications

Modification Item 1 of 1: CJ040 HM&E Electrical Modifications

Manufacturer Information							
Manufacturer Name: Various				Manufacturer Location: Various			
Administrative Leadtime (in Months): 1				Production Leadtime (in Months): 8			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates			Nov 2015				
Delivery Dates			Jul 2016				

Installation Information

Method of Implementation: AIT:: Installation Name: HM&E Electrical Upgrades

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	3 / 2.250	- / -	- / -	- / -	- / -	3 / 2.250
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 2.209	- / -	- / -	3 / 2.209
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 2.351	- / -	3 / 2.351
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.748	1 / 0.748
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.748	1 / 0.748
Total	- / -	- / -	- / -	- / -	- / -	- / -	3 / 2.250	- / -	3 / 2.209	3 / 2.351	2 / 1.496	11 / 8.306

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	-	-	-	-	-	1	-	-	2	1	-	1	1	2	11	
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	1	-	-	-	-	1	-	-	2	-	-	2	3	11	

Footnotes:

(2) HM&E Mod package fluctuates from year to year according to the LPD avail schedule; cost estimates dependent on the ship configuration for the avails during specific years and the magnitude of modification required during the availability. HM&E Mod (Electrical, Survivability, Mechanical/ Auxiliary): Procurement and install of equipment for (17) different mission critical systems, and (19) different alterations (each with varying scope and hull applicability based on ship configurations on 11 ships). FY16 Procurements support the Installations on the LPD 17 (FY17 Dry-Docking Phased Maintenance Availability, DPMA), LPD 18 (FY17 Dry-Docking Selected Restricted Availability, DSRA), and LPD 19 (FY17 DPMA)

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0946 / LPD Class Support Equipment					Modification Number / Title: 3 / CJ050 - HM&E Survivability Modifications			

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	0.048	0.072	0.736	1.288	-	1.288	2.875	3.641	4.666	1.591	1.178	16.095
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	0.048	0.072	0.736	1.288	-	1.288	2.875	3.641	4.666	1.591	1.178	16.095
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	0.048	0.072	0.736	1.288	-	1.288	2.875	3.641	4.666	1.591	1.178	16.095
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

[HM&E Survivability Modifications] HME Modernization funding is provided to correct mission, safety and reliability, issues on HM&E systems (impacting ship survivability) and ultimately resolve maintenance intensive system concerns. HM&E Survivability Modifications include:
Halocarbon Monitor Upgrade, Damage Control Action Management System (DCAMS) 1.1 upgrade, Smoke Ejection System (SES) Redesign, Night Vision Device (NVD) Well Deck Upgrades, Composite Ventilation Louvers and Screens.

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0946 / LPD Class Support Equipment						Modification Number / Title: 3 / CJ050 - HM&E Survivability Modifications			
Models of Systems Affected: HM&E Survivability Modifications				Modification Type:						Related RDT&E PEs:			
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
<i>Modification Item 1 of 1:</i> CJ050 - HM&E Survivability Modifications													
B Kits													
Recurring													
1.1.1) HM&E Survivability Modifications - NonOrganic ⁽³⁾	1 / 0.048	- / 0.040	2 / 0.736	5 / 1.196	- / -	5 / 1.196	- / 1.669	12 / 3.641	5 / 1.446	3 / 0.541	2 / 0.306	30 / 9.623	
<i>Subtotal: Recurring</i>	- / 0.048	- / 0.040	- / 0.736	- / 1.196	- / -	- / 1.196	- / 1.669	- / 3.641	- / 1.446	- / 0.541	- / 0.306	- / 9.623	
<i>Subtotal: CJ050 - HM&E Survivability Modifications</i>	1 / 0.048	- / 0.040	2 / 0.736	5 / 1.196	- / -	5 / 1.196	- / 1.669	12 / 3.641	5 / 1.446	3 / 0.541	2 / 0.306	30 / 9.623	
<i>Subtotal: Procurement, All Modification Items</i>	- / 0.048	- / 0.040	- / 0.736	- / 1.196	- / -	- / 1.196	- / 1.669	- / 3.641	- / 1.446	- / 0.541	- / 0.306	- / 9.623	
Installation													
<i>Modification Item 1 of 1:</i> CJ050 - HM&E Survivability Modifications	- / 0.000	- / 0.032	- / -	- / 0.092	- / -	- / 0.092	- / 1.206	- / -	- / 3.220	- / 1.050	- / 0.872	- / 6.472	
<i>Subtotal: Installation</i>	- / 0.000	- / 0.032	- / -	- / 0.092	- / -	- / 0.092	- / 1.206	- / -	- / 3.220	- / 1.050	- / 0.872	- / 6.472	
Total													
Total Cost (Procurement + Support + Installation)	0.048	0.072	0.736	1.288	-	1.288	2.875	3.641	4.666	1.591	1.178	16.095	

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0946 / LPD Class Support Equipment	Modification Number / Title: 3 / CJ050 - HM&E Survivability Modifications

Modification Item 1 of 1: CJ050 - HM&E Survivability Modifications

Manufacturer Information

Manufacturer Name: Various	Manufacturer Location: Various
Administrative Leadtime (in Months): 1	Production Leadtime (in Months): 8

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates		Apr 2015	Jan 2016				
Delivery Dates		Dec 2015	Sep 2016				

Installation Information

Method of Implementation: AIT:: Installation Name: HM&E Survivability Modifications

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	1 / 0.032	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.032
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	2 / 0.092	- / -	2 / 0.092	- / -	- / -	- / -	- / -	- / -	2 / 0.092
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	5 / 1.206	- / -	- / -	- / -	- / -	5 / 1.206
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	12 / 3.220	- / -	- / -	12 / 3.220
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 1.050	- / -	5 / 1.050
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.523	3 / 0.523
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.349	2 / 0.349
Total	- / -	1 / 0.032	- / -	2 / 0.092	- / -	2 / 0.092	5 / 1.206	- / -	12 / 3.220	5 / 1.050	5 / 0.872	30 / 6.472

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	1	-	-	-	-	-	1	-	1	2	1	-	2	-	-	-	-	-	6	3	3	2	-	2	1	5	30
Out	-	-	-	-	-	-	1	-	-	-	-	1	-	1	2	-	1	2	-	-	-	-	-	6	3	3	-	-	4	6	30

Footnotes:

⁽³⁾ Note: Significant changes since PB15 budget due to the shift of USS SAN ANTONIO Dry-docking Phased Maintenance Availability (DPMA) shift from FY16 to FY17. HM&E Mod package fluctuates from year to year according to the LPD avail schedule; cost estimates dependent on the ship configuration for the avails during specific years and the magnitude of modification required during the availability. HM&E Mod (Electrical, Survivability, Mechanical/ Auxiliary): Procurement and install of equipment for (17) different mission critical systems, and (19) different alterations (each with varying scope and hull applicability based on ship configurations on 11 ships).

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0946 / LPD Class Support Equipment	Modification Number / Title: 4 / CJ060 - HM&E Mechanical/Auxiliary Modifications

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ <i>in Millions</i>)	6.546	12.820	23.063	29.148	-	29.148	32.321	35.450	33.263	31.593	21.553	225.757
Less PY Advance Procurement (\$ <i>in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ <i>in Millions</i>)	6.546	12.820	23.063	29.148	-	29.148	32.321	35.450	33.263	31.593	21.553	225.757
Plus CY Advance Procurement (\$ <i>in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ <i>in Millions</i>)	6.546	12.820	23.063	29.148	-	29.148	32.321	35.450	33.263	31.593	21.553	225.757
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ <i>in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ <i>in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

[HM&E Mechanical/Auxiliary Modifications] HME Modernization funding is provided to correct mission, safety and reliability, issues on mechanical and auxiliary systems and ultimately resolve maintenance intensive system concerns. HM&E Mechanical/Auxiliary Modifications include: Mide Bulkhead Shaft Seal, Helo Hangar Door Control Modifications, VCHT Ejector Pump PLC Upgrade, 2nd Pass Reverse Osmosis (RO) Unit Upgrade, RO Unit Potable Water EDG Recirculation Capability, Aviation Maintenance Bridge Crane Replacement, Knuckleboom Crane Improvements, Geislinger Coupling Improvements, Scullery Improvements and Gaylord System Improvements.

Funding for system design and development to include Non-Recurring Engineering (NRE) and First Article Procurement and Testing required two year prior to first install.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0946 / LPD Class Support Equipment					Modification Number / Title: 4 / CJ060 - HM&E Mechanical/Auxiliary Modifications				
Models of Systems Affected: HM&E Mechanical/ Auxiliary Modifications				Modification Type:					Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: CJ060 - HM&E Mechanical/ Auxiliary Modifications													
B Kits													
Recurring													
1.1.1) HM&E Mechanical/Auxiliary Modifications - NonOrganic ⁽⁴⁾		- / 6.546	2 / 12.820	20 / 17.684	27 / 21.306	- / -	27 / 21.306	2 / 11.449	40 / 30.342	20 / 13.327	24 / 23.302	11 / 4.244	146 / 141.020
Subtotal: Recurring		- / 6.546	- / 12.820	- / 17.684	- / 21.306	- / -	- / 21.306	- / 11.449	- / 30.342	- / 13.327	- / 23.302	- / 4.244	- / 141.020
Subtotal: CJ060 - HM&E Mechanical/Auxiliary Modifications		- / 6.546	2 / 12.820	20 / 17.684	27 / 21.306	- / -	27 / 21.306	2 / 11.449	40 / 30.342	20 / 13.327	24 / 23.302	11 / 4.244	146 / 141.020
Subtotal: Procurement, All Modification Items		- / 6.546	- / 12.820	- / 17.684	- / 21.306	- / -	- / 21.306	- / 11.449	- / 30.342	- / 13.327	- / 23.302	- / 4.244	- / 141.020
Installation													
Modification Item 1 of 1: CJ060 - HM&E Mechanical/ Auxiliary Modifications		- / 0.000	- / -	- / 5.379	- / 7.842	- / -	- / 7.842	- / 20.872	- / 5.108	- / 19.936	- / 8.291	- / 17.309	- / 84.737
Subtotal: Installation		- / 0.000	- / -	- / 5.379	- / 7.842	- / -	- / 7.842	- / 20.872	- / 5.108	- / 19.936	- / 8.291	- / 17.309	- / 84.737
Total													
Total Cost (Procurement + Support + Installation)		6.546	12.820	23.063	29.148	-	29.148	32.321	35.450	33.263	31.593	21.553	225.757

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0946 / LPD Class Support Equipment	Modification Number / Title: 4 / CJ060 - HM&E Mechanical/Auxiliary Modifications

Modification Item 1 of 1: CJ060 - HM&E Mechanical/Auxiliary Modifications

Manufacturer Information

Manufacturer Name: Various	Manufacturer Location: Various
Administrative Leadtime (in Months): 1	Production Leadtime (in Months): 8

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates		Nov 2014	Jan 2016				
Delivery Dates		Jul 2015	Sep 2016				

Installation Information

Method of Implementation: AIT:: Installation Name: HM&E Mechanical/Auxiliary Modifications

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / -	2 / 5.379	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 5.379
FY 2015	- / -	- / -	- / -	20 / 7.842	- / -	20 / 7.842	- / -	- / -	- / -	- / -	- / -	20 / 7.842
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	27 / 20.872	- / -	- / -	- / -	- / -	27 / 20.872
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 5.108	- / -	- / -	- / -	2 / 5.108
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	40 / 19.936	- / -	- / -	40 / 19.936
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	20 / 8.291	- / -	20 / 8.291
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	24 / 11.869	24 / 11.869
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	11 / 5.440	11 / 5.440
Total	- / -	- / -	2 / 5.379	20 / 7.842	- / -	20 / 7.842	27 / 20.872	2 / 5.108	40 / 19.936	20 / 8.291	35 / 17.309	146 / 84.737

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	2	-	14	-	6	12	6	5	4	-	-	2	-	-	14	9	17	10	-	4	6	35	146
Out	-	-	-	-	-	-	-	-	-	2	-	14	-	6	12	-	11	4	-	-	2	-	-	14	9	17	-	-	14	41	146

Footnotes:

(4) Significant changes since PB15 budget due to the shift of USS SAN ANTONIO Dry-docking Phased Maintenance Availability (DPMA) shift from FY16 to FY17. Based on FY14 Type Commander (TYCOM) request, PMS 470 has revised the fielding plan for Auxiliary Seawater (ASW)/ Firemain (FM) modifications. These major modifications include system chlorinator installations, replacement of bronze valves with titanium valves and modification of system branch piping. Due to severity of system biological fouling, Fleet and Program Office emphasis was to install chlorinators at the earliest possible availability on each ship (LPD 17-22). To expedite the chlorinator installations, the remaining valve replacement and branch piping modifications will have to be executed in additional phases during each ships following availabilities. HM&E Mod package fluctuates from year to year according to the LPD Avail schedule; cost estimates dependent on the ship configuration for the avails during specific years and the magnitude

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0946 / LPD Class Support Equipment	Modification Number / Title: 4 / CJ060 - HM&E Mechanical/Auxiliary Modifications

of modification required during the availability. HM&E Mod (Electrical, Survivability, Mechanical/ Auxiliary): Procurement and install of equipment for (17) different mission critical systems, and (19) different alterations (each with varying scope and hull applicability based on ship configurations on 11 ships). Unit costs vary between FYs because the HM&E Mechanical/ Auxiliary line is comprised of multiple different ship alterations, each with varying scope and hull applicability. Each ship requires a different number of alterations to be installed, and these alteration packages vary in complexity and cost based on individual ship configurations. Alteration installation schedule is dictated by the CNO availability schedule, and the number of CNO availabilities for LPD 17 class ships fluctuates greatly per FY (3-6 availabilities per FY). The above variables drive fluctuation in average unit cost between FYs in the exhibits.

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0946 / LPD Class Support Equipment						Modification Number / Title: 5 / CJ070 SWAN-CANES Integration		
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	9.100	1.000	4.390	13.546	-	13.546	17.128	2.820	2.880	2.944	-	53.808
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	9.100	1.000	4.390	13.546	-	13.546	17.128	2.820	2.880	2.944	-	53.808
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	9.100	1.000	4.390	13.546	-	13.546	17.128	2.820	2.880	2.944	-	53.808
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

[SWAN-CANES Integration] The results of the Shipboard Wide Area Network (SWAN) / Consolidated Afloat Networks and Enterprise Services (CANES) study directed the replacement of the C4I capability of the LPD 17 Class SWAN with CANES and the conversion of the non-C4I SWAN into a new HM&E Network. SWAN funding is required to field the new HM&E Network in support of the CANES installation. SWAN funding is also required to sustain the legacy SWAN, until its replacement, to address SWAN obsolescence, reliability issues, performance concerns, and emergent Fleet requirements including enabling Cryptologic Log On (CLO), eradicating Windows XP, replacing aging obsolete network hardware (e.g., servers and core switches), and maintaining the Information Assurance posture of the Common Operating Environment (COE). SWAN sustainment modifications will be conducted in parallel with HM&E Network conversion and will be phased out as CANES installations begin.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0946 / LPD Class Support Equipment				Modification Number / Title: 5 / CJ070 SWAN-CANES Integration					
Models of Systems Affected: LPD 17 Class SWAN-CANES Integration				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: CJ070 SWAN-CANES Integration													
B Kits													
Recurring													
1.1.1) SWAN-CANES Integration - NonOrganic ⁽⁵⁾	23 / 2.865	- / -	18 / 1.212	15 / 8.580	- / -	15 / 8.580	4 / 8.710	5 / 0.920	2 / 0.932	2 / 0.955	- / -	69 / 24.174	
Subtotal: Recurring	- / 2.865	- / -	- / 1.212	- / 8.580	- / -	- / 8.580	- / 8.710	- / 0.920	- / 0.932	- / 0.955	- / -	- / 24.174	
Non-Recurring													
1.2.1) SWAN-CANES Integration - Organic ⁽⁶⁾	- / 3.235	- / 1.000	- / 0.200	- / 1.800	- / -	- / 1.800	- / 0.849	- / -	- / -	- / -	- / -	- / 7.084	
Subtotal: Non-Recurring	- / 3.235	- / 1.000	- / 0.200	- / 1.800	- / -	- / 1.800	- / 0.849	- / -	- / -	- / -	- / -	- / 7.084	
Subtotal: CJ070 SWAN-CANES Integration	23 / 6.100	- / 1.000	18 / 1.412	15 / 10.380	- / -	15 / 10.380	4 / 9.559	5 / 0.920	2 / 0.932	2 / 0.955	- / -	69 / 31.258	
Subtotal: Procurement, All Modification Items	- / 6.100	- / 1.000	- / 1.412	- / 10.380	- / -	- / 10.380	- / 9.559	- / 0.920	- / 0.932	- / 0.955	- / -	- / 31.258	
Installation													
Modification Item 1 of 1: CJ070 SWAN-CANES Integration													
Subtotal: Installation	- / 3.000	- / -	- / 2.978	- / 3.166	- / -	- / 3.166	- / 7.569	- / 1.900	- / 1.948	- / 1.989	- / -	- / 22.550	
Total													
Total Cost (Procurement + Support + Installation)	9.100	1.000	4.390	13.546	-	13.546	17.128	2.820	2.880	2.944	-	53.808	

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Exhibit P-3a, Individual Modification: PB 2016 Navy			Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9		P-1 Line Item Number / Title: 0946 / LPD Class Support Equipment			Modification Number / Title: 5 / CJ070 SWAN-CANES Integration

Modification Item 1 of 1: CJ070 SWAN-CANES Integration

Manufacturer Information							
Manufacturer Name: Raytheon				Manufacturer Location: San Diego, CA			
Administrative Leadtime (in Months): 2				Production Leadtime (in Months): 7			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Apr 2014	Apr 2015	Apr 2016				
Delivery Dates	Sep 2014	Nov 2015	Nov 2016				

Installation Information

Method of Implementation: AIT:: Installation Name: SWAN-CANES Integration

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	8 / 3.000	- / -	15 / 2.978	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	23 / 5.978
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	18 / 3.166	- / -	18 / 3.166	- / -	- / -	- / -	- / -	- / -	18 / 3.166
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	15 / 7.569	- / -	- / -	- / -	- / -	15 / 7.569
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 1.900	- / -	- / -	- / -	4 / 1.900
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 1.948	- / -	- / -	5 / 1.948
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 1.989	- / -	2 / 1.989
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / -	2 / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	8 / 3.000	- / -	15 / 2.978	18 / 3.166	- / -	18 / 3.166	15 / 7.569	4 / 1.900	5 / 1.948	2 / 1.989	2 / -	69 / 22.550

Installation Schedule																															
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	8	-	-	-	-	8	2	5	-	-	13	-	5	1	8	5	1	1	1	1	1	1	-	1	3	-	-	1	1	2	69
Out	8	-	-	-	-	6	4	-	5	-	-	13	-	5	-	8	6	1	-	2	1	1	1	-	1	3	-	-	1	3	69

Footnotes:

⁽⁵⁾ The PB15 Exhibit "Qty (Each)" represents the number of ship availabilities in the specific FY. The "Qty (Each)" for PB16 was more correctly noted as the total number of upgrades performed in the FY; multiple upgrades occur in any specific availability depending on Shipboard Wide Area Network (SWAN) configuration for each hull.

⁽⁶⁾ FY15 Availabilities: LPD 19 - SWAN Server (Dell)/COMPOSE 3.0; SWAN Server Compose 4.0; Network Storage Device (NSD); SWAN Transport/Adaptation Software; Acatel Operating System Upgrade; and SIPRNET CLO. LPD 25 - SWAN Transport/Adaptation Software; and SIPRNET CLO. LPD 22 - SWAN Transport/Adaptation Software; and SIPRNET CLO. LPD 20 - SWAN Server Compose 4.0; Network Storage Device (NSD); SWAN Transport/Adaptation Software; Acatel Operating System Upgrade; and SIPRNET CLO. FY16 Availabilities: LPD 21 -SWAN Server (Dell)/COMPOSE 3.0; SWAN Server Compose

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LI 0946 - LPD Class Support Equipment
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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy	Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment	P-1 Line Item Number / Title: 0950 / Strategic Platform Support Equip

ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:					Other Related Program Elements:				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	91.229	12.986	11.558	18.563	-	18.563	17.226	15.115	13.998	9.968	5.378	196.02
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	91.229	12.986	11.558	18.563	-	18.563	17.226	15.115	13.998	9.968	5.378	196.02
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	91.229	12.986	11.558	18.563	-	18.563	17.226	15.115	13.998	9.968	5.378	196.02
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Funding in this P-1 line provides for the procurement of tactical Hull, Mechanical and Electrical (HM&E) equipment that will be installed aboard ships and in the facilities at the TRIDENT Refit Facility (TRIREFFAC), Navy Intermediate Maintenance Facility (NAVIMFAC) and TRIDENT Training Facility (TRITRAFAC). The TRIDENT Refit Facility and Navy Intermediate Maintenance Facility (NAVIMFAC) are dedicated shore support facilities providing a full range of industrial support. The TRITRAFAC provides the crews for the SSBN 726 Class Submarines with realistic training experience in operating and maintaining shipboard equipment.

[P40A / HH009 EQUIPMENT HM&E & SWS/SS ALTERATION]: This provides for the replacement of obsolete equipment on board of SSBN 726 Class Submarines and at dedicated Shore Support Facilities (TLCSE, TRITRAFAC (B), NAVIMFAC (B), TRITRAFAC (KB), TRIREFFAC (KB), Major Shore Spares (MSS)). These alterations are necessary in order to replace obsolete/outdated equipment with new equipment to maintain or increase mission capabilities, replace or modify components/systems which have proven to be unreliable, correct design and safety problems and reduce fleet maintenance burdens. Funds provide for multiple efforts to ensure that the OHIO Class Ship Control Subsystem, both hardware and software components, support the extended life of the OHIO Class submarine platforms. In FY99 and again in FY06 a NUWC KEYPORT study identified a number of obsolete electronic components in the Ship Control Station (27 out of 107) that are no longer available. The FY06 study recommended that the Ship Control ISEA develop and execute a program that would address the near term obsolescence issues and ensure the continued availability of the subsystem in the out years. Alterations and actions are done at the lowest practicable and authorized level (taking into consideration urgency, priority, capability, capacity and cost). Alterations to SSBN 726 Class Submarines are scheduled for accomplishment at the TRIREFFAC, Kings Bay and NAVIMFAC, Bangor. This requires equipment procurement and installation, technical planning, training, and associated resources. This line provides for material procurement necessary to install the required alterations to SSBN 726 Class Submarines at the NAVIMFAC, Bangor, and the TRIREFFAC, Kings Bay. Additionally, this line provides for the utilization of specially trained and dedicated installation teams to ensure accelerated and correct installation of complex and high priority alterations within specific time frames. Provided are comprehensive program management and execution, including planning, direction, control, installation, integration, and coordination of specifically selected safety related, mission enhancement or technical HM&E alterations. Starting in FY12, SSBN SWSS OER Upgrades are planned for Ventilation Alarm Monitoring Panel (VAMP) and the Missile Heating and Cooling Proportional Controllers. Both upgrades are required to support Strategic Programs' SWS Integration program (Mod6/Mod7) which replaces the current Launcher, Fire Control and Weapons Support electronics. Starting in FY16, two SSBN/GN OER transducer upgrade programs are planned, one for Hovering Transducers and the second for MDD/MHC Differential Pressure Transducers. Both transducer types are estimated to be out of spares by 2018 and will require form/fit/function replacement. The Hovering System on both SSBNs and SSGNs is experiencing obsolescence issues due to aging technology and terminated vendor component production as of 2000. The Missile Drying and Dehumidification (MDD) system and Missile Heating and Cooling (MHC) system on both SSBNs and SSGNs provides a stable temperature and humidity environment for the missile tubes, and has similar obsolescence issues, with terminated vendor component production as of 2009. The Ships Hovering System is experiencing obsolescence issues due to aging technology and terminated vendor component production in 2000. The MDD/ MHC Differential Pressure Transducers for the Ship's Missile Drying and Dehumidification (MDD) system and Missile Heating and Cooling (MHC) system are utilized onboard the OHIO Class to provide a stable humidity environment for D5 missiles.

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment		P-1 Line Item Number / Title: 0950 / Strategic Platform Support Equip
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:
[P40A / HH012 EQUIPMENT HM&E TRIDENT ENGINEERING AVAILABILITY]: TRIDENT Engineered Availability (EA) material support funding is required to provide replacement and contingency material to support the critical path schedule during the SSBN 726 Class Submarine Engineered Availabilities (EAs) commencing in FY93 and continuing through the operational life of the submarine. Funding is also required to formulate or procure complex tools and fixtures required to reduce EA scheduled durations. This program also provides funding for installation of Depot level alterations packages, Quality Assurance (QA) oversight and certification by Supervisor Of Shipbuilding, Groton (SOS Groton) of OPN shipalts performed by Electric Boat Corporation (EB), Liaison Action Requests and Selected Record Drawings (LAR/ SRD) mark ups for Shipalt related work, NUWC Newport test support and deck plate coordination of Alteration Installation Team (AIT) work for Extended Refit Periods (ERPs)/ modernization periods. [P40A / HH0GN SSGN MODIFICATIONS]: Provides for procurement of SSGN unique system components that will be installed during planned modernization periods. Also provides funding to perform integrated testing of these unique systems to ensure satisfactory operation with other HM&E and Combat Systems. Beginning in FY11, funds are provided for procurement of Submarine Special Operations Forces (SOF) unique system components that will be installed during planned modernization periods. [P40A / SOF HH0GN]: Additionally beginning in FY11, funds are provided for installation of Submarine Special Operations Forces (SOF) unique system components. Starting in FY12, installation of SSBN SWSS OER upgrades are planned for Ventilation Alarm Monitoring Panel (VAMP) and Missile Heating and Cooling Proportional Controllers. Starting in FY14, installation of SSBN/SSGN Ship Control Station (SCS) OER upgrades. [P3A - 3 / SSTG ROTORS OHIO CLASS PROCUREMENT]: Provides for the procurement of material and manufacturing of Ships Service Turbine Generator (SSTG) Rotors on OHIO Class submarines. This cost code was established for FY10. This is due to shifting Engineered Refueling Overhauls (EROs) beginning in FY10 from SCN funding to O&MN, OPN, and WPN funding. This rotor effort used to be in the SSBN ERO SCN line and the transferred funding for this effort is OPN. Replaces both SSTG rotors (port and starboard). Rotor retaining rings and insufficient life of critical rotor internal components such as radial conductors, J-straps, rotor body tooth tops, and rotor winding transition area are primary liabilities limiting rotor set operational life. The older rotor design utilized retaining rings that are subject to stress, corrosion, and cracking when exposed to moisture. This stress corrosion and cracking could result in catastrophic failure resulting in personnel and ship safety concerns. Starting in FY12, the last procurement, a Major Shore Spare (MSS), is procured with no installation required.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy						Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment				P-1 Line Item Number / Title: 0950 / Strategic Platform Support Equip				
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:			Other Related Program Elements:		
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
Strategic Platform Support Equip	P-40a, P-5a		- / 62.052	- / 10.549	- / 7.837	- / 6.980	- / -	- / 6.980
1 / EQUIPMENT HM&E SWS/SS ALTERATION SSBN SWSS OER UPGRADE ()	P-3a		- / 3.611	- / 0.939	- / 0.941	- / 3.000	- / -	- / 3.000
2 / EQUIPMENT HM&E SWS/SS ALTERATION SCS SSBN/SSGN PROC ()	P-3a		- / 2.600	- / 1.498	- / 2.780	- / 8.583	- / -	- / 8.583
3 / SSTG ROTORS OHIO CLASS PROCUREMENT ()	P-3a		- / 22.966	- / -	- / -	- / -	- / -	- / -
Total Gross/Weapon System Cost			- / 91.229	- / 12.986	- / 11.558	- / 18.563	- / -	- / 18.563
Exhibits Schedule			FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
Strategic Platform Support Equip	P-40a, P-5a		- / -	- / -	- / -	- / -	- / -	- / -
1 / EQUIPMENT HM&E SWS/SS ALTERATION SSBN SWSS OER UPGRADE ()	P-3a		- / 2.000	- / -	- / -	- / -	- / -	- / 10.491
2 / EQUIPMENT HM&E SWS/SS ALTERATION SCS SSBN/SSGN PROC ()	P-3a		- / 8.890	- / 7.318	- / 7.852	- / 4.456	- / 4.566	- / 48.543
3 / SSTG ROTORS OHIO CLASS PROCUREMENT ()	P-3a		- / -	- / -	- / -	- / -	- / -	- / 22.966
Total Gross/Weapon System Cost			- / 17.226	- / 15.115	- / 13.998	- / 9.968	- / 5.378	- / 196.021
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.								
Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.								

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9						P-1 Line Item Number / Title: 0950 / Strategic Platform Support Equip									Aggregated Items Title: Strategic Platform Support Equip					
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.																				
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) HH009 EQUIPMENT HM&E & SWS/SS ALTERATION ⁽¹⁾																				
1.1) SCS PY SHIPALT DEV	A		-	-	24.548	-	-	6.005	-	-	3.852	-	-	1.029	-	-	-	-	-	1.029
1.2) SWSS SSBN/SSGN Hovering System DP Transducers	A		-	-	-	-	-	-	-	-	-	-	-	1.000	-	-	-	-	-	1.000
1.3) SWSS MDD/MHC Differential Pressure Transducers	A		-	-	-	-	-	-	-	-	-	-	-	1.000	-	-	-	-	-	1.000
Subtotal: 1) HH009 EQUIPMENT HM&E & SWS/SS ALTERATION			-	-	24.548	-	-	6.005	-	-	3.852	-	-	3.029	-	-	-	-	-	3.029
2) HH012 EQUIPMENT HM&E TRIDENT ENGINEERING AVAILABILITY																				
2.1) SHIPALT INSTALLATION AND ENGINEERING SERVICES ^(†)	A		4,205K	3	12.616	1,581K	1	1.581	1,335K	1	1.335	1,242K	1	1.242	-	-	-	1,242K	1	1.242
2.2) CCS EQUIPMENT REFURBISHMENT & SHIPBOARD TESTING ^(†)	A		3,596K	3	10.789	1,279K	1	1.279	1,081K	1	1.081	1,107K	1	1.107	-	-	-	1,107K	1	1.107
2.3) HM&E EQUIPMENT REFURBISHMENT & SHIPBOARD TESTING ^(†)	A		2,267K	3	6.802	903,000.00	1	0.903	763,000.00	1	0.763	782,000.00	1	0.782	-	-	-	782,000.00	1	0.782
Subtotal: 2) HH012 EQUIPMENT HM&E TRIDENT ENGINEERING AVAILABILITY			-	-	30.207	-	-	3.763	-	-	3.179	-	-	3.131	-	-	-	-	-	3.131
3) HH0GN SSGN MODIFICATIONS																				
3.1) SOF UPGRADES	A		-	-	1.682	-	-	0.503	-	-	0.587	-	-	0.528	-	-	-	-	-	0.528
Subtotal: 3) HH0GN SSGN MODIFICATIONS			-	-	1.682	-	-	0.503	-	-	0.587	-	-	0.528	-	-	-	-	-	0.528
4) SOF HH0GN ⁽²⁾																				
4.1) SOF UPGRADES	A		-	-	1.977	-	-	0.278	-	-	0.219	-	-	0.292	-	-	-	-	-	0.292
Subtotal: 4) SOF HH0GN			-	-	1.977	-	-	0.278	-	-	0.219	-	-	0.292	-	-	-	-	-	0.292
5) HH013 SSTG Rotor MSS ⁽³⁾																				

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9								P-1 Line Item Number / Title: 0950 / Strategic Platform Support Equip							Aggregated Items Title: Strategic Platform Support Equip				

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
5.1) OHIO CLASS PROCUREMENT MSS ^(†)	A		3,638K	1	3.638	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: 5) HH013 SSTG Rotor MSS</i>			-	-	3.638	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	62.052	-	-	10.549	-	-	7.837	-	-	6.980	-	-	-	-	-	6.980

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2017			FY 2018			FY 2019			FY 2020			To Complete			Total Cost		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) HH009 EQUIPMENT HM&E & SWS/SS ALTERATION ⁽¹⁾																				
1.1) SCS PY SHIPALT DEV	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1.2) SWSS SSBN/SSGN Hovering System DP Transducers	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1.3) SWSS MDD/MHC Differential Pressure Transducers	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 1) HH009 EQUIPMENT HM&E & SWS/SS ALTERATION			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2) HH012 EQUIPMENT HM&E TRIDENT ENGINEERING AVAILABILITY																				
2.1) SHIPALT INSTALLATION AND ENGINEERING SERVICES ^(†)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2.2) CCS EQUIPMENT REFURBISHMENT & SHIPBOARD TESTING ^(†)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2.3) HM&E EQUIPMENT REFURBISHMENT & SHIPBOARD TESTING ^(†)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 2) HH012 EQUIPMENT HM&E TRIDENT ENGINEERING AVAILABILITY			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9							P-1 Line Item Number / Title: 0950 / Strategic Platform Support Equip								Aggregated Items Title: Strategic Platform Support Equip					
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2017			FY 2018			FY 2019			FY 2020			To Complete			Total Cost		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
3) HH0GN SSGN MODIFICATIONS																				
3.1) SOF UPGRADES	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 3) HH0GN SSGN MODIFICATIONS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4) SOF HH0GN ⁽²⁾																				
4.1) SOF UPGRADES	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 4) SOF HH0GN			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5) HH013 SSTG Rotor MSS ⁽³⁾																				
5.1) OHIO CLASS PROCUREMENT MSS ^(†)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 5) HH013 SSTG Rotor MSS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

(†) indicates the presence of a P-5a

Footnotes:

(1) Starting in FY16, two SSBN/GN OER transducer upgrade programs are planned, one for Hovering Transducers and the second for MDD/MHC Differential Pressure Transducers. Both transducer types are estimated to be out of spares by 2018 and will require form/fit/function replacement. The Hovering System on both SSBNs and SSGNs is experiencing obsolescence issues due to aging technology and terminated vendor component production as of 2000. The Missile Drying and Dehumidification (MDD) system and Missile Heating and Cooling (MHC) system on both SSBNs and SSGNs provides a stable temperature and humidity environment for the missile tubes, and has similar obsolescence issues, with terminated vendor component production as of 2009.

(2) Beginning in FY11, funds are provided for installation of Submarine Special Operations Forces (SOF) unique system components.

(3) Provides for the installation of SSTG Rotors on the OHIO Class Submarines, FY12-13.

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Exhibit P-5a, Procurement History and Planning: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0950 / Strategic Platform Support Equip					Aggregated Items: Strategic Platform Support Equip			
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
2) HH012 EQUIPMENT HM&E TRIDENT ENGINEERING AVAILABILITY												
2.1) SHIPALT INSTALLATION AND ENGINEERING SERVICES		2011	ELECTRIC BOAT / NEW LONDON	C / CPFF	NAVSEA	Apr 2011	Aug 2011	1	1,997K	Y		
2.1) SHIPALT INSTALLATION AND ENGINEERING SERVICES		2012	ELECTRIC BOAT / NEW LONDON	C / CPFF	NAVSEA	Apr 2012	Aug 2012	1	2,035K	Y		
2.1) SHIPALT INSTALLATION AND ENGINEERING SERVICES		2013	ELECTRIC BOAT / NEW LONDON	C / CPFF	NAVSEA	Apr 2013	Aug 2013	1	1,354K	Y		
2.1) SHIPALT INSTALLATION AND ENGINEERING SERVICES		2014	ELECTRIC BOAT / NEW LONDON	C / CPFF	NAVSEA	Apr 2014	Aug 2014	1	1,581K	N		
2.1) SHIPALT INSTALLATION AND ENGINEERING SERVICES		2015	ELECTRIC BOAT / NEW LONDON	C / CPFF	NAVSEA	Apr 2015	Aug 2015	1	1,335K	N		
2.1) SHIPALT INSTALLATION AND ENGINEERING SERVICES		2016	ELECTRIC BOAT / NEW LONDON	C / CPFF	NAVSEA	Apr 2016	Aug 2016	1	1,242K	N		
2.2) CCS EQUIPMENT REFURBISHMENT & SHIPBOARD TESTING		2011	NUWC Newport / RI	Various	NAVSEA	Apr 2011	Aug 2011	1	1,620K	Y		
2.2) CCS EQUIPMENT REFURBISHMENT & SHIPBOARD TESTING		2012	NUWC Newport / RI	Various	NAVSEA	Apr 2012	Aug 2012	1	1,648K	Y		
2.2) CCS EQUIPMENT REFURBISHMENT & SHIPBOARD TESTING		2013	NUWC Newport / RI	Various	NAVSEA	Apr 2013	Aug 2013	1	1,096K	Y		
2.2) CCS EQUIPMENT REFURBISHMENT & SHIPBOARD TESTING		2014	NUWC Newport / RI	Various	NAVSEA	Apr 2014	Aug 2014	1	1,279K	N		
2.2) CCS EQUIPMENT REFURBISHMENT & SHIPBOARD TESTING		2015	NUWC Newport / RI	Various	NAVSEA	Apr 2015	Aug 2015	1	1,081K	N		
2.2) CCS EQUIPMENT REFURBISHMENT & SHIPBOARD TESTING		2016	NUWC Newport / RI	Various	NAVSEA	Apr 2016	Aug 2016	1	1,107K	N		
2.3) HM&E EQUIPMENT REFURBISHMENT & SHIPBOARD TESTING		2011	NSWC/CD / PHILADELPHIA, PA	Various	NAVSEA	Apr 2011	Aug 2011	1	1,134K	Y		
2.3) HM&E EQUIPMENT REFURBISHMENT & SHIPBOARD TESTING		2012	NSWC/CD / PHILADELPHIA, PA	Various	NAVSEA	Apr 2012	Aug 2012	1	1,163K	Y		
2.3) HM&E EQUIPMENT REFURBISHMENT & SHIPBOARD TESTING		2013	NSWC/CD / PHILADELPHIA, PA	Various	NAVSEA	Apr 2013	Aug 2013	1	774,000.00	Y		

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Exhibit P-5a, Procurement History and Planning: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0950 / Strategic Platform Support Equip				Aggregated Items: Strategic Platform Support Equip				
Item Number / Title [DODIC]	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
2.3) HM&E EQUIPMENT REFURBISHMENT & SHIPBOARD TESTING		2014	NSWC/CD / PHILADELPHIA, PA	Various	NAVSEA	Apr 2014	Aug 2014	1	903,000.00	N		
2.3) HM&E EQUIPMENT REFURBISHMENT & SHIPBOARD TESTING		2015	NSWC/CD / PHILADELPHIA, PA	Various	NAVSEA	Apr 2015	Aug 2015	1	763,000.00	N		
2.3) HM&E EQUIPMENT REFURBISHMENT & SHIPBOARD TESTING		2016	NSWC/CD / PHILADELPHIA, PA	Various	NAVSEA	Apr 2016	Aug 2016	1	782,000.00	N		
5) HH013 SSTG Rotor MSS												
5.1) OHIO CLASS PROCUREMENT MSS		2012	ELECTRIC BOAT / NEW LONDON	C / CPFF	NAVSEA	Apr 2012	Apr 2014	1	3,638K	Y		

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0950 / Strategic Platform Support Equip	Modification Number / Title: 1 / EQUIPMENT HM&E SWS/SS ALTERATION SSBN SWSS OER UPGRADE

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	3.611	0.939	0.941	3.000	-	3.000	2.000	-	-	-	-	10.491
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	3.611	0.939	0.941	3.000	-	3.000	2.000	-	-	-	-	10.491
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	3.611	0.939	0.941	3.000	-	3.000	2.000	-	-	-	-	10.491
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Strategic Weapons System Support Systems (SWSS) OER issues involving the Ventilation Alarm and Monitoring Panel (VAMP) and the Missile Heating and Cooling Proportional Controllers. Both upgrades are required to support Strategic Programs' SWS Integration program (Mod6/Mod7) which replaces the current Launcher, Fire Control and Weapons Support electronics.

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0950 / Strategic Platform Support Equip						Modification Number / Title: 1 / EQUIPMENT HM&E SWS/SS ALTERATION SSBN SWSS OER UPGRADE			
Models of Systems Affected:				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
<i>Modification Item 1 of 1:</i> EQUIPMENT HM&E SWS/ SS ALTERATION SSBN SWSS OER UPGRADE													
B Kits													
Recurring													
1.1.1) EQUIPMENT HM&E & SSWS/SS ALTERATION SSBN SWSSOER UPGRADE - NonOrganic	6 / 2.000	2 / 0.500	2 / 0.500	6 / 1.500	- / -	6 / 1.500	4 / 1.000	- / -	- / -	- / -	- / -	20 / 5.500	
<i>Subtotal: Recurring</i>	- / 2.000	- / 0.500	- / 0.500	- / 1.500	- / -	- / 1.500	- / 1.000	- / -	- / -	- / -	- / -	- / 5.500	
<i>Subtotal: EQUIPMENT HM&E SWS/SS ALTERATION SSBN SWSS OER UPGRADE</i>	6 / 2.000	2 / 0.500	2 / 0.500	6 / 1.500	- / -	6 / 1.500	4 / 1.000	- / -	- / -	- / -	- / -	20 / 5.500	
<i>Subtotal: Procurement, All Modification Items</i>	- / 2.000	- / 0.500	- / 0.500	- / 1.500	- / -	- / 1.500	- / 1.000	- / -	- / -	- / -	- / -	- / 5.500	
Installation													
<i>Modification Item 1 of 1:</i> EQUIPMENT HM&E SWS/SS ALTERATION SSBN SWSS OER UPGRADE	- / 1.611	- / 0.439	- / 0.441	- / 1.500	- / -	- / 1.500	- / 1.000	- / -	- / -	- / -	- / -	- / 4.991	
<i>Subtotal: Installation</i>	- / 1.611	- / 0.439	- / 0.441	- / 1.500	- / -	- / 1.500	- / 1.000	- / -	- / -	- / -	- / -	- / 4.991	
Total													
Total Cost (Procurement + Support + Installation)	3.611	0.939	0.941	3.000	-	3.000	2.000	-	-	-	-	10.491	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0950 / Strategic Platform Support Equip	Modification Number / Title: 1 / EQUIPMENT HM&E SWS/SS ALTERATION SSBN SWSS OER UPGRADE

Modification Item 1 of 1: EQUIPMENT HM&E SWS/SS ALTERATION SSBN SWSS OER UPGRADE

Manufacturer Information

Manufacturer Name: Electric Boat	Manufacturer Location: Groton, CT
Administrative Leadtime (in Months): 0	Production Leadtime (in Months): 4

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Feb 2014	Feb 2015	Feb 2016	Feb 2017			
Delivery Dates	Jun 2014	Jun 2015	Jun 2016	Jun 2017			

Installation Information

Method of Implementation: [none specified]:: Installation Name: EQUIPMENT HM&E & SSWS/SS ALTERATION SSBN SWSSOER UPGRADE

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	6 / 1.611	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 1.611
FY 2014	- / -	2 / 0.439	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.439
FY 2015	- / -	- / -	2 / 0.441	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.441
FY 2016	- / -	- / -	- / -	6 / 1.500	- / -	6 / 1.500	- / -	- / -	- / -	- / -	- / -	6 / 1.500
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	4 / 1.000	- / -	- / -	- / -	- / -	4 / 1.000
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	6 / 1.611	2 / 0.439	2 / 0.441	6 / 1.500	- / -	6 / 1.500	4 / 1.000	- / -	- / -	- / -	- / -	20 / 4.991

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	6	-	-	2	-	-	-	2	-	-	-	6	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
Out	6	-	-	-	2	-	-	-	2	-	-	-	6	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	20

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0950 / Strategic Platform Support Equip	Modification Number / Title: 2 / EQUIPMENT HM&E SWS/SS ALTERATION SCS SSBN/SSGN PROC

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	2.600	1.498	2.780	8.583	-	8.583	8.890	7.318	7.852	4.456	4.566	48.543
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	2.600	1.498	2.780	8.583	-	8.583	8.890	7.318	7.852	4.456	4.566	48.543
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	2.600	1.498	2.780	8.583	-	8.583	8.890	7.318	7.852	4.456	4.566	48.543
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

SSBN Ship Control Obsolete Equipment Replacement - Perform multiple efforts to ensure that the OHIO Class Ship Control Subsystem, both hardware and software components, support the extended life of the OHIO Class submarine platforms.

Note: Production lead-time for Ship Control System OER is 17 months except for the 2 units procured in FY12. These units in addition to the normal procurement lead-time will be used in the testing and certification program of the design of this safety of ship system. This testing and certification adds an additional 22 months of lead-time. These two units procured in FY12 have a total lead-time of 39 months and will be installed in FY16.

[EQUIPMENT HM&E SWS/SS ALTERATION SCS SSBN/SSGN PROC] Installations of this ShipAlt are accomplished during SSBN refits, SSBN Extended Refit Periods (ERP), SSGN Major Maintenance Periods (MMP), and SSBN Engineered Refueling Overhauls (ERO). Installations do not complete until the availability completes. Thus the installation duration ranges from 90 days for refit installations to 821 days for ERO installations.

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9					P-1 Line Item Number / Title: 0950 / Strategic Platform Support Equip					Modification Number / Title: 2 / EQUIPMENT HM&E SWS/SS ALTERATION SCS SSBN/SSGN PROC			
Models of Systems Affected:				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
<i>Modification Item 1 of 1:</i> EQUIPMENT HM&E SWS/ SS ALTERATION SCS SSBN/SSGN PROC													
B Kits													
Recurring													
1.1.1) EQUIPMENT HM&E SWS/SS ALTERATION SCS SSBN/SSGN PROC - NonOrganic	2 / 2.600	1 / 1.498	2 / 2.780	4 / 5.807	- / -	4 / 5.807	5 / 7.215	2 / 2.942	2 / 2.998	2 / 3.054	2 / 2.156	22 / 31.050	
1.1.2) SCS SSBN/SSGN INSTALLATION DSA - NonOrganic	- / -	- / -	- / -	- / 0.284	- / -	- / 0.284	- / 0.194	- / 0.495	- / 0.504	- / 0.103	- / 0.209	- / 1.789	
<i>Subtotal: Recurring</i>	- / 2.600	- / 1.498	- / 2.780	- / 6.091	- / -	- / 6.091	- / 7.409	- / 3.437	- / 3.502	- / 3.157	- / 2.365	- / 32.839	
<i>Subtotal: EQUIPMENT HM&E SWS/SS ALTERATION SCS SSBN/SSGN PROC</i>	2 / 2.600	1 / 1.498	2 / 2.780	4 / 6.091	- / -	4 / 6.091	5 / 7.409	2 / 3.437	2 / 3.502	2 / 3.157	2 / 2.365	22 / 32.839	
<i>Subtotal: Procurement, All Modification Items</i>	- / 2.600	- / 1.498	- / 2.780	- / 6.091	- / -	- / 6.091	- / 7.409	- / 3.437	- / 3.502	- / 3.157	- / 2.365	- / 32.839	
Installation													
<i>Modification Item 1 of 1:</i> EQUIPMENT HM&E SWS/SS ALTERATION SCS SSBN/SSGN PROC	- / 0.000	- / -	- / -	- / 2.492	- / -	- / 2.492	- / 1.481	- / 3.881	- / 4.350	- / 1.299	- / 2.201	- / 15.704	
<i>Subtotal: Installation</i>	- / 0.000	- / -	- / -	- / 2.492	- / -	- / 2.492	- / 1.481	- / 3.881	- / 4.350	- / 1.299	- / 2.201	- / 15.704	
Total													
Total Cost (Procurement + Support + Installation)	2.600	1.498	2.780	8.583	-	8.583	8.890	7.318	7.852	4.456	4.566	48.543	

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Exhibit P-3a, Individual Modification: PB 2016 Navy				Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9		P-1 Line Item Number / Title: 0950 / Strategic Platform Support Equip			Modification Number / Title: 2 / EQUIPMENT HM&E SWS/SS ALTERATION SCS SSBN/SSGN PROC		

Modification Item 1 of 1: EQUIPMENT HM&E SWS/SS ALTERATION SCS SSBN/SSGN PROC

Manufacturer Information

Manufacturer Name: Electric Boat	Manufacturer Location: Groton, CT
Administrative Leadtime (in Months): 0	Production Leadtime (in Months): 17

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Sep 2014	Aug 2015	May 2016	Jan 2017	Dec 2017	Nov 2018	Nov 2019
Delivery Dates	Feb 2016	Jan 2017	Oct 2017	Jun 2018	May 2019	Apr 2020	Apr 2021

Installation Information

Method of Implementation: [none specified]:: Installation Name: EQUIPMENT HM&E SWS/SS ALTERATION SCS SSBN/SSGN PROC

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	2 / 1.661	- / 0.000	2 / 1.661	- / -	- / -	- / -	- / -	- / -	2 / 1.661
FY 2014	- / -	- / -	- / -	1 / 0.831	- / -	1 / 0.831	- / -	- / -	- / -	- / -	- / -	1 / 0.831
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	2 / 1.481	- / -	- / -	- / -	- / -	2 / 1.481
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 3.105	- / -	- / -	- / -	4 / 3.105
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.776	4 / 2.900	- / -	- / -	5 / 3.676
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 1.450	- / -	- / -	2 / 1.450
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 1.299	- / -	2 / 1.299
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 1.101	2 / 1.101
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 1.100	2 / 1.100
Total	- / -	- / -	- / -	3 / 2.492	- / -	3 / 2.492	2 / 1.481	5 / 3.881	6 / 4.350	2 / 1.299	4 / 2.201	22 / 15.704

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	3	-	-	-	2	-	-	2	2	1	-	2	2	1	1	-	-	2	-	4	22
Out	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	1	1	-	3	1	2	1	1	2	-	-	1	2	5	22

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0950 / Strategic Platform Support Equip	Modification Number / Title: 3 / SSTG ROTORS OHIO CLASS PROCUREMENT

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	22.966	-	-	-	-	-	-	-	-	-	-	22.966
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	22.966	-	-	-	-	-	-	-	-	-	-	22.966
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	22.966	-	-	-	-	-	-	-	-	-	-	22.966
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The SSTG Rotors replace obsolete SSTG Components that are reaching the end of their design life. This eliminates the potential for catastrophic failure. This includes procurement of 1 rotor (one half of a shipset) for a Major Shore Spare (MSS).

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0950 / Strategic Platform Support Equip						Modification Number / Title: 3 / SSTG ROTORS OHIO CLASS PROCUREMENT			
Models of Systems Affected:				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
<i>Modification Item 1 of 1:</i> SSTG ROTORS OHIO CLASS PROCUREMENT													
B Kits													
Recurring													
1.1.1) SSTG ROTORS OHIO CLASS PROCURMENT - NonOrganic	3 / 14.460	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 14.460	
<i>Subtotal: Recurring</i>	- / 14.460	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 14.460	
<i>Subtotal: SSTG ROTORS OHIO CLASS PROCUREMENT</i>	3 / 14.460	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 14.460	
<i>Subtotal: Procurement, All Modification Items</i>	- / 14.460	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 14.460	
Installation													
<i>Modification Item 1 of 1:</i> SSTG ROTORS OHIO CLASS PROCUREMENT	- / 8.506	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 8.506	
<i>Subtotal: Installation</i>	- / 8.506	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 8.506	
Total													
Total Cost (Procurement + Support + Installation)	22.966	-	-	-	-	-	-	-	-	-	-	22.966	

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0950 / Strategic Platform Support Equip	Modification Number / Title: 3 / SSTG ROTORS OHIO CLASS PROCUREMENT

Modification Item 1 of 1: SSTG ROTORS OHIO CLASS PROCUREMENT

Manufacturer Information

Manufacturer Name: Electric Boat				Manufacturer Location: Groton, CT			
Administrative Leadtime (in Months): 3				Production Leadtime (in Months): 24			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: [none specified]:: Installation Name: SSTG ROTORS OHIO CLASS PROCURMENT

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	3 / 8.506	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 8.506
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	3 / 8.506	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 8.506

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
Out	1	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment							P-1 Line Item Number / Title: 0955 / Deep Subm Sys Proj (DSSP) Equip					
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:					Other Related Program Elements:				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	132.793	2.455	5.518	7.376	-	7.376	2.934	3.004	3.071	3.137	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	132.793	2.455	5.518	7.376	-	7.376	2.934	3.004	3.071	3.137	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	132.793	2.455	5.518	7.376	-	7.376	2.934	3.004	3.071	3.137	Continuing	Continuing
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: The Submarine Escape and Rescue Program, formerly Deep Submergence Systems Program (DSSP), is responsible for the procurement, life cycle support, and improvement and modernization of assigned platforms and programs. The Submarine Escape and Rescue Program provides for the procurement of equipment to support the establishment and maintenance of fleet capability for a number of programs which perform submarine search and rescue, inspection, and object location and retrieval from the ocean environment. Submarine Escape and Rescue procurements replace obsolete, non-supportable equipment and subsystems through phased improvement and modernization projects. These projects may include special ship alterations, field change kits, and design corrections. SOURCES: The sources for these acquisitions are limited. There are few private companies actively engaged in deep ocean engineering and even fewer with the specialized experience, knowledge, and facilities to meet the exacting requirement of the Submarine Escape and Rescue Program. Accordingly, sole source contracts are sometimes required; however, where possible, contracting via open competition is utilized. REFERENCES: Acquisition Plans 584-87 Revision 7 approved August 2000. Acquisition plan for Submarine Escape and Rescue is reviewed twice annually by the Submarine Escape and Rescue Review Group (SERRG). [P40A / HJ030 - RESCUE SUPPORT EQUIPMENT]: INTERVENTION SYSTEMS (ATMOSPHERIC DIVING SYSTEM (ADS)/REMOTE OPERATED VEHICLE (ROV))/SUBMARINE RESCUE DIVING and RECOMPRESSION SYSTEM (SRDRS)/SUBMARINE RESCUE CHAMBER (SRC) Intervention assets (ADS/ROV) are required to support the SRDRS and SRC world-wide rescue capability mission. Intervention assets are used to clear disabled submarines seating surfaces, attach the SRC downhaul cable, attach salvage fittings, deliver emergency life support stores, and assess disabled submarines. The ADS is a modified COTS one-man, one atmosphere diving system. An initiative is in process to transition from the ADS manned system to an unmanned ROV to reduce operational risk; full transition is pending availability of funding for second ROV. SRC provides shallow water rescue capability. SRDRS is the deep water rescue vehicle and will be delivered in increments. The Submarine Rescue System-Rescue Capable System (SRS-RCS) completed OPEVAL in FY08 and is currently the deep water rescue ready vehicle for the U.S. Navy. The final component of SRDRS is Transfer Under Pressure (TUP) or Submarine Rescue System-Submarine Decompression System (SRS-SDS). Full Operational Capability (FOC) has been delayed due to efforts associated with Pressurized Rescue Module (PRM) restoration to service. SURVIVABILITY This equipment will provide a more efficient CO2 removal capability giving the fleet an increase in survival time from 3 days to 7 days for a disabled submarine and adds state of the art atmospheric monitoring equipment aboard each submarine. [P40A / HJ100 - SUBMARINE ESCAPE & IMMERSION EQUIPMENT]: SUBMARINE ESCAPE & IMMERSION EQUIPMENT (SEIE) The SEIE is used by a submariner to escape from a disabled submarine and survive on the surface until rescued. The system, adapted from a British design, includes the escape suit, inner thermal suit and a single person life raft, all packaged as a unit onboard the submarine. This is a safety/survival appliance that is vastly superior to the obsolete Steinke Hood escape appliance. The SEIE increases the escape												

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment		P-1 Line Item Number / Title: 0955 / Deep Subm Sys Proj (DSSP) Equip
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:
depth to 600 FSW and provides thermal protection to the user from hypothermia. Also includes mandatory escape assistance devices for all escape trunk hatches to ensure safe escape by personnel from the disabled submarine.		
[P40A / HJ927 - EQUIPMENT INSTALLATION]: EQUIPMENT INSTALLATION (HJ927) These funds are for the installation of the Submarine Escape and Rescue Program equipment, as well as the SEIE equipment.		
[P40A / HJINS - EQUIPMENT INSTALLATION]: EQUIPMENT INSTALLATION (HJINS) These funds are for the installation of the Submarine Escape and Rescue Program equipment, as well as the SEIE equipment.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy	Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment	P-1 Line Item Number / Title: 0955 / Deep Subm Sys Proj (DSSP) Equip

ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:			Other Related Program Elements:		
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
Deep Subm Sys Proj (DSSP) Equip	P-40a		- / 132.793	- / 2.455	- / 5.518	- / 7.376	- / -	- / 7.376
Total Gross/Weapon System Cost			- / 132.793	- / 2.455	- / 5.518	- / 7.376	- / -	- / 7.376

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

Justification:

FY16 through FY20 increase supports procurement of Submarine Rescue Chamber (SRC) hoses.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9						P-1 Line Item Number / Title: 0955 / Deep Subm Sys Proj (DSSP) Equip									Aggregated Items Title: Deep Subm Sys Proj (DSSP) Equip					
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.																				
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) HJ030 - RESCUE SUPPORT EQUIPMENT																				
1.1) Vehicles Upgrades	A		-	-	0.055	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.2) ADS LARS 1	A		-	-	0.508	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.3) SRDRS Spares and Tools	A		-	-	4.335	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.4) ADS Suit 1 Upgrade/Cert	A		-	-	0.600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.5) LARS Deck Skid	A		-	-	0.491	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.6) SRC Materials ⁽¹⁾	A		-	-	0.702	-	-	0.107	-	-	0.110	-	-	2.199	-	-	-	-	-	2.199
1.7) SRDRS System Upgrade and Upgrade Spares ⁽²⁾	A		-	-	25.506	-	-	2.348	-	-	5.408	-	-	5.177	-	-	-	-	-	5.177
1.8) ADS Upgrades	A		-	-	14.238	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.9) UMW Upgrades	A		-	-	0.117	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.10) SRDRS Mooring System Upgrade	A		-	-	1.006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.11) Upper Hatch Linkage Upgrades	A		-	-	2.077	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 1) HJ030 - RESCUE SUPPORT EQUIPMENT			-	-	49.635	-	-	2.455	-	-	5.518	-	-	7.376	-	-	-	-	-	7.376
2) HJ100 - SUBMARINE ESCAPE & IMMERSION EQUIPMENT																				
2.1) LA Class SEIE Equipment Upgrade	A		-	-	0.343	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.2) LA Class SEIE Suit Sets	A		-	-	36.238	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 2) HJ100 - SUBMARINE ESCAPE & IMMERSION EQUIPMENT			-	-	36.581	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3) HJ927 - EQUIPMENT INSTALLATION																				
3.1) Install of Equipment (FMP)	A		-	-	44.484	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 3) HJ927 - EQUIPMENT INSTALLATION			-	-	44.484	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4) HJINS - EQUIPMENT INSTALLATION																				
4.1) Install of Equipment	A		-	-	2.093	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9						P-1 Line Item Number / Title: 0955 / Deep Subm Sys Proj (DSSP) Equip									Aggregated Items Title: Deep Subm Sys Proj (DSSP) Equip				

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Subtotal: 4) HJINS - EQUIPMENT INSTALLATION			-	-	2.093	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	132.793	-	-	2.455	-	-	5.518	-	-	7.376	-	-	-	-	-	7.376

Footnotes:

- (1) FY16 through FY20 increase supports procurement of Submarine Rescue Chamber (SRC) hoses.
- (2) The increased funding levels in FY16-FY19 support Submarine Rescue Diving and Recompression System (SRDRS) upgrades and spares in support of Transfer Under pressure (TUP) capability and transition from the manned Atmospheric Diving System (ADS) to the unmanned Remote Operated Vehicle (ROV). The increase in FY15 is related to the ROV and the increase in FY16 is related to TUP spares.

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment						P-1 Line Item Number / Title: 0960 / CG Modernization						
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:					Other Related Program Elements:				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	2,083.979	10.539	-	-	-	-	84.251	108.996	103.036	105.183	-	2,495.984
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	2,083.979	10.539	-	-	-	-	84.251	108.996	103.036	105.183	-	2,495.984
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	2,083.979	10.539	-	-	-	-	84.251	108.996	103.036	105.183	-	2,495.984
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (<i>\$ in Millions</i>)	-	0.561	0.120	-	-	-	4.380	0.500	1.063	-	-	6.624
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: Modernized CG47 Class ships will operate independently or as units of Carrier Battle Groups and Surface Action Groups, in support of the Marine Amphibious Task Forces in multi-threat environments that include air, surface and subsurface threats. These ships will respond to Low Intensity Conflict/Coastal and Littoral Offshore Warfare and joint mission scenarios as well as open ocean conflict, providing and augmenting power projection and forward presence. These ships will conduct Air Dominance, Land Attack, and Force Protection missions. [P40A / CC002 - SARTIS]: Procures Shipboard Advanced Radar Target Identification System (SARTIS) including equipment procurement, recurring equipment engineering, equipment integration, and ILS. [P40A / CC005 - SGS/CDLMS]: Procures Ship Gridlock System (SGS) and the Common Data Link Management System (CDLMS) for Baseline 2 ships including equipment procurement, recurring equipment engineering, equipment integration, and ILS. [P40A / CC012 - VIRGINIA SITES]: Procures Commercial Off The Shelf (COTS) equipment to support C/S capabilities including equipment procurement, recurring equipment engineering, equipment integration, and ILS for various Virginia Sites test facilities. Virginia Sites perform a variety of functions including life-cycle support of the AWS and AEGIS combat training for officer and enlisted watch standers. [P40A / CC013 - INSTALLATION / DSA / AIT]: Provides Planning Yard Design Services Allocation (DSA) (design, advance planning, and kitted material), MSR installations and AIT installation support. [P40A / CC014 - CONJUNCTIVE COMBAT SYSTEM ALTERATIONS]: Conjunctive Combat System Alterations includes design integration, equipment procurement, recurring equipment engineering, equipment integration, and ILS. [P40A / CC017 - MULTI-MISSION BMD CAPABILITIES]: Procures Multi-Mission Ballistic Missile Defense (BMD) Capability including equipment procurement, recurring equipment engineering, equipment integration, and ILS. [P40A / CC018 - MULTI-MISSION SSA/CWI MICROWAVE TUBES]: Procures Multi-Mission Solid State Amplifier (SSA)/Continuous Wave Illuminator (CWI) Microwave Tubes including equipment procurement, recurring equipment engineering, equipment integration, and ILS. [P3A / CC001 - SPQ-9B UPGRADE]: Procures SPQ-9B for all CG Modernization ships including equipment procurement, recurring equipment engineering, equipment integration, and Integrated Logistics												

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment		P-1 Line Item Number / Title: 0960 / CG Modernization
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:
[P3A - 2 / CC003 - COOPERATIVE ENGAGEMENT CAPABILITIES (CEC)]: Procures Cooperative Engagement Capability (CEC) for all ships including equipment procurement, recurring equipment engineering, equipment integration, and ILS. [P3A - 3 / CC004 - AN/SQQ-89 A(V) 15 PROCUREMENT]: Procures AN/SQQ-89 A(V) 15 for Baseline 3 and 4 ships including equipment procurement, recurring equipment engineering, equipment integration, and ILS. [P3A - 4 / CC007 - AEGIS WEAPONS SYSTEM (AWS) UPGRADE PROCUREMENT]: Procures AEGIS Weapons System (AWS) upgrade for all ships including equipment procurement, recurring equipment engineering, equipment integration, and ILS. [P3A - 5 / CC008 - VERTICAL LAUNCH SYSTEM (VLS)]: Procures Vertical Launch System (VLS) upgrade for all ships including equipment procurement, recurring equipment engineering, equipment integration, and ILS. [P3A - 6 / CC010 - MK34 UPGRADE]: Procures MK34 Gun Weapon System (GWS) upgrade for all ships including equipment procurement, recurring equipment engineering, equipment integration, and ILS. [P3A - 7 / CC011 - INTEGRATED SHIP CONTROLS (ISC)]: Procures Smartship Integrated Ship Controls (ISC) for all ships requiring upgrade including equipment procurement, recurring equipment engineering, equipment integration, and ILS. [P3A - 8 / CC015 - MULTI-MISSION SIGPRO]: Procures Multi-Mission Signal Processor (MMSP) including equipment procurement, recurring equipment engineering, equipment integration, and ILS. [P3A - 9 / CC016 - SPY-1B VARIANCE TRANSMITTER UPGRADES]: Procures SPY-1B Variance Transmitter Upgrades including equipment procurement, recurring equipment engineering, equipment integration, and ILS.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy	Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment	P-1 Line Item Number / Title: 0960 / CG Modernization

ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:

Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
CG Modernization	P-40a		- / 586.388	- / 10.539	- / -	- / -	- / -	- / -
1 / CC001 - SPQ-9B UPGRADE ()	P-3a		- / 124.579	- / -	- / -	- / -	- / -	- / -
2 / CC003 - COOPERATIVE ENGAGEMENT CAPABILITIES (CEC) ()	P-3a		- / 99.369	- / -	- / -	- / -	- / -	- / -
3 / CC004 - AN/SQQ-89 A(V) 15 PROCUREMENT ()	P-3a		- / 165.342	- / -	- / -	- / -	- / -	- / -
4 / CC007 - AEGIS WEAPONS SYSTEM (AWS) UPGRADE PROCUREMENT ()	P-3a		- / 598.112	- / -	- / -	- / -	- / -	- / -
5 / CC008 - VERTICAL LAUNCH SYSTEM (VLS) ()	P-3a		- / 190.759	- / -	- / -	- / -	- / -	- / -
6 / CC010 - MK34 UPGRADE ()	P-3a		- / 145.077	- / -	- / -	- / -	- / -	- / -
7 / CC011 - INTEGRATED SHIP CONTROLS (ISC) ()	P-3a		- / 77.573	- / -	- / -	- / -	- / -	- / -
8 / CC015 - MULTI-MISSION SIGPRO ()	P-3a		- / 66.000	- / -	- / -	- / -	- / -	- / -
9 / CC016 - SPY-1B VARIANCE TRANSMITTER UPGRADES ()	P-3a		- / 30.780	- / -	- / -	- / -	- / -	- / -
Total Gross/Weapon System Cost			- / 2,083.979	- / 10.539	- / -	- / -	- / -	- / -

Exhibits Schedule			FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
CG Modernization	P-40a		- / -	- / -	- / -	- / -	- / -	- / -
1 / CC001 - SPQ-9B UPGRADE ()	P-3a		- / 7.884	- / 8.533	- / 2.369	- / 1.880	- / -	- / 145.245
2 / CC003 - COOPERATIVE ENGAGEMENT CAPABILITIES (CEC) ()	P-3a		- / 6.050	- / 6.694	- / 2.431	- / 1.924	- / -	- / 116.468
3 / CC004 - AN/SQQ-89 A(V) 15 PROCUREMENT ()	P-3a		- / 16.836	- / 18.757	- / 8.781	- / 7.262	- / -	- / 216.978
4 / CC007 - AEGIS WEAPONS SYSTEM (AWS) UPGRADE PROCUREMENT ()	P-3a		- / 27.184	- / 33.938	- / 26.891	- / 20.871	- / -	- / 706.996
5 / CC008 - VERTICAL LAUNCH SYSTEM (VLS) ()	P-3a		- / 11.163	- / 11.669	- / 1.266	- / 0.978	- / -	- / 215.835
6 / CC010 - MK34 UPGRADE ()	P-3a		- / 6.555	- / 8.099	- / 6.636	- / 5.280	- / -	- / 171.647
7 / CC011 - INTEGRATED SHIP CONTROLS (ISC) ()	P-3a		- / 0.942	- / 14.156	- / 29.501	- / 13.890	- / -	- / 136.062
8 / CC015 - MULTI-MISSION SIGPRO ()	P-3a		- / -	- / -	- / -	- / -	- / -	- / 66.000
9 / CC016 - SPY-1B VARIANCE TRANSMITTER UPGRADES ()	P-3a		- / -	- / -	- / -	- / -	- / -	- / 30.780
Total Gross/Weapon System Cost			- / 84.251	- / 108.996	- / 103.036	- / 105.183	- / -	- / 2,495.984

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9						P-1 Line Item Number / Title: 0960 / CG Modernization									Aggregated Items Title: CG Modernization					
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.																				
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
1) CC002 - SARTIS																				
1.1) SARTIS EQUIPMENT ⁽¹⁾	A		282.571	7	1.978	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 1) CC002 - SARTIS			-	-	1.978	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2) CC005 - SGS/CDLMS																				
2.1) SGS/CDLMS EQUIPMENT	A		820.143	7	5.741	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2.2) SGS/CDLMS ENGINEERING SERVICES	A		-	-	0.700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 2) CC005 - SGS/CDLMS			-	-	6.441	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3) CC012 - VIRGINIA SITES																				
3.1) VIRGINIA SITES	A		-	-	82.028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 3) CC012 - VIRGINIA SITES			-	-	82.028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4) CC013 - INSTALLATION / DSA / AIT																				
4.1) INSTALLATION / DSA / AIT ⁽²⁾	A		-	-	284.023	-	-	10.539	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 4) CC013 - INSTALLATION / DSA / AIT			-	-	284.023	-	-	10.539	-	-	-	-	-	-	-	-	-	-	-	
5) CC014 - CONJUNCTIVE COMBAT SYSTEM ALTERATIONS																				
5.1) CONJUNCTIVE COMBAT SYSTEM ALTERATION EQUIPMENT	A		-	-	203.838	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 5) CC014 - CONJUNCTIVE COMBAT SYSTEM ALTERATIONS			-	-	203.838	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6) CC017 - MULTI-MISSION BMD CAPABILITIES																				
6.1) MULTI-MISSION BMD CAPABILITIES EQUIPMENT	A		1,553.333	3	4.660	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 6) CC017 - MULTI-MISSION BMD CAPABILITIES			-	-	4.660	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
7) CC018 - MULTI-MISSION SSA/CWI MICROWAVE TUBES ⁽³⁾																				
7.1) MULTI-MISSION SSA/CWI MICROWAVE TUBE EQUIPMENT	A		1,140.000	3	3.420	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9								P-1 Line Item Number / Title: 0960 / CG Modernization							Aggregated Items Title: CG Modernization				

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Subtotal: 7) CC018 - MULTI-MISSION SSA/ CWI MICROWAVE TUBES			-	-	3.420	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	586.388	-	-	10.539	-	-	-	-	-	-	-	-	-	-	-	-

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2017			FY 2018			FY 2019			FY 2020			To Complete			Total Cost		
			Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
1) CC002 - SARTIS																				
1.1) SARTIS EQUIPMENT ⁽¹⁾	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 1) CC002 - SARTIS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2) CC005 - SGS/CDLMS																				
2.1) SGS/CDLMS EQUIPMENT	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2.2) SGS/CDLMS ENGINEERING SERVICES	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 2) CC005 - SGS/CDLMS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3) CC012 - VIRGINIA SITES																				
3.1) VIRGINIA SITES	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 3) CC012 - VIRGINIA SITES			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4) CC013 - INSTALLATION / DSA / AIT																				
4.1) INSTALLATION / DSA / AIT ⁽²⁾	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 4) CC013 - INSTALLATION / DSA / AIT			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5) CC014 - CONJUNCTIVE COMBAT SYSTEM ALTERATIONS																				
5.1) CONJUNCTIVE COMBAT SYSTEM ALTERATION EQUIPMENT	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 5) CC014 - CONJUNCTIVE COMBAT SYSTEM ALTERATIONS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6) CC017 - MULTI-MISSION BMD CAPABILITIES																				

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy																Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9						P-1 Line Item Number / Title: 0960 / CG Modernization						Aggregated Items Title: CG Modernization									
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2017			FY 2018			FY 2019			FY 2020			To Complete			Total Cost			
			Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	
6.1) MULTI-MISSION BMD CAPABILITIES EQUIPMENT	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 6) CC017 - MULTI-MISSION BMD CAPABILITIES			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
7) CC018 - MULTI-MISSION SSA/CWI MICROWAVE TUBES ⁽³⁾																					
7.1) MULTI-MISSION SSA/CWI MICROWAVE TUBE EQUIPMENT	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 7) CC018 - MULTI-MISSION SSA/CWI MICROWAVE TUBES			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Footnotes:

⁽¹⁾ FY17 combat systems procurement for CG 67 USS SHILOH. FY18 combat systems procurement for CG 70 LAKE ERIE.

⁽²⁾ FY17 funding for First Year DSA for CG 67 USS SHILOH. FY18 funding for First Year DSA for CG 70 LAKE ERIE and Second Year DSA/LLTM for CG 67 USS SHILOH, FY19 funding for Second Year DSA/LLTM for CG 70 LAKE ERIE, Combat Systems Installation for CG 67 USS SHILOH, Integrated Ship Control (ISC) Install for CG 67, and Aegis Modernization Team Testing (AMT) for CG 67. FY20 funding supports CSSQT for CG 67 USS SHILOH, Combat Systems Installation for CG 70 LAKE ERIE, Integrated Ship Control (ISC) Install for CG 70, and Aegis Modernization Team Testing (AMT) for CG 70.

⁽³⁾ Ship Modernization, Operations and Sustainment Fund (SMOSF) transfer in FY15 for \$200.6 Million.

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Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0960 / CG Modernization					Modification Number / Title: 1 / CC001 - SPQ-9B UPGRADE			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	124.579	-	-	-	-	-	7.884	8.533	2.369	1.880	-	145.245
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	124.579	-	-	-	-	-	7.884	8.533	2.369	1.880	-	145.245
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	124.579	-	-	-	-	-	7.884	8.533	2.369	1.880	-	145.245
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Thousands)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: Replaces the existing AN/SPQ-9A heavyweight (HW) Radar Set with the AN/SPQ-9B lightweight (LW) Radar Set. Supports associated DSA and Planning for installation.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0960 / CG Modernization				Modification Number / Title: 1 / CC001 - SPQ-9B UPGRADE				
Models of Systems Affected:			Modification Type:					Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Procurement												
Modification Item 1 of 1: CC001 - SPQ-9B UPGRADE												
B Kits												
Recurring												
1.1.1) CC001 - SPQ-9B EQUIPMENT - NonOrganic ⁽⁴⁾	15 / 95.419	- / -	- / -	- / -	- / -	- / -	1 / 6.940	1 / 7.060	- / -	- / -	- / -	17 / 109.419
1.1.2) CC001 - SPQ-9B ENGINEERING SERVICES - NonOrganic	- / 7.343	- / -	- / -	- / -	- / -	- / -	- / 0.829	- / 0.844	- / -	- / -	- / -	- / 9.016
Subtotal: Recurring	- / 102.762	- / -	- / -	- / -	- / -	- / -	- / 7.769	- / 7.904	- / -	- / -	- / -	- / 118.435
Subtotal: CC001 - SPQ-9B UPGRADE	15 / 102.762	- / -	- / -	- / -	- / -	- / -	1 / 7.769	1 / 7.904	- / -	- / -	- / -	17 / 118.435
Subtotal: Procurement, All Modification Items	- / 102.762	- / -	- / -	- / -	- / -	- / -	- / 7.769	- / 7.904	- / -	- / -	- / -	- / 118.435
Installation												
Modification Item 1 of 1: CC001 - SPQ-9B UPGRADE	- / 21.817	- / -	- / -	- / -	- / -	- / -	- / 0.115	- / 0.629	- / 2.369	- / 1.880	- / -	- / 26.810
Subtotal: Installation	- / 21.817	- / -	- / -	- / -	- / -	- / -	- / 0.115	- / 0.629	- / 2.369	- / 1.880	- / -	- / 26.810
Total												
Total Cost (Procurement + Support + Installation)	124.579	-	-	-	-	-	7.884	8.533	2.369	1.880	-	145.245

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Exhibit P-3a, Individual Modification: PB 2016 Navy			Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9		P-1 Line Item Number / Title: 0960 / CG Modernization			Modification Number / Title: 1 / CC001 - SPQ-9B UPGRADE

Modification Item 1 of 1: CC001 - SPQ-9B UPGRADE

Manufacturer Information

Manufacturer Name: NORTHROP GRUMMAN				Manufacturer Location: MELVILLE, NY			
Administrative Leadtime (in Months): 6				Production Leadtime (in Months): 18			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates				Jun 2017	Jun 2018		
Delivery Dates				Dec 2018	Dec 2019		

Installation Information

Method of Implementation: [none specified]:: Installation Name: CC001 - SPQ-9B EQUIPMENT

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	10 / 21.817	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	10 / 21.817
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.115	- / 0.511	1 / 1.848	- / -	- / -	1 / 2.474
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.118	- / 0.521	1 / 1.880	- / -	1 / 2.519
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	10 / 21.817	- / -	- / -	- / -	- / -	- / -	- / 0.115	- / 0.629	1 / 2.369	1 / 1.880	- / -	12 / 26.810

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	12
Out	9	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	12

Footnotes:

⁽⁴⁾ FY17 combat systems procurement for CG 67 USS SHILOH. FY18 combat systems procurement for CG 70 LAKE ERIE.

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0960 / CG Modernization						Modification Number / Title: 2 / CC003 - COOPERATIVE ENGAGEMENT CAPABILITIES (CEC)		
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	99.369	-	-	-	-	-	6.050	6.694	2.431	1.924	-	116.468
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	99.369	-	-	-	-	-	6.050	6.694	2.431	1.924	-	116.468
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	99.369	-	-	-	-	-	6.050	6.694	2.431	1.924	-	116.468
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: Procure and install Cooperative Engagement Capability (CEC). Supports DSA and Planning for installation.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0960 / CG Modernization				Modification Number / Title: 2 / CC003 - COOPERATIVE ENGAGEMENT CAPABILITIES (CEC)					
Models of Systems Affected:				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: CC003 - COOPERATIVE ENGAGEMENT CAPABILITIES (CEC)													
B Kits													
Recurring													
1.1.1) CC003 - CEC EQUIPMENT - NonOrganic ⁽⁵⁾	15 / 70.388	- / -	- / -	- / -	- / -	- / -	1 / 5.300	1 / 5.400	- / -	- / -	- / -	17 / 81.088	
1.1.2) CC003 - CEC ENGINEERING SERVICES - NonOrganic	- / 6.779	- / -	- / -	- / -	- / -	- / -	- / 0.627	- / 0.638	- / -	- / -	- / -	- / 8.044	
Subtotal: Recurring	- / 77.167	- / -	- / -	- / -	- / -	- / -	- / 5.927	- / 6.038	- / -	- / -	- / -	- / 89.132	
Subtotal: CC003 - COOPERATIVE ENGAGEMENT CAPABILITIES (CEC)	15 / 77.167	- / -	- / -	- / -	- / -	- / -	1 / 5.927	1 / 6.038	- / -	- / -	- / -	17 / 89.132	
Subtotal: Procurement, All Modification Items	- / 77.167	- / -	- / -	- / -	- / -	- / -	- / 5.927	- / 6.038	- / -	- / -	- / -	- / 89.132	
Installation													
Modification Item 1 of 1: CC003 - COOPERATIVE ENGAGEMENT CAPABILITIES (CEC)	- / 22.202	- / -	- / -	- / -	- / -	- / -	- / 0.123	- / 0.656	- / 2.431	- / 1.924	- / -	- / 27.336	
Subtotal: Installation	- / 22.202	- / -	- / -	- / -	- / -	- / -	- / 0.123	- / 0.656	- / 2.431	- / 1.924	- / -	- / 27.336	
Total													
Total Cost (Procurement + Support + Installation)	99.369	-	-	-	-	-	6.050	6.694	2.431	1.924	-	116.468	

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015																					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9										P-1 Line Item Number / Title: 0960 / CG Modernization										Modification Number / Title: 2 / CC003 - COOPERATIVE ENGAGEMENT CAPABILITIES (CEC)											
Modification Item 1 of 1: CC003 - COOPERATIVE ENGAGEMENT CAPABILITIES (CEC)																															
Manufacturer Information																															
Manufacturer Name: RAYTHEON															Manufacturer Location: ST. PETERSBURG, FL																
Administrative Leadtime (in Months): 6															Production Leadtime (in Months): 18																
Dates		FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020					
Contract Dates														Jun 2017				Jun 2018													
Delivery Dates														Dec 2018				Dec 2019													
Installation Information																															
Method of Implementation: [none specified]:: Installation Name: CC003 - CEC EQUIPMENT																															
Installation Cost		Prior Years		FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total		FY 2017		FY 2018		FY 2019		FY 2020		To Complete		Total							
		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)							
Prior Years		10 / 22.202		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		10 / 22.202					
FY 2014		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2015		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2016		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2017		- / -		- / -		- / -		- / -		- / -		- / -		- / 0.123		- / 0.531		1 / 1.890		- / -		- / -		- / -		1 / 2.544					
FY 2018		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / 0.125		- / 0.541		1 / 1.924		- / -		- / -		1 / 2.590					
FY 2019		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2020		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
To Complete		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
Total		10 / 22.202		- / -		- / -		- / -		- / -		- / -		- / 0.123		- / 0.656		1 / 2.431		1 / 1.924		- / -		- / -		12 / 27.336					
Installation Schedule																															
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	12
Out	9	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	12
Footnotes:																															
⁽⁵⁾ FY17 combat systems procurement for CG 67 USS SHILOH. FY18 combat systems procurement for CG 70 LAKE ERIE.																															

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0960 / CG Modernization						Modification Number / Title: 3 / CC004 - AN/SQQ-89 A(V) 15 PROCUREMENT		

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	165.342	-	-	-	-	-	16.836	18.757	8.781	7.262	-	216.978
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	165.342	-	-	-	-	-	16.836	18.757	8.781	7.262	-	216.978
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	165.342	-	-	-	-	-	16.836	18.757	8.781	7.262	-	216.978
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Thousands)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: Procure and Install AN/SQQ-89 A(V) 15 for CG Modernization. Supports DSA and Planning for installation.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0960 / CG Modernization					Modification Number / Title: 3 / CC004 - AN/SQQ-89 A(V) 15 PROCUREMENT				
Models of Systems Affected:				Modification Type:					Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: CC004 - AN/SQQ-89 A(V) 15 PROCUREMENT													
B Kits													
Recurring													
1.1.1) CC004 - AN/SQQ-89 A(V) 15 EQUIPMENT - NonOrganic ⁽⁶⁾	8 / 111.841	- / -	- / -	- / -	- / -	- / -	1 / 15.350	1 / 15.630	- / -	- / -	- / -	10 / 142.821	
1.1.2) CC004 - AN/SQQ-89 A(V) 15 ENGINEERING SERVICES - NonOrganic	- / 36.800	- / -	- / -	- / -	- / -	- / -	- / 1.048	- / 1.067	- / -	- / -	- / -	- / 38.915	
Subtotal: Recurring	- / 148.641	- / -	- / -	- / -	- / -	- / -	- / 16.398	- / 16.697	- / -	- / -	- / -	- / 181.736	
Subtotal: CC004 - AN/SQQ-89 A(V) 15 PROCUREMENT	8 / 148.641	- / -	- / -	- / -	- / -	- / -	1 / 16.398	1 / 16.697	- / -	- / -	- / -	10 / 181.736	
Subtotal: Procurement, All Modification Items	- / 148.641	- / -	- / -	- / -	- / -	- / -	- / 16.398	- / 16.697	- / -	- / -	- / -	- / 181.736	
Installation													
Modification Item 1 of 1: CC004 - AN/SQQ-89 A(V) 15 PROCUREMENT	- / 16.701	- / -	- / -	- / -	- / -	- / -	- / 0.438	- / 2.060	- / 8.781	- / 7.262	- / -	- / 35.242	
Subtotal: Installation	- / 16.701	- / -	- / -	- / -	- / -	- / -	- / 0.438	- / 2.060	- / 8.781	- / 7.262	- / -	- / 35.242	
Total													
Total Cost (Procurement + Support + Installation)	165.342	-	-	-	-	-	16.836	18.757	8.781	7.262	-	216.978	

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0960 / CG Modernization	Modification Number / Title: 3 / CC004 - AN/SQQ-89 A(V) 15 PROCUREMENT

Modification Item 1 of 1: CC004 - AN/SQQ-89 A(V) 15 PROCUREMENT

Manufacturer Information

Manufacturer Name: LOCKHEED MARTIN				Manufacturer Location: SYRACUSE, NY			
Administrative Leadtime (in Months): 6				Production Leadtime (in Months): 18			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates				Jun 2017	Jun 2018		
Delivery Dates				Dec 2018	Dec 2019		

Installation Information

Method of Implementation: [none specified]:: Installation Name: CC004 - AN/SQQ-89 A(V) 15 EQUIPMENT

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	3 / 16.701	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 16.701
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.438	- / 1.614	1 / 7.136	- / -	- / -	1 / 9.188
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.446	- / 1.645	1 / 7.262	- / -	1 / 9.353
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	3 / 16.701	- / -	- / -	- / -	- / -	- / -	- / 0.438	- / 2.060	1 / 8.781	1 / 7.262	- / -	5 / 35.242

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	5
Out	2	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	5

Footnotes:

⁽⁶⁾ FY17 combat systems procurement for CG 67 USS SHILOH. FY18 combat systems procurement for CG 70 LAKE ERIE.

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0960 / CG Modernization	Modification Number / Title: 4 / CC007 - AEGIS WEAPONS SYSTEM (AWS) UPGRADE PROCUREMENT

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	598.112	-	-	-	-	-	27.184	33.938	26.891	20.871	-	706.996
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	598.112	-	-	-	-	-	27.184	33.938	26.891	20.871	-	706.996
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	598.112	-	-	-	-	-	27.184	33.938	26.891	20.871	-	706.996
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Thousands)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Provides improved computing and display capabilities, faster processing, and greater track capacity. Supports DSA and Planning for installation.

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9					P-1 Line Item Number / Title: 0960 / CG Modernization					Modification Number / Title: 4 / CC007 - AEGIS WEAPONS SYSTEM (AWS) UPGRADE PROCUREMENT			
Models of Systems Affected:				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
<i>Modification Item 1 of 1:</i> CC007 - AEGIS WEAPONS SYSTEM (AWS) UPGRADE PROCUREMENT													
B Kits													
Recurring													
1.1.1) CC007 - AWS EQUIPMENT - NonOrganic ⁽⁷⁾	15 / 369.548	- / -	- / -	- / -	- / -	- / -	1 / 24.840	1 / 25.280	- / -	- / -	- / -	17 / 419.668	
1.1.2) CC007 - AWS ENGINEERING SERVICES - NonOrganic	- / 30.289	- / -	- / -	- / -	- / -	- / -	- / 0.970	- / 0.988	- / -	- / -	- / -	- / 32.247	
<i>Subtotal: Recurring</i>	- / 399.837	- / -	- / -	- / -	- / -	- / -	- / 25.810	- / 26.268	- / -	- / -	- / -	- / 451.915	
<i>Subtotal: CC007 - AEGIS WEAPONS SYSTEM (AWS) UPGRADE PROCUREMENT</i>	15 / 399.837	- / -	- / -	- / -	- / -	- / -	1 / 25.810	1 / 26.268	- / -	- / -	- / -	17 / 451.915	
<i>Subtotal: Procurement, All Modification Items</i>	- / 399.837	- / -	- / -	- / -	- / -	- / -	- / 25.810	- / 26.268	- / -	- / -	- / -	- / 451.915	
Installation													
<i>Modification Item 1 of 1:</i> CC007 - AEGIS WEAPONS SYSTEM (AWS) UPGRADE PROCUREMENT	- / 198.275	- / -	- / -	- / -	- / -	- / -	- / 1.374	- / 7.670	- / 26.891	- / 20.871	- / -	- / 255.081	
<i>Subtotal: Installation</i>	- / 198.275	- / -	- / -	- / -	- / -	- / -	- / 1.374	- / 7.670	- / 26.891	- / 20.871	- / -	- / 255.081	
Total													
Total Cost (Procurement + Support + Installation)	598.112	-	-	-	-	-	27.184	33.938	26.891	20.871	-	706.996	

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0960 / CG Modernization	Modification Number / Title: 4 / CC007 - AEGIS WEAPONS SYSTEM (AWS) UPGRADE PROCUREMENT

Modification Item 1 of 1: CC007 - AEGIS WEAPONS SYSTEM (AWS) UPGRADE PROCUREMENT

Manufacturer Information

Manufacturer Name: LOCKHEED MARTIN	Manufacturer Location: MOORESTOWN, NJ
Administrative Leadtime (in Months): 6	Production Leadtime (in Months): 20

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates				Apr 2017	Apr 2018		
Delivery Dates				Dec 2018	Dec 2019		

Installation Information

Method of Implementation: [none specified]:: Installation Name: CC007 - AWS EQUIPMENT

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	10 / 198.275	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	10 / 198.275
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.374	- / 6.270	1 / 20.497	- / -	- / -	1 / 28.141
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.400	- / 6.394	1 / 20.871	- / -	1 / 28.665
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	10 / 198.275	- / -	- / -	- / -	- / -	- / -	- / 1.374	- / 7.670	1 / 26.891	1 / 20.871	- / -	12 / 255.081

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	12
Out	9	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	12

Footnotes:

⁽⁷⁾ FY17 combat systems procurement for CG 67 USS SHILOH. FY18 combat systems procurement for CG 70 LAKE ERIE.

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0960 / CG Modernization	Modification Number / Title: 5 / CC008 - VERTICAL LAUNCH SYSTEM (VLS)

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	190.759	-	-	-	-	-	11.163	11.669	1.266	0.978	-	215.835
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	190.759	-	-	-	-	-	11.163	11.669	1.266	0.978	-	215.835
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	190.759	-	-	-	-	-	11.163	11.669	1.266	0.978	-	215.835
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Provides VLS upgrades one module forward and one module aft to support evolved sea sparrow missile system capability. Supports DSA and Planning for installation.

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LI 0960 - CG Modernization
Navy

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0960 / CG Modernization	Modification Number / Title: 5 / CC008 - VERTICAL LAUNCH SYSTEM (VLS)

Modification Item 1 of 1: CC008 - VERTICAL LAUNCH SYSTEM (VLS)

Manufacturer Information

Manufacturer Name: LOCHEED MARTIN	Manufacturer Location: BALTIMORE, MD
Administrative Leadtime (in Months): 6	Production Leadtime (in Months): 18

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates				Jun 2017	Jun 2018		
Delivery Dates				Dec 2018	Dec 2019		

Installation Information

Method of Implementation: [none specified]:: Installation Name: CC008 - VLS EQUIPMENT

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	10 / 15.164	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	10 / 15.164
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.065	- / 0.299	1 / 0.961	- / -	- / -	1 / 1.325
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.066	- / 0.305	1 / 0.978	- / -	1 / 1.349
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	10 / 15.164	- / -	- / -	- / -	- / -	- / -	- / 0.065	- / 0.365	1 / 1.266	1 / 0.978	- / -	12 / 17.838

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	12
Out	9	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	12

Footnotes:

⁽⁸⁾ FY17 combat systems procurement for CG 67 USS SHILOH. FY18 combat systems procurement for CG 70 LAKE ERIE.

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0960 / CG Modernization	Modification Number / Title: 6 / CC010 - MK34 UPGRADE

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	145.077	-	-	-	-	-	6.555	8.099	6.636	5.280	-	171.647
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	145.077	-	-	-	-	-	6.555	8.099	6.636	5.280	-	171.647
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	145.077	-	-	-	-	-	6.555	8.099	6.636	5.280	-	171.647
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Thousands)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Procures the MK34 Mod 4 Gun Weapon System (GWS) to replace the existing MK86 Gun Fire Control System. Supports DSA and Planning for installation.

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0960 / CG Modernization				Modification Number / Title: 6 / CC010 - MK34 UPGRADE				
Models of Systems Affected:			Modification Type:					Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Procurement												
Modification Item 1 of 1: CC010 - MK34 UPGRADE												
B Kits												
Recurring												
1.1.1) CC010 - MK34 EQUIPMENT - NonOrganic ⁽⁹⁾	15 / 88.291	- / -	- / -	- / -	- / -	- / -	1 / 5.873	1 / 5.979	- / -	- / -	- / -	17 / 100.143
1.1.2) CC010 - MK34 ENGINEERING SERVICES - NonOrganic	- / 19.881	- / -	- / -	- / -	- / -	- / -	- / 0.340	- / 0.346	- / -	- / -	- / -	- / 20.567
Subtotal: Recurring	- / 108.172	- / -	- / -	- / -	- / -	- / -	- / 6.213	- / 6.325	- / -	- / -	- / -	- / 120.710
Subtotal: CC010 - MK34 UPGRADE	15 / 108.172	- / -	- / -	- / -	- / -	- / -	1 / 6.213	1 / 6.325	- / -	- / -	- / -	17 / 120.710
Subtotal: Procurement, All Modification Items	- / 108.172	- / -	- / -	- / -	- / -	- / -	- / 6.213	- / 6.325	- / -	- / -	- / -	- / 120.710
Installation												
Modification Item 1 of 1: CC010 - MK34 UPGRADE	- / 36.905	- / -	- / -	- / -	- / -	- / -	- / 0.342	- / 1.774	- / 6.636	- / 5.280	- / -	- / 50.937
Subtotal: Installation	- / 36.905	- / -	- / -	- / -	- / -	- / -	- / 0.342	- / 1.774	- / 6.636	- / 5.280	- / -	- / 50.937
Total												
Total Cost (Procurement + Support + Installation)	145.077	-	-	-	-	-	6.555	8.099	6.636	5.280	-	171.647

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy			Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9		P-1 Line Item Number / Title: 0960 / CG Modernization			Modification Number / Title: 6 / CC010 - MK34 UPGRADE

Modification Item 1 of 1: CC010 - MK34 UPGRADE

Manufacturer Information

Manufacturer Name: Various				Manufacturer Location: Various			
Administrative Leadtime (in Months): 6				Production Leadtime (in Months): 18			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates				Jun 2017	Jun 2018		
Delivery Dates				Dec 2018	Dec 2019		

Installation Information

Method of Implementation: [none specified]:: Installation Name: CC010 - MK34 EQUIPMENT

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	10 / 36.905	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	10 / 36.905
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.342	- / 1.425	1 / 5.184	- / -	- / -	1 / 6.951
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.349	- / 1.452	1 / 5.280	- / -	1 / 7.081
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	10 / 36.905	- / -	- / -	- / -	- / -	- / -	- / 0.342	- / 1.774	1 / 6.636	1 / 5.280	- / -	12 / 50.937

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	12
Out	9	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	12

Footnotes:

⁽⁹⁾ FY17 combat systems procurement for CG 67 USS SHILOH. FY18 combat systems procurement for CG 70 LAKE ERIE.

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0960 / CG Modernization						Modification Number / Title: 7 / CC011 - INTEGRATED SHIP CONTROLS (ISC)		

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	77.573	-	-	-	-	-	0.942	14.156	29.501	13.890	-	136.062
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	77.573	-	-	-	-	-	0.942	14.156	29.501	13.890	-	136.062
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	77.573	-	-	-	-	-	0.942	14.156	29.501	13.890	-	136.062
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Thousands)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:
Procure and Install Smartship Integrated Ship Control (ISC) for CG Modernization.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0960 / CG Modernization				Modification Number / Title: 7 / CC011 - INTEGRATED SHIP CONTROLS (ISC)					
Models of Systems Affected:				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: CC011 - INTEGRATED SHIP CONTROLS (ISC)													
B Kits													
Recurring													
1.1.1) CC011 - ISC EQUIPMENT - NonOrganic ⁽¹⁰⁾		6 / 38.485	- / -	- / -	- / -	- / -	- / -	1 / 8.883	1 / 9.033	- / -	- / -	8 / 56.401	
1.1.2) CC011 - ISC ENGINEERING SERVICES - NonOrganic		- / 2.771	- / -	- / -	- / -	- / -	- / -	- / 2.507	- / 2.552	- / -	- / -	- / 7.830	
Subtotal: Recurring		- / 41.256	- / -	- / -	- / -	- / -	- / -	- / 11.390	- / 11.585	- / -	- / -	- / 64.231	
Subtotal: CC011 - INTEGRATED SHIP CONTROLS (ISC)		6 / 41.256	- / -	- / -	- / -	- / -	- / -	1 / 11.390	1 / 11.585	- / -	- / -	8 / 64.231	
Subtotal: Procurement, All Modification Items		- / 41.256	- / -	- / -	- / -	- / -	- / -	- / 11.390	- / 11.585	- / -	- / -	- / 64.231	
Installation													
Modification Item 1 of 1: CC011 - INTEGRATED SHIP CONTROLS (ISC)		- / 36.317	- / -	- / -	- / -	- / -	- / 0.942	- / 2.766	- / 17.916	- / 13.890	- / -	- / 71.831	
Subtotal: Installation		- / 36.317	- / -	- / -	- / -	- / -	- / 0.942	- / 2.766	- / 17.916	- / 13.890	- / -	- / 71.831	
Total													
Total Cost (Procurement + Support + Installation)		77.573	-	-	-	-	-	0.942	14.156	29.501	13.890	-	136.062

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0960 / CG Modernization	Modification Number / Title: 7 / CC011 - INTEGRATED SHIP CONTROLS (ISC)

Modification Item 1 of 1: CC011 - INTEGRATED SHIP CONTROLS (ISC)

Manufacturer Information

Manufacturer Name: HENSCHEL	Manufacturer Location: NEWBURY PORT, MA
Administrative Leadtime (in Months): 6	Production Leadtime (in Months): 6

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates					Dec 2017	Dec 2018	
Delivery Dates					Dec 2018	Dec 2019	

Installation Information

Method of Implementation: [none specified]:: Installation Name: CC011 - ISC EQUIPMENT

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	5 / 36.317	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 36.317
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.942	- / 1.806	1 / 13.632	- / -	- / -	1 / 16.380
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.960	- / 4.284	1 / 13.890	- / -	1 / 19.134
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	5 / 36.317	- / -	- / -	- / -	- / -	- / -	- / 0.942	- / 2.766	1 / 17.916	1 / 13.890	- / -	7 / 71.831

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	7
Out	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	7

Footnotes:

⁽¹⁰⁾ FY18 ISC combat systems procurement for CG 67 USS SHILOH. FY19 ISC combat systems procurement for CG 70 LAKE ERIE.

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0960 / CG Modernization					Modification Number / Title: 8 / CC015 - MULTI-MISSION SIGPRO			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	66.000	-	-	-	-	-	-	-	-	-	-	66.000
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	66.000	-	-	-	-	-	-	-	-	-	-	66.000
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	66.000	-	-	-	-	-	-	-	-	-	-	66.000
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Thousands)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: Replaces existing AN/SPY-1B/B(V) MIL-STANDARD Signal Processor with the COTS Multi-Mission SIGPRO set.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015						
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0960 / CG Modernization				Modification Number / Title: 8 / CC015 - MULTI-MISSION SIGPRO						
Models of Systems Affected:			Modification Type:						Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total		
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)		
Procurement														
Modification Item 1 of 1: CC015 - MULTI-MISSION SIGPRO														
B Kits														
Recurring														
1.1.1) CC015 - MULTI-MISSION SIGPRO EQUIPMENT - Organic	- / 66.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 66.000		
Subtotal: Recurring	- / 66.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 66.000		
Subtotal: CC015 - MULTI-MISSION SIGPRO	- / 66.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 66.000		
Subtotal: Procurement, All Modification Items	- / 66.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 66.000		
Installation														
Subtotal: Installation	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -		
Total														
Total Cost (Procurement + Support + Installation)	66.000	-	-	-	-	-	-	-	-	-	-	66.000		

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Exhibit P-3a, Individual Modification: PB 2016 Navy					Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9		P-1 Line Item Number / Title: 0960 / CG Modernization			Modification Number / Title: 8 / CC015 - MULTI-MISSION SIGPRO		
Modification Item 1 of 1: CC015 - MULTI-MISSION SIGPRO							
Manufacturer Information							
Manufacturer Name: TBD				Manufacturer Location: TBD			
Administrative Leadtime (in Months):				Production Leadtime (in Months):			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							
Installation Information							
Method of Implementation (Organic): No Quantities Associated with Install					Installation Quantity: 0		

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0960 / CG Modernization						Modification Number / Title: 9 / CC016 - SPY-1B VARIANCE TRANSMITTER UPGRADES		

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	30.780	-	-	-	-	-	-	-	-	-	-	30.780
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	30.780	-	-	-	-	-	-	-	-	-	-	30.780
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	30.780	-	-	-	-	-	-	-	-	-	-	30.780
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Thousands)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:
 Provides upgrades to the existing Radio Frequency Monitor (RFM), existing Driver/Pre-Driver (DPD) and modifies existing Deckhouse Wave Guide.

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0960 / CG Modernization						Modification Number / Title: 9 / CC016 - SPY-1B VARIANCE TRANSMITTER UPGRADES			
Models of Systems Affected:				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
<i>Modification Item 1 of 1:</i> CC016 - SPY-1B VARIANCE TRANSMITTER UPGRADES													
B Kits													
Recurring													
1.1.1) CC016 - SPY-1B VARIANCE TRANSMITTER EQUIPMENT - Organic	- / 30.780	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 30.780	
<i>Subtotal: Recurring</i>	- / 30.780	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 30.780	
<i>Subtotal: CC016 - SPY-1B VARIANCE TRANSMITTER UPGRADES</i>	- / 30.780	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 30.780	
<i>Subtotal: Procurement, All Modification Items</i>	- / 30.780	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 30.780	
Installation													
<i>Subtotal: Installation</i>	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Total													
Total Cost (Procurement + Support + Installation)	30.780	-	-	-	-	-	-	-	-	-	-	30.780	

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Exhibit P-3a, Individual Modification: PB 2016 Navy					Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9			P-1 Line Item Number / Title: 0960 / CG Modernization			Modification Number / Title: 9 / CC016 - SPY-1B VARIANCE TRANSMITTER UPGRADES	
Modification Item 1 of 1: CC016 - SPY-1B VARIANCE TRANSMITTER UPGRADES							
Manufacturer Information							
Manufacturer Name: Raytheon				Manufacturer Location: Marlborough, MA			
Administrative Leadtime (in Months): 6				Production Leadtime (in Months): 18			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							
Installation Information							
Method of Implementation (Organic): No Quantities Associated with Install					Installation Quantity: 0		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment							P-1 Line Item Number / Title: 0970 / LCAC					
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:					Other Related Program Elements:				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	78.493	14.431	7.158	20.965	-	20.965	3.237	5.445	4.141	5.707	-	139.577
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	78.493	14.431	7.158	20.965	-	20.965	3.237	5.445	4.141	5.707	-	139.577
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	78.493	14.431	7.158	20.965	-	20.965	3.237	5.445	4.141	5.707	-	139.577
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: The LCAC (Landing Craft Air Cushion) mission is to transport weapons systems, equipment, cargo, and personnel of the assault elements for the Marine Air/Ground Task Force from ship-to-shore and across the beach. The LCAC weighs 150 tons, is 88ft long with a beam of 47ft, rides on a cushion of air contained in a flexible skirt and is propelled by two aft-mounted, reversible, variable pitch propellers. It is capable of speeds in excess of 40 knots. The LCAC sustainment funding is programmed for equipment procurement using OPN to replace selected engines, personnel transport modules and propeller shrouds that the fleet urgently requires to maintain acceptable levels of readiness. LC001 - LCAC SYSTEM UPGRADES The LCAC System Upgrade Program provides for selected modernization through procurement and installation of components required to maintain acceptable levels of fleet operational readiness. Equipment removal and installation will take place at the two Assault Craft Units (ACUs), each of which are currently responsible for half of the craft inventory. LC002 - ENGINES The ETF-40B engines are enhanced versions of the current TF-40B engines and are being provided with the rest of the SLEP craft. Recent catastrophic engine failures have highlighted the need for spare engines to reduce operational downtime. Engine procurements are also for Pack Up Kits (PUKs) that accompany fleet deployment of LCACs aboard amphibious ships. Additional ETF 40B Engines will be needed for this purpose since they are being newly introduced as part of SLEP. LC007 - LIGHTWEIGHT ARMOR The portable lightweight armor system replaces the existing armor system. The portable system can be transported via a Container Express (CONEX) box and provides the Assault Craft Unit with the ability to provide ballistic/fragmentation protection to manned spaces on the craft as well as to selected machinery components. LC008 - COLD WEATHER KITS LCACs are required to operate in ambient temperatures as low as 10F. Snow and ice accumulation leads to actuation of a safety system that bypasses the main engine inlet air filtration system and allows engines to draw in unfiltered air. Cold weather kits prevent snow and ice accumulation in the main engines during cold weather operations. LC009 - PERSONNEL TRANSPORT MODULE The Personnel Transport Module (PTM) increases the capability of the Landing Craft Air Cushion (LCAC) to transport personnel and protect occupants from the elements inherent in an amphibious environment.												

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment		P-1 Line Item Number / Title: 0970 / LCAC
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy						Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment				P-1 Line Item Number / Title: 0970 / LCAC				
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:			Other Related Program Elements:		
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
LCAC	P-40a		- / 78.493	- / 14.431	- / 7.158	- / 20.965	- / -	- / 20.965
Total Gross/Weapon System Cost			- / 78.493	- / 14.431	- / 7.158	- / 20.965	- / -	- / 20.965
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown. Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.								

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9								P-1 Line Item Number / Title: 0970 / LCAC							Aggregated Items Title: LCAC				

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) LCAC																				
1.1) LC001 LCAC SYSTEMS UPGRADE	A		-	-	48.182	722,500.00	2	1.445	736,000.00	3	2.208	730,000.00	19	13.870	-	-	-	730,000.00	19	13.870
1.2) LC002 ETF 40-B ENGINES ⁽¹⁾	A		2,909K	9	26.183	1,471K	8	11.767	1,484K	3	4.452	1,512K	2	3.024	-	-	-	1,512K	2	3.024
1.3) LC007 LIGHTWEIGHT ARMOR ⁽²⁾	A		-	-	4.128	243,800.00	5	1.219	249,000.00	2	0.498	217,750.00	4	0.871	-	-	-	217,750.00	4	0.871
1.5) LC009 PERSONNEL TRANSPORT MODULE ⁽³⁾	A																			
			-	-	-	-	-	-	-	-	-	800,000.00	4	3.200	-	-	-	800,000.00	4	3.200
Subtotal: 1) LCAC			-	-	78.493	-	-	14.431	-	-	7.158	-	-	20.965	-	-	-	-	-	20.965
Total			-	-	78.493	-	-	14.431	-	-	7.158	-	-	20.965	-	-	-	-	-	20.965

Footnotes:

- ⁽¹⁾ Recent catastrophic engine failures have highlighted the need for spare engines to reduce operational downtime. Engine procurements are also for Pack Up Kits (PUKs) that accompany fleet deployment of LCACs aboard amphibious ships. Additional ETF 40B Engines will be needed for this purpose since they are being newly introduced as part of SLEP.
- ⁽²⁾ The lower unit cost in FY16 is driven by economies of scale from the increase units procured.
- ⁽³⁾ The legacy Personnel Transport Modules (PTMs) are at the end of their service life. The next generation PTM will replace the aging and deteriorating legacy PTMs in the Fleet

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment							P-1 Line Item Number / Title: 0977 / Underwater EOD Programs					
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:					Other Related Program Elements:				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	91.439	31.513	58.576	51.652	-	51.652	32.211	51.206	50.150	51.209	-	417.956
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	91.439	31.513	58.576	51.652	-	51.652	32.211	51.206	50.150	51.209	-	417.956
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	91.439	31.513	58.576	51.652	-	51.652	32.211	51.206	50.150	51.209	-	417.956
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	8.133	4.949	6.075	-	6.075	1.928	3.931	1.650	1.988	Continuing	Continuing
Flyaway Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-
Description: Underwater Explosive Ordnance Disposal (EOD) program supports EOD Groups, Units, and Detachments worldwide. This program supplies EOD and Maritime Expeditionary forces with the necessary allowance outfitting, and diving and diving-related equipment aligned to fulfill assigned missions that includes Underwater Mine Countermeasures (UMCM) and other Maritime Expeditionary missions. All equipment must have inherently low acoustic and magnetic signatures. The EOD program supports numerous Programs of Record (POR) and non PORs within this budget line item which includes the Marine Mammal Systems (MMS). Underwater EOD Programs: The requirements for the procurement of each of these system suites are articulated in OPNAV approved requirements documents in accordance with DoD Directive 5000.2, SECNAVINST 5000.2E, and the JCIDS process as defined by CJSCINST 3170.01. Additionally, the nature of the missions assigned to EOD and MCM forces under OPNAVINST 3501.97H, Required Operational Capabilities & Projected Operational Environments (ROC/POE), require an aggregated set of systems and equipment to perform the wide range of mine countermeasures, underwater detection, location, investigation, force protection, and neutralization tasks that comprise the mission set. The establishment of Expeditionary MCM Forces under the direction of Commander, US Fleet Forces Command has resulted in an increased inventory requirement for Underwater EOD systems and equipment, with a resultant requirement for re-aligned procurement and fielding priorities across the FYDP. The acquisition strategy approved by the milestone decision authority reflects an evolutionary and modular approach to develop, test, procure, and field the types of baseline capabilities defined by this program with attendant pre-planned product improvements and production engineering needed to improve and advance maintain these capabilities in ever changing dynamic underwater threat environments. [P5 / UQ019-MINE WARFARE VULNERABILITY IDENTIFICATION PROGRAM (MIW-VIP)]: Measures magnetic and acoustic signatures using existing ranges and portable ranges (Forward Area Combined Degaussing and Acoustic Range (FACDAR)). Measurements will be taken in both home port areas and deployment areas to assess a ship's susceptibility to various mines. [P5 / UQ034 - U/W EOD & MCM SYSTEM/EQUIPMENT]: UNDERWATER MINE COUNTERMEASURES (UMCM) EOD UNMANNED UNDERWATER VEHICLE (MK 18 UUV/HULS/HULS-N): Provides for the procurement of Navy expeditionary unmanned underwater vehicles for UMCM search/localization/identification/neutralization and battle damage assessment (BDA) operations. UUV INCREMENTAL CAPABILITY IMPROVEMENT PROGRAM RETROFIT KITS (MK18/HULS): Provides for the procurement of evolving technology insertion of retrofit upgrades to UUV systems. Upgrades are the result of incremental capability improvements to address CNO validated preplanned production improvements leveraging ONR developed technologies. Retrofit kits are developed based on technologies which have achieved a Technology Readiness level of sufficient maturity for integration into UUV systems. Unit cost of individual retrofit kits will vary based on the number and type of technologies included and systems being upgraded and are identified as incremental Block Upgrades (e.g., current increment Block B retrofit kit is an upgrade in capability for the Mk 18 Mod 2 UUV system).												

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment		P-1 Line Item Number / Title: 0977 / Underwater EOD Programs
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:
AUXILIARY EQUIPMENT (MK 18/HULS): Provides for procurement of mission critical auxiliary equipment for launch, recovery, handling, storage, and transportation of unmanned systems and equipment. COCOM UUV MK 18 Mod 2: Provides for procurement of UUV MK 18 Mod 2 systems and retrofit kits for fielding advanced sensor technology upgrades, which will be employed in operational missions in Shallow Water (SW) and Very Shallow Water (VSW) environments including rotational deployments to the Fifth Fleet area of responsibility as directed by CNO. Unit costs of the advanced sensor retrofit kits will vary based on the number and type of sensor upgrades. UNDERWATER (UW) DIVER INTEGRATED SENSORS: Provides for the procurement of a family of systems based on Modified-Off-The Shelf (MOTS), mature technologies and upgrades to Diver Integrated Sensors. Specifically, this provides for more capable diver tools in support of EOD, UMCM and Mobile Diving & Salvage Unit (MDSU) object localization, precise navigation, managing data and underwater mine location and identification. Also provides retrofit kits to improve and increase capabilities. Unit cost of individual retrofit kits may vary based on number and type of technology included in the kit. ADVANCED FIRING SYSTEMS (AFS): Provides for the procurement of EOD Underwater firing systems, and sub-systems. Provides retrofit improvements to increase AFS capabilities using a tool box approach. Quantities and unit cost of toolbox kits may vary based on technologies included in each kit. DIVER SAFETY & LIFE SUPPORT SYSTEMS: Provides for the procurement of a family of systems based on MOTS and mature technologies to provide safer tools and life support systems for EOD UMCM and MDSU operations. Based on family of systems concept, unit cost of individual systems and sub-systems will vary based on number and type of technology included. [P5 / UQ035 - OUTFIT EOD/UMCM TOOLS & EQUIPMENT]: UNDERWATER (UW) INTEGRATED SYSTEM INTERFACE (previously - C4I UPGRADES): Provides for the upgrade of existing EOD systems to meet UW Integrated System Interface requirements. [P5 / UQ036 - DIVER SAFETY LIFE SUPPORT EQUIPMENT]: DIVER SAFETY & LIFE SUPPORT SYSTEMS - Provide for the procurement of a family of systems based on MOTS and mature technologies to provide safer tools and life support systems for EOD UMCM and MDSU operations. [P5 / UQ037 - MARINE MAMMAL SYSTEM/EQUIPMENT]: MMS ALLOWANCE: Initial outfitting of tools/equipment for increased allowances of all Fleet MMS in accordance with CNO approved allowance list. MEDICAL OUTFITTING: Provides for initial outfitting of additions to medical specific items to MMS allowance. This equipment enables fleet MMS to meet care requirements articulated in SECNAVINST 3900.41D. MMS ENVIRONMENTAL PEN ASSEMBLIES: Provides extended deployment capabilities of deployed MCM MMS for extended periods of time to areas with varying and sometimes extreme environmental conditions. UNDERWATER LOW MAGNETIC TEST EQUIPMENT UPGRADE: Provides for procurement of equipment for Fleet Remote Site Facility Low Magnetic Certification. MARINE MAMMAL SYSTEM CONTINUOUS IMPROVEMENT PROGRAM (MMS CIP): Provides for engineering changes and initial outfitting of equipment to fleet MMS allowing for reduce footprint, and improved system effectiveness and suitability to meet EOD, Anti-Terrorism (AT)/force Protection (FP), and mission areas. MMS LITTORAL, PORT AND HARBOR DEFENSE OPERATIONS: Enhances Doctrine, Organization, Training, Material, Leadership, Personnel and Facilities (DOTMLPF) of fleet Marine Mammal Systems to optimize the rapid detection, identification, and clearance of mines in support of UMCM and Maritime Homeland Defense. MMS UMCM: Provides for the production of capabilities to support OPNAV validated and capacity needs to conduct UMCM operations by fleet Marine Mammal Systems. MARITIME HOMELAND DEFENSE (MHD): Optimization of configuration of existing swimmer defense and mine countermeasures fleet Marine Mammal Systems in support of high priority Maritime Homeland Defense missions. These upgrades include but are not limited to civilianization of fleet systems, re-configuration of system hardware and revised TT&P.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment		P-1 Line Item Number / Title: 0977 / Underwater EOD Programs
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:
[P5 / UQ830 - PRODUCTION ENGINEERING]: Provides for production engineering support of outfitting in meeting OPNAV improved diver-based and unmanned systems fleet inventory objectives. This includes writing of contracts, production contract award, first article tests, factory acceptance tests and other production support efforts directly related to delivery of the support hardware. In addition for EOD equipment, review all technical and data packages prior to procurement and providing procurement instructions to the procuring activity for EOD and MMS production contracts. Production engineering efforts vary based on the changes in inventory objectives of Underwater EOD systems and equipment across the FYDP. [P5 / UQ850 - PRODUCT IMPROVEMENT]: Provides for engineering services to improve fielded MMS Systems/EOD Diver-based and unmanned systems to improve Human Systems Integration (HSI)/Logistics domains insert technology refresh and/or decrease costs. Product improvement efforts vary based on the changes in inventory objectives of Underwater EOD systems and equipment across the FYDP [P5 / UQTNG - INITIAL TRAINING]: Provides training support packages which include curriculum material and training aids for Underwater EOD/UMCM systems and Marine Mammal System equipment.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy						Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment				P-1 Line Item Number / Title: 0977 / Underwater EOD Programs				
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:			Other Related Program Elements:		
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
1 / Underwater EOD Programs	P-5, P-5a, P-21		- / 91.439	- / 31.513	- / 58.576	- / 51.652	- / -	- / 51.652
Total Gross/Weapon System Cost			- / 91.439	- / 31.513	- / 58.576	- / 51.652	- / -	- / 51.652
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.								
Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.								

Justification:

FY16 baseline funding is required to procure Underwater EOD program systems and equipment to outfit Expeditionary MCM Companies, EOD and Mobile Salvage units with hardware required to accomplish their OPNAV approved Required Operational Capability and Projected Operational Environments. This equipment will allow warfighters to detect, locate, investigate, neutralize and render safe unexploded ordnance including improvised explosive devices. If these units are not properly outfitted lives may be lost, access to sea lanes of communication could be severed and risk to transiting forces will be elevated. Additionally, FY16 baseline funding is required to address product improvements needed for systems designed and first produced over 40 years ago, as well as the production engineering and integrated logistics support needed for all Expeditionary MCM Companies, EOD and Mobile Salvage unit equipment.

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Exhibit P-5, Cost Analysis: PB 2016 Navy												Date: February 2015						
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9						P-1 Line Item Number / Title: 0977 / Underwater EOD Programs						Item Number / Title [DODIC]: 1 / Underwater EOD Programs						
ID Code (A=Service Ready, B=Not Service Ready) :									MDAP/MAIS Code:									
Resource Summary				Prior Years		FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total				
Procurement Quantity <i>(Units in Each)</i>				-		-		-		-		-		-				
Gross/Weapon System Cost <i>(\$ in Millions)</i>				91.439		31.513		58.576		51.652		-		51.652				
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Net Procurement (P1) <i>(\$ in Millions)</i>				91.439		31.513		58.576		51.652		-		51.652				
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Total Obligation Authority <i>(\$ in Millions)</i>				91.439		31.513		58.576		51.652		-		51.652				
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																		
Initial Spares <i>(\$ in Millions)</i>				-		8.133		4.949		6.075		-		6.075				
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>				-		-		-		-		-		-				
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.																		
Cost Elements	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Hardware - UQ019-MINE WARFARE VULNERABILITY IDENTIFICATION PROGRAM (MIW-VIP) Cost																		
Recurring Cost																		
1.1.1) MIW-VIP	-	-	1.214	-	-	0.326	-	-	0.334	-	-	0.299	-	-	-	-	-	0.299
Subtotal: Recurring Cost	-	-	1.214	-	-	0.326	-	-	0.334	-	-	0.299	-	-	-	-	-	0.299
Subtotal: Hardware - UQ019-MINE WARFARE VULNERABILITY IDENTIFICATION PROGRAM (MIW-VIP) Cost	-	-	1.214	-	-	0.326	-	-	0.334	-	-	0.299	-	-	-	-	-	0.299
Hardware - UQ034 - U/W EOD & MCM SYSTEM/EQUIPMENT Cost																		
Recurring Cost																		
2.1.1) MK 18 Mod 1 UUV ^(†)	-	-	-	-	-	-	385,000.00	3	1.155	396,666.67	3	1.190	-	-	-	396,666.67	3	1.190
2.1.2) MK 18 Mod 1 UMCM UUV Incremental (CIP) Retrofit Kit ^(†)	-	-	-	-	-	-	1,060K	5	5.300	1,060K	5	5.300	-	-	-	1,060K	5	5.300
2.1.3) COCOM UUV MK 18 Mod 2	2,450K	4	9.800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.1.4) UW DIVER INTEGRATION SENSORS ^(†)	158,228.26	92	14.557	132,888.89	27	3.588	-	-	-	-	-	-	-	-	-	-	-	-
2.1.5) ADVANCED FIRING SYSTEM ^(†)	47,500.00	40	1.900	20,000.00	50	1.000	20,000.00	50	1.000	20,000.00	50	1.000	-	-	-	20,000.00	50	1.000

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Exhibit P-5, Cost Analysis: PB 2016 Navy												Date: February 2015						
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9						P-1 Line Item Number / Title: 0977 / Underwater EOD Programs						Item Number / Title [DODIC]: 1 / Underwater EOD Programs						
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:								
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.																		
Cost Elements	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
2.1.6) HULS (Vehicle Procurement) ^(†)	-	-	-	541,000.00	4	2.164	553,000.00	4	2.212	-	-	-	-	-	-	-	-	-
2.1.7) HULS Retrofit Kits ^(†)	-	-	-	-	-	-	149,500.00	6	0.897	150,230.77	13	1.953	-	-	-	150,230.77	13	1.953
2.1.8) MK 18 Mod 2 UUV ^(†)	-	-	-	990,000.00	6	5.940	949,777.78	9	8.548	990,000.00	2	1.980	-	-	-	990,000.00	2	1.980
2.1.9) MK 18 Mod 2 Retrofit Kits ^(†)	-	-	-	1,750K	1	1.750	1,864K	4	7.455	1,812K	12	21.739	-	-	-	1,812K	12	21.739
2.1.10) Auxilliary Equipment (HULS) ^(†)	-	-	-	286,000.00	4	1.144	286,000.00	1	0.286	-	-	-	-	-	-	-	-	-
2.1.11) Auxilliary Equipment (MK 18) ^(†)	-	-	-	378,000.00	9	3.402	364,950.00	20	7.299	386,000.00	4	1.544	-	-	-	386,000.00	4	1.544
2.1.13) UMCM/EOD UUV	-	-	15.150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.1.14) UMCM UUV INCREMENTAL (CIP) RETROFIT (BLKB)	1,318K	4	5.270	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	46.677	-	-	18.988	-	-	34.152	-	-	34.706	-	-	-	-	-	34.706
Subtotal: Hardware - UQ034 - U/W EOD & MCM SYSTEM/EQUIPMENT Cost	-	-	46.677	-	-	18.988	-	-	34.152	-	-	34.706	-	-	-	-	-	34.706
Hardware - UQ035 - OUTFIT EOD/UMCM TOOLS & EQUIPMENT Cost																		
Recurring Cost																		
3.1.1) UW INTEGRATED SYSTEM INTERFACE (PREVIOUSLY C4I UPGRADES)	-	-	0.805	-	-	0.218	-	-	0.222	-	-	0.226	-	-	-	-	-	0.226
Subtotal: Recurring Cost	-	-	0.805	-	-	0.218	-	-	0.222	-	-	0.226	-	-	-	-	-	0.226
Subtotal: Hardware - UQ035 - OUTFIT EOD/UMCM TOOLS & EQUIPMENT Cost	-	-	0.805	-	-	0.218	-	-	0.222	-	-	0.226	-	-	-	-	-	0.226
Hardware - UQ036 - DIVER SAFETY LIFE SUPPORT EQUIPMENT Cost																		
Recurring Cost																		
4.1.1) DIVER SAFETY LIFE SUPPORT EQUIPMENT	-	-	1.200	-	-	2.000	-	-	-	-	-	0.338	-	-	-	-	-	0.338
Subtotal: Recurring Cost	-	-	1.200	-	-	2.000	-	-	-	-	-	0.338	-	-	-	-	-	0.338

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Exhibit P-5, Cost Analysis: PB 2016 Navy												Date: February 2015						
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9						P-1 Line Item Number / Title: 0977 / Underwater EOD Programs						Item Number / Title [DODIC]: 1 / Underwater EOD Programs						
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:								
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.																		
Cost Elements	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Subtotal: Hardware - UQ036 - DIVER SAFETY LIFE SUPPORT EQUIPMENT Cost	-	-	1.200	-	-	2.000	-	-	-	-	-	0.338	-	-	-	-	-	0.338
Hardware - UQ037 - MARINE MAMMAL SYSTEM/EQUIPMENT Cost																		
Recurring Cost																		
5.1.1) MMS UCMCM	-	-	5.598	-	-	3.600	-	-	7.263	-	-	5.971	-	-	-	-	-	5.971
5.1.2) MMS ALLOWANCE	-	-	1.064	-	-	0.275	-	-	0.270	-	-	0.280	-	-	-	-	-	0.280
5.1.3) MEDICAL OUTFITTING	-	-	1.820	-	-	0.392	-	-	0.422	-	-	0.426	-	-	-	-	-	0.426
5.1.4) MMS ENVIRON PEN ASSEMBLIES	-	-	3.619	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.1.5) UW LOW MAGNETIC TEST EQUIPM UPGRADE	-	-	0.512	-	-	0.110	-	-	0.120	-	-	0.120	-	-	-	-	-	0.120
5.1.6) MMS CIP	-	-	2.446	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.1.7) MMS LITTORAL PORT & HARBOR DEFENSE OPERATIONS	-	-	2.462	-	-	1.409	-	-	1.456	-	-	1.506	-	-	-	-	-	1.506
Subtotal: Recurring Cost	-	-	17.521	-	-	5.786	-	-	9.531	-	-	8.303	-	-	-	-	-	8.303
Non Recurring Cost																		
5.2.1) MARINE MAMMAL SYSTEM (MMS) - MK 4, MK 6, MK 7, & MK 8 (OCO)	-	-	5.040	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.2.2) MARINE MAMMAL SYSTEM (MMS) - MK 6 (OCO)	-	-	7.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Non Recurring Cost	-	-	12.040	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Hardware - UQ037 - MARINE MAMMAL SYSTEM/EQUIPMENT Cost	-	-	29.561	-	-	5.786	-	-	9.531	-	-	8.303	-	-	-	-	-	8.303
Hardware - FY15 OCO SUPPLEMENTAL Cost																		
Non Recurring Cost																		
6.1.1) OCO FY15 (OEF-T)	-	-	-	-	-	-	-	-	8.210	-	-	-	-	-	-	-	-	-
Subtotal: Non Recurring Cost	-	-	0.000	-	-	-	-	-	8.210	-	-	-	-	-	-	-	-	-

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Exhibit P-5, Cost Analysis: PB 2016 Navy												Date: February 2015						
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9						P-1 Line Item Number / Title: 0977 / Underwater EOD Programs						Item Number / Title [DODIC]: 1 / Underwater EOD Programs						
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:								
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.																		
Cost Elements	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Subtotal: Hardware - FY15 OCO SUPPLEMENTAL Cost	-	-	0.000	-	-	-	-	-	8.210	-	-	-	-	-	-	-	-	-
Support - UQ830 - PRODUCTION ENGINEERING Cost																		
7.1) PRODUCTION ENGINEERING	-	-	5.824	-	-	2.566	-	-	3.723	-	-	4.108	-	-	-	-	-	4.108
Subtotal: Support - UQ830 - PRODUCTION ENGINEERING Cost	-	-	5.824	-	-	2.566	-	-	3.723	-	-	4.108	-	-	-	-	-	4.108
Support - UQ850 - PRODUCT IMPROVEMENT Cost																		
8.1) PRODUCT IMPROVEMENT	-	-	5.403	-	-	1.432	-	-	2.206	-	-	3.375	-	-	-	-	-	3.375
Subtotal: Support - UQ850 - PRODUCT IMPROVEMENT Cost	-	-	5.403	-	-	1.432	-	-	2.206	-	-	3.375	-	-	-	-	-	3.375
Support - UQTNG - INITIAL TRAINING Cost																		
9.1) INITIAL TRAINING	-	-	0.755	-	-	0.197	-	-	0.198	-	-	0.297	-	-	-	-	-	0.297
Subtotal: Support - UQTNG - INITIAL TRAINING Cost	-	-	0.755	-	-	0.197	-	-	0.198	-	-	0.297	-	-	-	-	-	0.297
Gross/Weapon System Cost	-	-	91.439	-	-	31.513	-	-	58.576	-	-	51.652	-	-	-	-	-	51.652
(†) indicates the presence of a P-5a																		

(t) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9			P-1 Line Item Number / Title: 0977 / Underwater EOD Programs					Item Number / Title [DODIC]: 1 / Underwater EOD Programs				
Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
2.1.1) MK 18 Mod 1 UUV		2015	Hydroid, Inc./Kongsberg Maritime / Cape Cod, MA	C / FFP	NSWCIH, MD	Mar 2015	Mar 2016	3	385,000.00	Y		
2.1.1) MK 18 Mod 1 UUV		2016	Hydroid, Inc./Kongsberg Maritime / Cape Cod, MA	C / FFP	NSWCIH, MD	Oct 2015	Oct 2016	3	396,666.67	Y		
2.1.2) MK 18 Mod 1 UCMC UUV Incremental (CIP) Retrofit Kit ^(†)		2015	Hydroid, Inc./Kongsberg Maritime / Cape Cod, MA	C / FFP	NSWCIHD, MD	Nov 2014	Nov 2015	5	1,060K	Y		
2.1.2) MK 18 Mod 1 UCMC UUV Incremental (CIP) Retrofit Kit ^(†)		2016	Hydroid, Inc./Kongsberg Maritime / Cape Cod, MA	C / FFP	NSWCIHD, MD	Mar 2016	Mar 2017	5	1,060K	Y		
2.1.4) UW DIVER INTEGRATION SENSORS		2014	UARC-University of Texas at Austin / Austin, TX	C / FFP	NSWCIHD, MD	May 2014	May 2015	27	132,888.89	Y		
2.1.5) ADVANCED FIRING SYSTEM		2014	UARC-University of Texas at Austin / Austin, TX	C / FFP	NAVSEA, HQ	May 2014	May 2015	50	20,000.00	Y		
2.1.5) ADVANCED FIRING SYSTEM		2015	UARC-University of Texas at Austin / Austin, TX	C / TBD	NAVSEA, HQ	Apr 2015	Apr 2016	50	20,000.00	Y		
2.1.5) ADVANCED FIRING SYSTEM		2016	UARC-University of Texas at Austin / Austin, TX	C / TBD	NAVSEA, HQ	May 2016	May 2017	50	20,000.00	Y		
2.1.6) HULS (Vehicle Procurement)		2014	Bluefin Robotics / Quincy, MA	C / FFP	NSWCIHD, MD	Mar 2014	Mar 2015	4	541,000.00	Y		
2.1.6) HULS (Vehicle Procurement)		2015	Bluefin Robotics / Quincy, MA	C / FFP	NSWCIHD, MD	Oct 2014	Oct 2015	4	553,000.00	Y		
2.1.7) HULS Retrofit Kits		2015	Bluefin / Maine	C / FFP	NSWCIHD, MD	Mar 2015	Mar 2016	6	149,500.00	Y		
2.1.7) HULS Retrofit Kits		2016	Bluefin / Maine	C / FFP	NSWCIHD, MD	Mar 2016	Mar 2017	13	150,230.77	Y		
2.1.8) MK 18 Mod 2 UUV		2014	Hydroid, Inc./Kongsberg Maritime / Cape Cod, MA	C / FFP	NSWCIH, MD	Mar 2014	Mar 2015	6	990,000.00	Y		
2.1.8) MK 18 Mod 2 UUV		2015	Hydroid, Inc./Kongsberg Maritime / Cape Cod, MA	C / FFP	NSWCIH, MD	Mar 2015	Mar 2016	9	949,777.78	Y		
2.1.8) MK 18 Mod 2 UUV		2016	Hydroid, Inc./Kongsberg Maritime / Cape Cod, MA	C / FFP	NSWCIH, MD	Mar 2016	Mar 2017	2	990,000.00	Y		
2.1.9) MK 18 Mod 2 Retrofit Kits ^(†)		2014	Hydroid, Inc./Kongsberg Maritime / Cape Cod, MA	C / FFP	NSWCIH, MD	Mar 2014	Mar 2015	1	1,750K	Y		
2.1.9) MK 18 Mod 2 Retrofit Kits ^(†)		2015	Hydroid, Inc./Kongsberg Maritime / Cape Cod, MA	C / FFP	NSWCIHD, MD	Nov 2014	Nov 2015	4	1,864K	Y		
2.1.9) MK 18 Mod 2 Retrofit Kits ^(†)		2016	Hydroid, Inc./Kongsberg Maritime / Cape Cod, MA	C / FFP	NSWCIHD, MD	Nov 2015	Aug 2016	12	1,812K	Y		
2.1.10) Auxilliary Equipment (HULS)		2014	Bluefin / Maine	C / FFP	NSWCIH, MD	Mar 2014	Mar 2015	4	286,000.00	Y		
2.1.10) Auxilliary Equipment (HULS)		2015	Bluefin / Maine	C / FFP	NSWCIH, MD	Oct 2014	Oct 2015	1	286,000.00	Y		
2.1.11) Auxilliary Equipment (MK 18)		2014	Hydroid, Inc./Kongsberg Maritime / Cape Cod, MA	C / FFP	NSWCIH, MD	Mar 2014	Mar 2015	9	378,000.00	Y		

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Exhibit P-5a, Procurement History and Planning: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0977 / Underwater EOD Programs				Item Number / Title [DODIC]: 1 / Underwater EOD Programs				
Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
2.1.11) Auxilliary Equipment (MK 18)		2015	Hydroid, Inc./Kongsberg Maritime / Cape Cod, MA	C / FFP	NSWCIH, MD	Mar 2015	Mar 2016	20	364,950.00	Y		
2.1.11) Auxilliary Equipment (MK 18)		2016	Hydroid, Inc./Kongsberg Maritime / Cape Cod, MA	C / FFP	NSWCIH, MD	Apr 2016	Apr 2017	4	386,000.00	Y		

(†) indicates the presence of a P-21

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Exhibit P-21, Production Schedule: PB 2016 Navy																				Date: February 2015														
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9										P-1 Line Item Number / Title: 0977 / Underwater EOD Programs										Item Number / Title [DODIC]: 1 / Underwater EOD Programs														
Cost Elements (Units in Each)							Fiscal Year 2014										Fiscal Year 2015																	
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2013	BAL DUE AS OF 1 OCT	Calendar Year 2014										Calendar Year 2015																	
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L			
2.1.2) MK 18 Mod 1 UMCM UUV Incremental (CIP) Retrofit Kit																																		
	1	2015	NAVY	5	-	5															A -	-	-	-	-	-	-	-	-	-	-	5		
	1	2016	NAVY	5	-	5																										5		
2.1.9) MK 18 Mod 2 Retrofit Kits																																		
	2	2014	NAVY	1	-	1							A -	-	-	-	-	-	-	-	-	-	-	-	-	1								-
	2	2015	NAVY	4	-	4															A -	-	-	-	-	-	-	-	-	-	-	4		
	2	2016	NAVY	12	-	12																										12		
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L			

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Exhibit P-21, Production Schedule: PB 2016 Navy																				Date: February 2015											
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9										P-1 Line Item Number / Title: 0977 / Underwater EOD Programs										Item Number / Title [DODIC]: 1 / Underwater EOD Programs											
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2016										Fiscal Year 2017														
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2015	BAL DUE AS OF 1 OCT	Calendar Year 2016										Calendar Year 2017														
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L
2.1.2) MK 18 Mod 1 UMCM UUV Incremental (CIP) Retrofit Kit																															
	1	2015	NAVY	5	-	5	-	1	-	1	-	1	-	1	-	1															-
	1	2016	NAVY	5	-	5						A -	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	1	-	1	1
2.1.9) MK 18 Mod 2 Retrofit Kits																															
	2	2014	NAVY	1	1	-																									-
	2	2015	NAVY	4	-	4	-	1	-	1	-	1	-	1																	-
	2	2016	NAVY	12	-	12		A -	-	-	-	-	-	-	-	1	-	2	-	2	-	-	2	2	2	2	1				-
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L

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Exhibit P-21, Production Schedule: PB 2016 Navy																				Date: February 2015																	
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9										P-1 Line Item Number / Title: 0977 / Underwater EOD Programs										Item Number / Title [DODIC]: 1 / Underwater EOD Programs																	
Cost Elements (Units in Each)							Fiscal Year 2018													Fiscal Year 2019																	
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2017	BAL DUE AS OF 1 OCT							Calendar Year 2018												Calendar Year 2019												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L						
2.1.2) MK 18 Mod 1 UMCM UUV Incremental (CIP) Retrofit Kit																																					
	1	2015	NAVY	5	5	-																										-					
	1	2016	NAVY	5	4	1	-	1																								-					
2.1.9) MK 18 Mod 2 Retrofit Kits																																					
	2	2014	NAVY	1	1	-																										-					
	2	2015	NAVY	4	4	-																										-					
	2	2016	NAVY	12	12	-																										-					
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L						

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Exhibit P-21, Production Schedule: PB 2016 Navy									Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9					P-1 Line Item Number / Title: 0977 / Underwater EOD Programs					Item Number / Title [DODIC]: 1 / Underwater EOD Programs			
		Production Rates (Each / Year)			Procurement Leadtime (Months)								
MFR Ref #	MFR Name - Location	MSR For 2016	1-8-5 For 2016	MAX For 2016	Initial				Reorder				
					ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1	
1	Hydroid, Inc./Kongsberg Maritime - Cape Cod, MA	-	-	-	-	-	-	-	-	-	-	-	
2	Hydroid, Inc./Kongsberg Maritime - Cape Cod, MA	-	-	-	-	-	-	-	-	-	-	-	

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment							P-1 Line Item Number / Title: 0981 / Items less than \$5 Million					
ID Code (A=Service Ready, B=Not Service Ready) : B			Program Elements for Code B Items:					Other Related Program Elements:				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	354.697	68.590	62.772	102.498	-	102.498	97.012	98.491	77.773	58.686	28.010	948.529
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	354.697	68.590	62.772	102.498	-	102.498	97.012	98.491	77.773	58.686	28.010	948.529
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	354.697	68.590	62.772	102.498	-	102.498	97.012	98.491	77.773	58.686	28.010	948.529
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	0.771	0.215	0.183	-	0.183	-	-	-	-	-	1.169
Flyaway Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-
Description: The FY 2016 funding request was reduced by \$18.591 million to account for the availability of prior year execution balances.												
This budget provides for "S" cognizance (Shipboard, Hull, Mechanical & Electrical (HM&E) equipment for submarines, surface ships, and aircraft carriers) which are not in any specific category. This equipment accomplishes Program alterations for installation during CNO and Fleet availabilities, fills Fleet requisitions from casualties and attrition, provide tech refresh upgrades, and replaces obsolete equipment. Primary objectives are to maintain or improve readiness, safety, reliability, reduce workload, lower maintenance costs, improve sailor quality of life, and/or sustain ship classes through their notional life or beyond. The budget purchases install various equipment including machinery pumps, generators, ships propellers and shafts, air compressors, davits, A/C Plants, and steam propulsion items. It also procures allowance items as required by the Coordinated Shipboard Allowance List (COSAL). Major programs are the CVN Class Machinery Plant Upgrades, MACHALTs, Carrier Auto Voltage Regulator (AVR), Solid State Lighting, Patrol Coastal Modernization, and MLP Afloat Forward Staging Base (AFSB).												
[P40A / LT040 - AEC]: LT040 - AEC (ASSESSMENT OF EQUIPMENT CONDITION) This supports the implementation of Condition Based Maintenance (CBM) by providing work package validation for HM&E systems, pre-deployment HM&E systems condition assessment, on the job training and repair assistance to ships during TYCOM's TARGET process. These funds are for the outfitting and periodic replacement of the AEC team's Test Measurement and Diagnostic Equipment (TMDE) inventories, to provide deckplate diagnostic capability to improve the quality of AEC's process and products, and to leverage technology to streamline the visit process.												
[P40A / LT060 - Machalts]: LT060 - MACHALTS The Machinery Alteration Program (MACHALT) permits approved changes to Hull Mechanical and Electrical (HM&E) equipment aboard in-service Surface Combatant and Amphibious Warfare Ships, and is focused on safety, obsolescence resolution, and improved readiness. The \$8.919M in FY16 OSD Controls provides procurement and installation of MACHALTs aboard Surface Combatant ship-classes that will ensure adherence to safety and statutory regulations. The increase of FY16 MACHALT funding will mitigate the bow wave of currently failed refrigerant leak monitor units that have increased over the past several years. These units are installed in about 700 locations Fleet wide in response to an environmental mandate to monitor shipboard air for leakage of ozone depleting gases invisible to the naked eye and potentially deadly to the ships' force. These monitors are now obsolete and as of December 2013, a total of 55 units had failed and could not be repaired, each representing a direct violation of the statutory regulation demanded by Congress and a major safety concern. This program funding supports the replacement of these critical legacy monitors.												
[P40A / LT110 - Propellers and Shafts]: LT110- VARIOUS PROPELLERS AND SHAFTS This funding procures spare waterborne shafting (propeller shafts and stern tube shafts) and controllable pitch propeller (CPP) system end items such as propeller blades, hubs and oil distribution (OD) boxes used on DDG 51 class ships. These spares are required to meet DDG 51 class Fleet demand due to scheduled replacement caused by lifecycle wear and unscheduled replacements caused by CASREPs. The												

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment		P-1 Line Item Number / Title: 0981 / Items less than \$5 Million
ID Code (A=Service Ready, B=Not Service Ready) : B	Program Elements for Code B Items:	Other Related Program Elements:
component have long repair turn-around times (1-2 years) and thus cannot be repaired and reused during an availability. The technical requirements and drydocking constraints drives the program to establish a rotatable pool to support replacements. The growing size of the DDG 51 class is driving the requirement to increase the number of spares to support a rotatable pool and ensure readiness. A malfunctioning propeller or shaft may result in excessive vibration, which could lead to damage of ship structures and equipment (bearings, main reduction gears, and bulkhead seal), increase of ship cavitation/noise, loss of speed or loss of motion.		
[P40A / LT120 - Carrier Propulsion Plant Inspection]: Funds will be utilized to procure the latest technology inspection system tooling, i.e., laser-optic, ultrasonic, fiber-optic, electro-optic and computed radiography inspection systems.		
[P40A / LT130 - Steam Propulsion Items]: LT130 - STEAM PROPULSION ITEMS This provides for several initiatives oriented to upgrading boiler efficiency and safety with downstream maintenance effectiveness. In particular, the items procured include: Upgraded Stack Gas Analyzer (SGA) , Optimization Trim Loop Material including fuel oil meters, stack gas temperature sensors, electronic automatic boiler controls interface software/schema to improve steam plant efficiency, Upgraded electronic automatic boiler control (E-ABC) system process controllers/smart transmitters, Upgraded Boiler Water/Feedwater (BW/FW) Chemistry Analysis/Carbohydrazide Implementation Equipment., Upgraded SSTG Protective Devices (Overspeed Trips), and Upgrades to Boiler Igniter System (BIS) (Fuel Valve and Insert/Retract Air Actuators). The Steam Propulsion Improvement Program provides safe and reliable power for ship movement through the water, and, in addition, provides power to ships combat and habitability systems, whether electrical or steam dependent. At any given time, due to propulsion plant casualties, ship propulsion systems may be operating at reduced capability, adversely affecting the ship's mission(s). The Steam Propulsion improvement program encompasses steam and diesel propulsion surface ships in the Fleet, and provides for material upgrades to propulsion systems resulting in increased readiness, safety and reliability. Items can be installed during a scheduled or unscheduled availability by a shipyard, tender/ Intermediate Maintenance Activity or Alteration Installation Team (AIT).		
[P40A / LT830 - Carrier Production Engineering]: The review and approval of any production contract technical documentation, or the separate development of this documentation, to include: Technical Manuals, Planned Maintenance System (PMS), Level III Production Drawings, Provisioning Technical Documentation (PTD), Program Support Data (PSD), and Allowance Parts List (APL); engineering support for final design reviews.		
[P3A / LT160 - Machinery Plant Upgrades]: LT160 - MACHINERY PLANT UPGRADES (INTEGRATED COMMUNICATIONS AND ADVANCED NETWORK (ICAN) ICAN provides core infrastructure (node rooms, air blown fiber optic cable plant, network services) for integrating voice, video and data systems. This capability is easily upgradeable for rapid and cost effective expansion to support new technologies, such as IT-21, and is compatible with the Navy's integrated Information Networks MOA.		
[P3A - 2 / LT306 - Automated Voltage Regulator (AVR)]: LT306 - AUTOMATED VOLTAGE REGULATOR The CVN Automatic Voltage Regulator (AVR) is a microprocessor based voltage regulator system for the NIMITZ Class, programmed to replace the legacy analog voltage regulator, which, although operational, lacks the improved reliability and lower maintenance costs of the AVR. It controls the output voltage of a turbine generator (TG), which converts steam into the electricity used for aircraft and combat operations, and reactor cooling.		
[P3A - 3 / LT307 - Carrier Canned Lube Oil Pump]: The Canned Lube Oil Pump (CLOP) with a two-speed motor will replace both the Standby Lube Oil Pump (SLOP) and Emergency Lube Oil Pump (ELOP) on all CVN-68 Class ships. The ships have repeatedly overhauled SLOPs to replace turbine and reduction gear parts as well as replacing leaking mechanical seals at excessive costs. The ELOPs are also regularly overhauled to replace leaking mechanical seals. In addition, the installed ELOP does not meet all operational requirements for a Lube Oil System. The motor and pump are an integral piece on the CLOP which alleviates any alignment issues and a mechanical seal is no longer required.		
[P3A - 4 / LT308 - LHD/LHA Davits]: LT308 - LHD/LHA Davit Funding provides for the procurement of Rigid Inflatable Boat (RIB) Davits for LHA and LHD Class Ships. These allow ships to utilize Navy Standard 11M RIBs which replace antiquated Landing Craft Personnel (LCPL) boats which are no longer supported and present a maintenance burden, reduction in operational availability and jeopardize ships' ability to perform Anti-Terrorism Force Protection (ATFP) missions.		
[P3A - 5 / LT309 - Solid-State Lighting (SSL)]: LT309- SOLID-STATE LIGHTING (SSL) FIXTURES		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment		P-1 Line Item Number / Title: 0981 / Items less than \$5 Million
ID Code (A=Service Ready, B=Not Service Ready) : B	Program Elements for Code B Items:	Other Related Program Elements:
Solid State Lighting refers to a type of lighting that uses semiconductor Light-Emitting Diodes (LEDs), Organic Light-Emitting Diodes (OLEDs), or Polymer Light-Emitting Diodes (PLEDs) as sources of illumination rather than electrical filaments, plasma (used in arc lamps such as fluorescent lamps) or gas. Funds provide for replacement of fluorescent and incandescent lighting fixtures installed on surface combatants and Amphibious Class ships with a Solid-State Lighting (SSL) fixtures.		
[P3A - 7 / LT315 - LCC20 Electrical Improvements.]: LCC EXTENDED SERVICE LIFE PROGRAM Funds provide for the procurement and installation of equipment in support of LCC 20 Extended Service Life Program extending this ship to a 2039 service life. Funds specifically provided for LCC 20 Electrical Switchboard upgrades.		
[P3A - 8 / LT316 - Patrol Coastal ECDIS]: LT316 - PATROL COASTAL MODERNIZATION The PC Sustainment Program provides necessary modifications and upgrades to keep PC 1 class ships in-service and supportable through their expected service lives (until 2025). Upgrades include Navigation upgrades, Electronic Chart Display and Information System-Navy (ECDIS-N) upgrades, and Forward Looking Infrared (FLIR) upgrades. FY16 increase due to the Navigator of the Navy direction, that all ships must be paperless by the end of FY16.		
[P3A - 11 / LT318 - Carriers Passive Countermeasures System (PCMS)]: classified effort		
[P3A - 13 / FMP Ship Units - LSD Davit]: LT322 - LSD Davit Provide Davit capabilities to meet the new OPNAV LSD boat requirement for two 11M Rigid Hull Inflatable Boats (RHIBs). Previous requirement was one 7M RHIB and one 11M RHIB. New Davit provides RHIB Launching Capability that meets Mandatory Safety of Life At Sea (SOLAS), Force Protection and Mission Requirements (Amphibious Assault; Anti-Piracy; Visit, Board, Search, and Seizure (VBSS)).		
[P3A - 14 / LT321 MLP AFSB SOF Backfit]: Funds provided for the review and approval of any production contract technical documentation, or the separate development of this documentation, to include: Technical Manuals, Planned Maintenance System (PMS), Level III Production Drawings, Provisioning Technical Documentation (PTD), Program Support Data (PSD), and Allowance Parts List (APL), engineering support for final design reviews, and procurement of Special Operation Forces (SOF) backfit items. These items include communication enhancements, aviation plus-ups, night vision compatibility, medical support items, MOGAS capability, and additional storage.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy						Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment				P-1 Line Item Number / Title: 0981 / Items less than \$5 Million				
ID Code (A=Service Ready, B=Not Service Ready) : B			Program Elements for Code B Items:			Other Related Program Elements:		
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
Items Less than \$5M Programs	P-40a, P-5a		- / 114.262	- / 8.806	- / 10.018	- / 14.415	- / -	- / 14.415
1 / LT160 - Machinery Plant Upgrades ()	P-3a		- / 129.746	- / 32.739	- / 17.578	- / 9.425	- / -	- / 9.425
2 / LT306 - Automated Voltage Regulator (AVR) ()	P-3a		- / 45.004	- / 0.880	- / 7.036	- / 5.149	- / -	- / 5.149
3 / LT307 - Carrier Canned Lube Oil Pump ()	P-3a		- / 13.633	- / 4.495	- / 6.017	- / 2.200	- / -	- / 2.200
4 / LT308 - LHD/LHA Davits ()	P-3a		- / 15.025	- / 0.400	- / 1.332	- / 2.615	- / -	- / 2.615
5 / LT309 - Solid-State Lighting (SSL) ()	P-3a		- / 11.421	- / 4.321	- / 3.401	- / 2.888	- / -	- / 2.888
6 / LT314 - Carrier Oil Water Separator ()	P-3a		- / 0.000	- / -	- / 1.749	- / 6.065	- / -	- / 6.065
7 / LT315 - LCC20 Electrical Improvements. ()	P-3a		- / 2.504	- / 2.980	- / -	- / -	- / -	- / -
8 / LT316 - Patrol Coastal ECDIS ()	P-3a		- / 3.346	- / 1.437	- / 1.574	- / 3.831	- / -	- / 3.831
9 / LT316 - Patrol Coastal Navigation Upgrade ()	P-3a		- / 4.910	- / 1.222	- / 0.422	- / 5.586	- / -	- / 5.586
10 / LT316 - Patrol Coastal FLIR ()	P-3a		- / 2.030	- / 0.300	- / -	- / 1.770	- / -	- / 1.770
11 / LT318 - Carriers Passive Countermeasures System (PCMS) ()	P-3a		- / 12.816	- / 11.010	- / 11.290	- / 21.110	- / -	- / 21.110
12 / LT319 - JSF Support - Heavy Unrep ()	P-3a		- / 0.000	- / -	- / -	- / 0.838	- / -	- / 0.838
13 / LT322 - LSD Boat Davit ()	P-3a		- / 0.000	- / -	- / 2.355	- / 7.058	- / -	- / 7.058
14 / LT321 MLP AFSB SOF Backfit ()	P-3a		- / 0.000	- / -	- / -	- / 19.547	- / -	- / 19.547
Total Gross/Weapon System Cost			- / 354.697	- / 68.590	- / 62.772	- / 102.498	- / -	- / 102.498
Exhibits Schedule			FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
Items Less than \$5M Programs	P-40a, P-5a		- / -	- / -	- / -	- / -	- / -	- / -
1 / LT160 - Machinery Plant Upgrades ()	P-3a		- / 32.210	- / 15.448	- / 28.862	- / 30.329	- / -	- / 296.337
2 / LT306 - Automated Voltage Regulator (AVR) ()	P-3a		- / 1.802	- / 3.600	- / -	- / -	- / -	- / 63.471
3 / LT307 - Carrier Canned Lube Oil Pump ()	P-3a		- / 1.756	- / 6.150	- / -	- / -	- / -	- / 34.251
4 / LT308 - LHD/LHA Davits ()	P-3a		- / 3.623	- / 3.349	- / 3.579	- / 1.892	- / -	- / 31.815
5 / LT309 - Solid-State Lighting (SSL) ()	P-3a		- / 3.361	- / 3.520	- / 3.587	- / 3.659	- / -	- / 36.158
6 / LT314 - Carrier Oil Water Separator ()	P-3a		- / 9.464	- / 2.841	- / 6.098	- / -	- / -	- / 26.217
7 / LT315 - LCC20 Electrical Improvements. ()	P-3a		- / -	- / -	- / -	- / -	- / -	- / 5.484
8 / LT316 - Patrol Coastal ECDIS ()	P-3a		- / 0.395	- / -	- / -	- / -	- / -	- / 10.583
9 / LT316 - Patrol Coastal Navigation Upgrade ()	P-3a		- / 0.640	- / -	- / -	- / -	- / -	- / 12.780
10 / LT316 - Patrol Coastal FLIR ()	P-3a		- / 2.683	- / -	- / -	- / -	- / 1.680	- / 8.463
11 / LT318 - Carriers Passive Countermeasures System (PCMS) ()	P-3a		- / 20.200	- / 23.225	- / 19.450	- / 3.400	- / -	- / 122.501
12 / LT319 - JSF Support - Heavy Unrep ()	P-3a		- / 3.045	- / 2.207	- / -	- / -	- / -	- / 6.090
13 / LT322 - LSD Boat Davit ()	P-3a		- / 4.411	- / 2.529	- / 2.607	- / 5.535	- / 26.330	- / 50.825
14 / LT321 MLP AFSB SOF Backfit ()	P-3a		- / 2.829	- / 22.398	- / -	- / -	- / -	- / 44.774
Total Gross/Weapon System Cost			- / 97.012	- / 98.491	- / 77.773	- / 58.686	- / 28.010	- / 948.529

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment		P-1 Line Item Number / Title: 0981 / Items less than \$5 Million
ID Code (A=Service Ready, B=Not Service Ready) : B	Program Elements for Code B Items:	Other Related Program Elements:
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown. Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.		

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy														Date: February 2015						
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9						P-1 Line Item Number / Title: 0981 / Items less than \$5 Million								Aggregated Items Title: Items Less than \$5M Programs						
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.																				
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) LT040 - AEC																				
1.1) AEC	A		-	-	2.591	-	-	0.241	-	-	0.199	-	-	-	-	-	-	-	-	-
Subtotal: 1) LT040 - AEC			-	-	2.591	-	-	0.241	-	-	0.199	-	-	-	-	-	-	-	-	-
2) LT060 - Machalts ⁽¹⁾																				
2.1) Machalts (Amphibs)	A		-	-	14.467	-	-	1.364	-	-	0.515	-	-	0.560	-	-	-	-	-	0.560
2.2) Machalts (Surface Ships)	A		-	-	53.109	-	-	5.379	-	-	5.486	-	-	8.359	-	-	-	-	-	8.359
Subtotal: 2) LT060 - Machalts			-	-	67.576	-	-	6.743	-	-	6.001	-	-	8.919	-	-	-	-	-	8.919
3) LT110 - Propellers and Shafts																				
3.1) Blade Set Port/STBD, DDG 51 CL ^(†)	B		503,000.00	1	0.503	-	-	-	-	-	-	630,000.00	1	0.630	-	-	-	630,000.00	1	0.630
3.2) Hub Port DDG51 CL ^(†)	A		792,500.00	2	1.585	-	-	-	1,011K	1	1.011	875,000.00	1	0.875	-	-	-	875,000.00	1	0.875
3.3) Hub STBD DDG51 CL ^(†)	A		923,200.00	5	4.616	-	-	-	-	-	-	875,000.00	1	0.875	-	-	-	875,000.00	1	0.875
3.4) Prop Shaft DDG51 CL ^(†)	A		1,596K	6	9.573	1,358K	1	1.358	-	-	-	1,437K	1	1.437	-	-	-	1,437K	1	1.437
3.5) Stern Tube DDG51 CL ^(†)	A		1,088K	9	9.788	-	-	-	1,193K	2	2.386	1,181K	1	1.181	-	-	-	1,181K	1	1.181
3.6) Oil Distribution (OD) Box, STBD DDG 51 CL CPP ^(†)	A		209,000.00	9	1.881	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.7) Oil Distribution (OD) Box, Port DDG 51 CL CPP ^(†)	A		211,666.67	3	0.635	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 3) LT110 - Propellers and Shafts			-	-	28.581	-	-	1.358	-	-	3.397	-	-	4.998	-	-	-	-	-	4.998
4) LT120 - Carrier Propulsion Plant Inspection																				
4.1) Propulsion Plant Inspection	A		-	-	1.033	-	-	0.170	-	-	0.170	-	-	0.170	-	-	-	-	-	0.170
Subtotal: 4) LT120 - Carrier Propulsion Plant Inspection			-	-	1.033	-	-	0.170	-	-	0.170	-	-	0.170	-	-	-	-	-	0.170
5) LT130 - Steam Propulsion Items																				
5.1) Steam Propulsion Items	A		-	-	1.843	-	-	0.254	-	-	0.211	-	-	0.288	-	-	-	-	-	0.288
Subtotal: 5) LT130 - Steam Propulsion Items			-	-	1.843	-	-	0.254	-	-	0.211	-	-	0.288	-	-	-	-	-	0.288

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9								P-1 Line Item Number / Title: 0981 / Items less than \$5 Million							Aggregated Items Title: Items Less than \$5M Programs				

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
6) LT830 - Carrier Production Engineering																				
6.1) Production Engineering	A		-	-	0.238	-	-	0.040	-	-	0.040	-	-	0.040	-	-	-	-	-	0.040
Subtotal: 6) LT830 - Carrier Production Engineering			-	-	0.238	-	-	0.040	-	-	0.040	-	-	0.040	-	-	-	-	-	0.040
7) PC HVAC Upgrade																				
7.1) PC HVAC Upgrade	A		1,550K	8	12.400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 7) PC HVAC Upgrade			-	-	12.400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total			-	-	114.262	-	-	8.806	-	-	10.018	-	-	14.415	-	-	-	-	14.415	

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	FY 2017			FY 2018			FY 2019			FY 2020			To Complete			Total Cost									
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)							
1) LT040 - AEC																											
1.1) AEC	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
Subtotal: 1) LT040 - AEC			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
2) LT060 - Machalts ⁽¹⁾																											
2.1) Machalts (Amphibs)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
2.2) Machalts (Surface Ships)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
Subtotal: 2) LT060 - Machalts			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
3) LT110 - Propellers and Shafts																											
3.1) Blade Set Port/ STBD, DDG 51 CL ^(†)	B		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
3.2) Hub Port DDG51 CL ^(†)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
3.3) Hub STBD DDG51 CL ^(†)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
3.4) Prop Shaft DDG51 CL ^(†)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
3.5) Stern Tube DDG51 CL ^(†)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9								P-1 Line Item Number / Title: 0981 / Items less than \$5 Million							Aggregated Items Title: Items Less than \$5M Programs				

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2017			FY 2018			FY 2019			FY 2020			To Complete			Total Cost		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
3.6) Oil Distribution (OD) Box, STBD DDG 51 CL CPP ^(†)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.7) Oil Distribution (OD) Box, Port DDG 51 CL CPP ^(†)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: 3) LT110 - Propellers and Shafts</i>			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4) LT120 - Carrier Propulsion Plant Inspection																				
4.1) Propulsion Plant Inspection	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: 4) LT120 - Carrier Propulsion Plant Inspection</i>			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5) LT130 - Steam Propulsion Items																				
5.1) Steam Propulsion Items	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: 5) LT130 - Steam Propulsion Items</i>			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6) LT830 - Carrier Production Engineering																				
6.1) Production Engineering	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: 6) LT830 - Carrier Production Engineering</i>			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7) PC HVAC Upgrade																				
7.1) PC HVAC Upgrade	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: 7) PC HVAC Upgrade</i>			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

^(†) indicates the presence of a P-5a

Footnotes:

⁽¹⁾ The \$8.919M in FY16 provides procurement and installation of MACHALTs aboard Surface Combatant ship-classes that will ensure adherence to safety and statutory regulations. The increase of FY16 MACHALT funding will mitigate the bow wave of currently failed refrigerant leak monitor units that have increased over the past several years. These units are installed in about 700 locations Fleet wide in response to an environmental mandate to monitor shipboard air for leakage of ozone depleting gases invisible to the naked eye and potentially deadly to the ships' force. These monitors are now obsolete and as of December 2013, a total of 55 units had failed and could not be repaired, each representing a direct violation of the statutory regulation demanded by Congress and a major safety concern. This program funding supports the replacement of these critical legacy monitors.

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Exhibit P-5a, Procurement History and Planning: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9			P-1 Line Item Number / Title: 0981 / Items less than \$5 Million					Aggregated Items: Items Less than \$5M Programs				
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
3) LT110 - Propellers and Shafts												
3.1) Blade Set Port/STBD, DDG 51 CL		2016	Rolls Royce / MS	C / FP	NAVSUP	Oct 2015	Jan 2018	1	630,000.00	Y		
3.2) Hub Port DDG51 CL		2011	Rolls Royce / MS	C / FP	NAVICP	May 2012	Dec 2014	1	800,000.00	Y		
3.2) Hub Port DDG51 CL		2015	Rolls Royce / MS	C / FP	NAVICP	May 2015	May 2017	1	1,011K	Y		
3.2) Hub Port DDG51 CL		2016	Rolls Royce / MS	C / FP	NAVICP	Apr 2016	Apr 2018	1	875,000.00	Y		
3.3) Hub STBD DDG51 CL		2011	Rolls Royce / MS	C / FP	NAVICP	May 2012	Dec 2014	2	800,000.00	Y		
3.3) Hub STBD DDG51 CL		2012	Rolls Royce / MS	C / FP	NAVICP	Sep 2012	Sep 2014	1	940,000.00	Y		
3.3) Hub STBD DDG51 CL		2016	Rolls Royce / MS	C / FP	NAVICP	Apr 2016	Apr 2018	1	875,000.00	Y		
3.4) Prop Shaft DDG51 CL		2011	Erie Forge / PA	C / FP	NAVICP	Aug 2012	Aug 2016	1	1,427K	Y		
3.4) Prop Shaft DDG51 CL		2012	Erie Forge / PA	C / FP	NAVICP	Sep 2012	Sep 2016	1	1,436K	Y		
3.4) Prop Shaft DDG51 CL		2014	Erie Forge / PA	C / FP	NAVICP	Jul 2014	Jul 2018	1	1,358K	Y		
3.4) Prop Shaft DDG51 CL		2016	Erie Forge / PA	C / FP	NAVICP	Apr 2016	Apr 2020	1	1,437K	Y		
3.5) Stern Tube DDG51 CL		2011	Erie Forge / PA	C / FP	NAVICP	Aug 2012	Aug 2016	2	1,100K	Y		
3.5) Stern Tube DDG51 CL		2012	Erie Forge / PA	C / FP	NAVICP	Sep 2012	Sep 2016	1	1,116K	Y		
3.5) Stern Tube DDG51 CL		2013	Erie Forge / PA	C / FP	NAVICP	Jul 2013	Jul 2017	1	1,152K	Y		
3.5) Stern Tube DDG51 CL		2015	Erie Forge / PA	C / FP	NAVICP	Jul 2015	Jul 2019	2	1,193K	Y		
3.5) Stern Tube DDG51 CL		2016	Erie Forge / PA	C / FP	NAVICP	Apr 2016	Apr 2020	1	1,181K	Y		
3.6) Oil Distribution (OD) Box, STBD DDG 51 CL CPP		2011	Rolls Royce / MS	C / FP	NAVSUP	May 2012	Nov 2014	2	205,000.00	Y		
3.6) Oil Distribution (OD) Box, STBD DDG 51 CL CPP		2012	Rolls Royce / MS	C / FP	NAVSUP	Sep 2012	Sep 2014	1	235,000.00	Y		
3.6) Oil Distribution (OD) Box, STBD DDG 51 CL CPP		2013	Rolls Royce / MS	C / FP	NAVSUP	Jul 2013	Jul 2015	1	239,000.00	Y		
3.7) Oil Distribution (OD) Box, Port DDG 51 CL CPP		2011 (2)	Rolls Royce / MS	C / FP	NAVICP	May 2012	Nov 2014	1	205,000.00	Y		
3.7) Oil Distribution (OD) Box, Port DDG 51 CL CPP		2013	Rolls Royce / MS	C / FP	NAVICP	Jul 2013	Jul 2015	1	233,000.00	Y		
Footnotes: (2) Vendor reported delay in delivery due to backlog												

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Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0981 / Items less than \$5 Million					Modification Number / Title: 1 / LT160 - Machinery Plant Upgrades			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	129.746	32.739	17.578	9.425	-	9.425	32.210	15.448	28.862	30.329	-	296.337
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	129.746	32.739	17.578	9.425	-	9.425	32.210	15.448	28.862	30.329	-	296.337
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	129.746	32.739	17.578	9.425	-	9.425	32.210	15.448	28.862	30.329	-	296.337
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: ICAN provides core infrastructure (node rooms, air blown fiber optic cable plant, network services) for integrating voice, video and data systems. This capability is easily upgradable for rapid and cost effective expansion to support new technologies, such as IT-21, and is compatible with the Navy integrated Information Networks MOA.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0981 / Items less than \$5 Million				Modification Number / Title: 1 / LT160 - Machinery Plant Upgrades					
Models of Systems Affected: Machinery Plant Upgrades				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: LT160 - Machinery Plant Upgrades													
B Kits													
Recurring													
1.1.1) Machinery Plant Upgrades - NonOrganic ⁽³⁾	21 / 43.592	4 / 18.180	2 / 6.614	2 / 3.120	- / -	2 / 3.120	5 / 9.605	3 / 5.073	4 / 8.537	5 / 7.787	- / -	46 / 102.508	
Subtotal: Recurring	- / 43.592	- / 18.180	- / 6.614	- / 3.120	- / -	- / 3.120	- / 9.605	- / 5.073	- / 8.537	- / 7.787	- / -	- / 102.508	
Subtotal: LT160 - Machinery Plant Upgrades	21 / 43.592	4 / 18.180	2 / 6.614	2 / 3.120	- / -	2 / 3.120	5 / 9.605	3 / 5.073	4 / 8.537	5 / 7.787	- / -	46 / 102.508	
Subtotal: Procurement, All Modification Items	- / 43.592	- / 18.180	- / 6.614	- / 3.120	- / -	- / 3.120	- / 9.605	- / 5.073	- / 8.537	- / 7.787	- / -	- / 102.508	
Installation													
Modification Item 1 of 1: LT160 - Machinery Plant Upgrades	- / 86.154	- / 14.559	- / 10.964	- / 6.305	- / -	- / 6.305	- / 22.605	- / 10.375	- / 20.325	- / 22.542	- / -	- / 193.829	
Subtotal: Installation	- / 86.154	- / 14.559	- / 10.964	- / 6.305	- / -	- / 6.305	- / 22.605	- / 10.375	- / 20.325	- / 22.542	- / -	- / 193.829	
Total													
Total Cost (Procurement + Support + Installation)	129.746	32.739	17.578	9.425	-	9.425	32.210	15.448	28.862	30.329	-	296.337	

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Exhibit P-3a, Individual Modification: PB 2016 Navy				Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9		P-1 Line Item Number / Title: 0981 / Items less than \$5 Million			Modification Number / Title: 1 / LT160 - Machinery Plant Upgrades		

Modification Item 1 of 1: LT160 - Machinery Plant Upgrades

Manufacturer Information

Manufacturer Name: various				Manufacturer Location: various			
Administrative Leadtime (in Months): 2				Production Leadtime (in Months): 5			

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Nov 2013	Nov 2014	Nov 2015				
Delivery Dates	Apr 2014	Apr 2015	Apr 2016				

Installation Information

Method of Implementation: AIT:: Installation Name: Machinery Plant Upgrades

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	21 / 84.354	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	21 / 84.354
FY 2014	0 / 1.800	3 / 12.409	1 / 10.114	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 24.323
FY 2015	- / -	- / 2.150	- / -	2 / 3.600	- / -	2 / 3.600	- / -	- / -	- / -	- / -	- / -	2 / 5.750
FY 2016	- / -	- / -	- / 0.850	1 / 2.000	- / -	1 / 2.000	1 / 6.825	- / -	- / -	- / -	- / -	2 / 9.675
FY 2017	- / -	- / -	- / -	- / 0.705	- / -	- / 0.705	1 / 6.780	4 / 7.625	- / -	- / -	- / -	5 / 15.110
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / 6.000	1 / 2.000	2 / 8.663	- / -	- / -	3 / 16.663
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / 3.000	- / 0.750	2 / 8.662	2 / 11.524	- / -	4 / 23.936
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 3.000	- / 11.018	5 / -	5 / 14.018
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	21 / 86.154	3 / 14.559	1 / 10.964	3 / 6.305	- / -	3 / 6.305	2 / 22.605	5 / 10.375	4 / 20.325	2 / 22.542	5 / -	46 / 193.829

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	21	-	-	2	1	-	1	-	-	-	2	-	1	-	1	-	1	1	2	2	-	1	1	-	2	1	1	-	-	5	46
Out	19	-	-	-	-	1	1	2	-	1	2	2	-	-	-	1	-	-	1	3	-	-	-	2	1	1	2	2	-	5	46

Footnotes:

⁽³⁾ The Machinery Plant Upgrade project within the CVN Fleet Modernization Program (FMP) encompasses CVN Machinery Control Systems, Ship Control (Navigation/Steering), Integrated Voice Control Networks, Announcing Systems and Shipboard Air Traffic Control Communication Systems. The machinery plant upgrade currently consists of 33 different modernization alterations with a current value of approximately \$42M for all the alterations. During each CNO availability, we schedule and complete a subset of these 33 alterations. Every hull may not get all 33 of the Machinery Plant Upgrade. It depends on ship configuration. These alts are scheduled for installation over 3-4 availabilities (which may be 9-12 years) with many installations occurring in later years of the FYDP. Additionally, the machinery plant upgrade program is technology driven and many alterations are still being finalized in the Navy modernization Program (i.e. Ship Change Document (SCD) development) process for installation in later years. New SCDs

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0981 / Items less than \$5 Million	Modification Number / Title: 1 / LT160 - Machinery Plant Upgrades
continue to be developed to proactively address obsolescence issues associated with ever changing technology. The current budget for the out years is based on initial SCD development estimates. Individual SCDs can range in cost from \$5K (for software only changes) to ~ \$14M for major system upgrades.		

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0981 / Items less than \$5 Million					Modification Number / Title: 2 / LT306 - Automated Voltage Regulator (AVR)			

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	45.004	0.880	7.036	5.149	-	5.149	1.802	3.600	-	-	-	63.471
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	45.004	0.880	7.036	5.149	-	5.149	1.802	3.600	-	-	-	63.471
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	45.004	0.880	7.036	5.149	-	5.149	1.802	3.600	-	-	-	63.471
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The CVN Automatic Voltage Regulator (AVR) is a microprocessor based voltage regulator system for the NIMITZ Class, programmed to replace the legacy analog voltage regulator, which, although operational, lacks the improved reliability and lower maintenance costs of the AVR. It controls the output voltage of a turbine generator (TG), which converts steam into the electricity used for aircraft and combat operations, and reactor cooling.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0981 / Items less than \$5 Million					Modification Number / Title: 2 / LT306 - Automated Voltage Regulator (AVR)				
Models of Systems Affected: Auto Voltage Regulator				Modification Type:					Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: LT306 - Automated Voltage Regulator (AVR)													
B Kits													
Recurring													
1.1.1) AVR - NonOrganic ⁽⁴⁾	49 / 22.060	- / -	5 / 2.875	8 / 4.400	- / -	8 / 4.400	- / -	- / -	- / -	- / -	- / -	62 / 29.335	
1.1.2) Field Engineering Services - NonOrganic	- / 1.117	- / 0.130	- / 0.300	- / 0.300	- / -	- / 0.300	- / -	- / -	- / -	- / -	- / -	- / 1.847	
Subtotal: Recurring	- / 23.177	- / 0.130	- / 3.175	- / 4.700	- / -	- / 4.700	- / -	- / -	- / -	- / -	- / -	- / 31.182	
Subtotal: LT306 - Automated Voltage Regulator (AVR)	49 / 23.177	- / 0.130	5 / 3.175	8 / 4.700	- / -	8 / 4.700	- / -	- / -	- / -	- / -	- / -	62 / 31.182	
Subtotal: Procurement, All Modification Items	- / 23.177	- / 0.130	- / 3.175	- / 4.700	- / -	- / 4.700	- / -	- / -	- / -	- / -	- / -	- / 31.182	
Installation													
Modification Item 1 of 1: LT306 - Automated Voltage Regulator (AVR)	- / 21.827	- / 0.750	- / 3.861	- / 0.449	- / -	- / 0.449	- / 1.802	- / 3.600	- / -	- / -	- / -	- / 32.289	
Subtotal: Installation	- / 21.827	- / 0.750	- / 3.861	- / 0.449	- / -	- / 0.449	- / 1.802	- / 3.600	- / -	- / -	- / -	- / 32.289	
Total													
Total Cost (Procurement + Support + Installation)	45.004	0.880	7.036	5.149	-	5.149	1.802	3.600	-	-	-	63.471	

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0981 / Items less than \$5 Million	Modification Number / Title: 2 / LT306 - Automated Voltage Regulator (AVR)

Modification Item 1 of 1: LT306 - Automated Voltage Regulator (AVR)

Manufacturer Information

Manufacturer Name: NG P/CS	Manufacturer Location: MD
Administrative Leadtime (in Months): 6	Production Leadtime (in Months): 21

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates		Mar 2015	Mar 2016				
Delivery Dates		Dec 2016	Dec 2017				

Installation Information

Method of Implementation: SHIPYARD:: Installation Name: AVR

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	37 / 21.827	- / 0.750	8 / 3.861	- / -	- / -	- / -	- / 0.100	4 / 1.400	- / -	- / -	- / -	49 / 27.938
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / 0.449	- / -	- / 0.449	4 / 1.400	- / -	- / -	- / -	- / -	4 / 1.849
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.302	8 / 2.200	- / -	- / -	- / -	8 / 2.502
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	37 / 21.827	- / 0.750	8 / 3.861	- / 0.449	- / -	- / 0.449	4 / 1.802	12 / 3.600	- / -	- / -	- / -	61 / 32.289

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	37	-	-	-	-	4	4	-	-	-	-	-	-	-	-	-	4	4	8	-	-	-	-	-	-	-	-	-	-	-	61
Out	37	-	-	-	-	-	-	4	-	-	4	-	-	-	-	-	-	-	4	4	-	-	-	-	8	-	-	-	-	-	61

Footnotes:

(4) AVR Procurement and Fielding plan changed due to availability schedule changes and shipyard workload issues. Original plan to procure 4 units in FY14 for a FY16 install was changed due to avail shifting 14 months to the right. The units will now be procured in FY15 for a FY17 install. Procurement of 8 units planned for FY15 for a FY17 install was changed due to avail shifting to FY18 (7 months to the right). The units will now be procured in FY16 for a FY18 install. Installation of 8 units planned for late FY14/early FY15 has been changed to 4 units due to shipyard workload issues. Remaining 4 AVRs will be installed in ship's next avail scheduled for FY18. Contract awards scheduled for March 2015 and March 2016. Production lead time is estimated at 21 months. Both award dates will satisfy in yard need dates for the

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0981 / Items less than \$5 Million	Modification Number / Title: 2 / LT306 - Automated Voltage Regulator (AVR)

FY17 and FY18 availabilities. FY15 procurement will also include an additional unit for use at the vendor's facility as a test unit available for testing of replacement AVR components (circuit cards) needed for fleet fielded units (no installation funding associated with this unit).

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0981 / Items less than \$5 Million	Modification Number / Title: 3 / LT307 - Carrier Canned Lube Oil Pump

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	13.633	4.495	6.017	2.200	-	2.200	1.756	6.150	-	-	-	34.251
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	13.633	4.495	6.017	2.200	-	2.200	1.756	6.150	-	-	-	34.251
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	13.633	4.495	6.017	2.200	-	2.200	1.756	6.150	-	-	-	34.251
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Canned Lube Oil Pump (CLOP) with a two-speed motor will replace both the Standby Lube Oil Pump (SLOP) and Emergency Lube Oil Pump (ELOP) on all CVN-68 Class ships. The ships have repeatedly overhauled SLOPs to replace turbine and reduction gear parts as well as replacing leaking mechanical seals at excessive costs. The ELOPs are also regularly overhauled to replace leaking mechanical seals. In addition, the installed ELOP does not meet all operational requirements for Lube Oil System. The motor and pump are an integral piece on the CLOP which alleviates any alignment issues and a mechanical seal is no longer required.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0981 / Items less than \$5 Million				Modification Number / Title: 3 / LT307 - Carrier Canned Lube Oil Pump					
Models of Systems Affected: Carrier Canned Lube Oil Pump				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: LT307 - Carrier Canned Lube Oil Pump													
B Kits													
Recurring													
1.1.1) Canned Lube Oil Pump - NonOrganic ⁽⁵⁾	16 / 5.000	- / -	- / -	8 / 2.200	- / -	8 / 2.200	- / -	- / -	- / -	- / -	- / -	24 / 7.200	
Subtotal: Recurring	- / 5.000	- / -	- / -	- / 2.200	- / -	- / 2.200	- / -	- / -	- / -	- / -	- / -	- / 7.200	
Subtotal: LT307 - Carrier Canned Lube Oil Pump	16 / 5.000	- / -	- / -	8 / 2.200	- / -	8 / 2.200	- / -	- / -	- / -	- / -	- / -	24 / 7.200	
Subtotal: Procurement, All Modification Items	- / 5.000	- / -	- / -	- / 2.200	- / -	- / 2.200	- / -	- / -	- / -	- / -	- / -	- / 7.200	
Installation													
Modification Item 1 of 1: LT307 - Carrier Canned Lube Oil Pump	- / 8.633	- / 4.495	- / 6.017	- / -	- / -	- / -	- / 1.756	- / 6.150	- / -	- / -	- / -	- / 27.051	
Subtotal: Installation	- / 8.633	- / 4.495	- / 6.017	- / -	- / -	- / -	- / 1.756	- / 6.150	- / -	- / -	- / -	- / 27.051	
Total													
Total Cost (Procurement + Support + Installation)	13.633	4.495	6.017	2.200	-	2.200	1.756	6.150	-	-	-	34.251	

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0981 / Items less than \$5 Million	Modification Number / Title: 3 / LT307 - Carrier Canned Lube Oil Pump

Modification Item 1 of 1: LT307 - Carrier Canned Lube Oil Pump

Manufacturer Information

Manufacturer Name: IMO Pumps	Manufacturer Location: Monroe, NC
Administrative Leadtime (in Months): 2	Production Leadtime (in Months): 12

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Jul 2013		May 2016				
Delivery Dates	Jul 2014		May 2017				

Installation Information

Method of Implementation: Shipyard:: Installation Name: Canned Lube Oil Pump

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	8 / 8.633	3 / 4.495	5 / 6.017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	16 / 19.145
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.756	8 / 6.150	- / -	- / -	- / -	8 / 7.906
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	8 / 8.633	3 / 4.495	5 / 6.017	- / -	- / -	- / -	- / 1.756	8 / 6.150	- / -	- / -	- / -	24 / 27.051

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	8	-	-	-	3	5	-	-	-	-	-	-	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	24
Out	-	-	-	-	-	8	8	-	-	-	-	-	-	-	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	24

Footnotes:

⁽⁵⁾ CLOP (Lube oil Service Pump upgrade) procurement and installation schedule has changed from original plan due to shipyard workload issues. LOSP material (LOSPs and motors/controllers) were procured in late FY13 for a late FY14 availability (on CVN75 in Norfolk). In FY14 it was determined by the installation yard that they did not have the capacity or resources to execute the upgrade in the scheduled availability (workload integration issues in the machinery spaces was also an issue). As a result, the material was diverted to the next ship scheduled to receive the upgrade (CVN76 in early FY15). This eliminated the material procurement requirement in FY14. The procurement scheduled in FY14 has been shifted to FY16 to support an early FY18 availability (Production lead time is ~14 months). CVN75 and

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0981 / Items less than \$5 Million	Modification Number / Title: 3 / LT307 - Carrier Canned Lube Oil Pump

CVN76 are the only remaining ships receiving this upgrade. Note: Installation costs for Lube Oil Service Pump effort has been updated to reflect actual costs from the performing activity (Puget Sound Naval Shipyard).

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0981 / Items less than \$5 Million					Modification Number / Title: 4 / LT308 - LHD/LHA Davits			

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	15.025	0.400	1.332	2.615	-	2.615	3.623	3.349	3.579	1.892	-	31.815
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	15.025	0.400	1.332	2.615	-	2.615	3.623	3.349	3.579	1.892	-	31.815
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	15.025	0.400	1.332	2.615	-	2.615	3.623	3.349	3.579	1.892	-	31.815
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

This shipalt installs Boat (RIB) Davits replacing Land Craft Personnel (LCPL) Davits on the LHA/LHD Class Ships.

[Boat (RIB) Davits]

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Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0981 / Items less than \$5 Million					Modification Number / Title: 4 / LT308 - LHD/LHA Davits				
Models of Systems Affected: Boat (RIB) Davits			Modification Type:						Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: LT308 - LHD/LHA Davits													
B Kits													
Recurring													
1.1.1) Boat (RIB) Davits - NonOrganic ⁽⁶⁾	9 / 7.725	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	9 / 7.725	
Subtotal: Recurring	- / 7.725	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 7.725	
Subtotal: LT308 - LHD/LHA Davits	9 / 7.725	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	9 / 7.725	
Subtotal: Procurement, All Modification Items	- / 7.725	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 7.725	
Installation													
Modification Item 1 of 1: LT308 - LHD/LHA Davits	- / 7.300	- / 0.400	- / 1.332	- / 2.615	- / -	- / 2.615	- / 3.623	- / 3.349	- / 3.579	- / 1.892	- / -	- / 24.090	
Subtotal: Installation	- / 7.300	- / 0.400	- / 1.332	- / 2.615	- / -	- / 2.615	- / 3.623	- / 3.349	- / 3.579	- / 1.892	- / -	- / 24.090	
Total													
Total Cost (Procurement + Support + Installation)	15.025	0.400	1.332	2.615	-	2.615	3.623	3.349	3.579	1.892	-	31.815	

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015																					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9										P-1 Line Item Number / Title: 0981 / Items less than \$5 Million										Modification Number / Title: 4 / LT308 - LHD/LHA Davits											
Modification Item 1 of 1: LT308 - LHD/LHA Davits																															
Manufacturer Information																															
Manufacturer Name: Not Specified.															Manufacturer Location: Not Specified..																
Administrative Leadtime (in Months): 0															Production Leadtime (in Months): 0																
Dates		FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020					
Contract Dates																															
Delivery Dates																															
Installation Information																															
Method of Implementation: AIT:: Installation Name: Boat (RIB) Davits																															
Installation Cost		Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total																		
		Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)																		
Prior Years		4 / 7.300	- / 0.400	- / 1.332	1 / 2.615	- / 0.000	1 / 2.615	1 / 3.623	1 / 3.349	1 / 3.579	1 / 1.892	- / -	9 / 24.090																		
FY 2014		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2015		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2016		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2017		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2018		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2019		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2020		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
To Complete		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
Total		4 / 7.300	- / 0.400	- / 1.332	1 / 2.615	- / -	1 / 2.615	1 / 3.623	1 / 3.349	1 / 3.579	1 / 1.892	- / -	9 / 24.090																		
Installation Schedule																															
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	4	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	1	-	-	-	1	-	-	-	1	-	-	-	-	9
Out	4	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	1	-	-	-	-	1	-	-	1	-	-	-	9
Footnotes:																															
⁽⁶⁾ Funding is required in FY14 to support shipcheck and drawing development for the FY16 installation. FY15 funds are required to support advance planning and long lead time installation material for the FY16 installation and the shipcheck and drawing development for the FY17 installation.																															

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Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0981 / Items less than \$5 Million					Modification Number / Title: 5 / LT309 - Solid-State Lighting (SSL)			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	11.421	4.321	3.401	2.888	-	2.888	3.361	3.520	3.587	3.659	-	36.158
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	11.421	4.321	3.401	2.888	-	2.888	3.361	3.520	3.587	3.659	-	36.158
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	11.421	4.321	3.401	2.888	-	2.888	3.361	3.520	3.587	3.659	-	36.158
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: Procure/Install solid state lighting fixtures to replace fluorescent and incandescent lighting fixtures installed on Surface combatants and Amphibious Class ships												

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0981 / Items less than \$5 Million				Modification Number / Title: 5 / LT309 - Solid-State Lighting (SSL)					
Models of Systems Affected: Solid State Lighting			Modification Type:						Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: LT309 - Solid-State Lighting (SSL)													
B Kits													
Recurring													
1.1.1) Solid State Lighting - NonOrganic													
13 / 5.889 6 / 2.298 4 / 1.675 4 / 1.419 - / - 4 / 1.419 3 / 1.569 3 / 1.698 3 / 1.732 3 / 1.766 - / - 39 / 18.046													
Subtotal: Recurring													
- / 5.889 - / 2.298 - / 1.675 - / 1.419 - / - - / 1.419 - / 1.569 - / 1.698 - / 1.732 - / 1.766 - / - - / 18.046													
Subtotal: LT309 - Solid-State Lighting (SSL)													
13 / 5.889 6 / 2.298 4 / 1.675 4 / 1.419 - / - 4 / 1.419 3 / 1.569 3 / 1.698 3 / 1.732 3 / 1.766 - / - 39 / 18.046													
Subtotal: Procurement, All Modification Items													
- / 5.889 - / 2.298 - / 1.675 - / 1.419 - / - - / 1.419 - / 1.569 - / 1.698 - / 1.732 - / 1.766 - / - - / 18.046													
Installation													
Modification Item 1 of 1: LT309 - Solid-State Lighting (SSL)													
- / 5.532 - / 2.023 - / 1.726 - / 1.469 - / - - / 1.469 - / 1.792 - / 1.822 - / 1.855 - / 1.893 - / - - / 18.112													
Subtotal: Installation													
- / 5.532 - / 2.023 - / 1.726 - / 1.469 - / - - / 1.469 - / 1.792 - / 1.822 - / 1.855 - / 1.893 - / - - / 18.112													
Total													
Total Cost (Procurement + Support + Installation)													
11.421 4.321 3.401 2.888 - 2.888 3.361 3.520 3.587 3.659 - 36.158													

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015																						
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9										P-1 Line Item Number / Title: 0981 / Items less than \$5 Million										Modification Number / Title: 5 / LT309 - Solid-State Lighting (SSL)												
Modification Item 1 of 1: LT309 - Solid-State Lighting (SSL)																																
Manufacturer Information																																
Manufacturer Name: Energy Focus Inc															Manufacturer Location: Solon, OH																	
Administrative Leadtime (in Months): 3															Production Leadtime (in Months): 6																	
Dates		FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020						
Contract Dates		Dec 2013				Dec 2014				Dec 2015																						
Delivery Dates		Jun 2014				Jun 2015				Jun 2016																						
Installation Information																																
Method of Implementation: AIT:: Installation Name: Solid State Lighting																																
Installation Cost		Prior Years		FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total		FY 2017		FY 2018		FY 2019		FY 2020		To Complete		Total								
		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)								
Prior Years		13 / 5.532		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		13 / 5.532						
FY 2014		- / -		6 / 2.023		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		6 / 2.023						
FY 2015		- / -		- / -		4 / 1.726		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		4 / 1.726						
FY 2016		- / -		- / -		- / -		4 / 1.469		- / -		4 / 1.469		- / -		- / -		- / -		- / -		- / -		- / -		4 / 1.469						
FY 2017		- / -		- / -		- / -		- / -		- / -		- / -		3 / 1.792		- / -		- / -		- / -		- / -		- / -		3 / 1.792						
FY 2018		- / -		- / -		- / -		- / -		- / -		- / -		- / -		3 / 1.822		- / -		- / -		- / -		- / -		3 / 1.822						
FY 2019		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		3 / 1.855		- / -		- / -		- / -		3 / 1.855						
FY 2020		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		3 / 1.893		- / -		- / -		3 / 1.893						
To Complete		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -						
Total		13 / 5.532		6 / 2.023		4 / 1.726		4 / 1.469		- / -		4 / 1.469		3 / 1.792		3 / 1.822		3 / 1.855		3 / 1.893		- / -		- / -		39 / 18.112						
Installation Schedule																																
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
In	13	-	-	6	-	-	-	-	4	-	-	-	-	4	-	-	-	-	3	-	-	-	-	3	-	-	-	-	3	-	-	39
Out	13	-	-	-	6	-	-	-	4	-	-	-	-	4	-	-	-	-	3	-	-	-	-	3	-	-	-	-	3	-	-	39

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0981 / Items less than \$5 Million						Modification Number / Title: 6 / LT314 - Carrier Oil Water Separator		
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	0.000	-	1.749	6.065	-	6.065	9.464	2.841	6.098	-	-	26.217
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	0.000	-	1.749	6.065	-	6.065	9.464	2.841	6.098	-	-	26.217
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	0.000	-	1.749	6.065	-	6.065	9.464	2.841	6.098	-	-	26.217
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Oil Water Separator (OWS) will be installed on the CVN 68 Class to meet the new environmental discharge law of 15 parts per million (ppm) worldwide. The current OWSs installed on CVN 68 Class experience a high degree of costly maintenance and reliability issues and they do not meet the 15 ppm requirement.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0981 / Items less than \$5 Million				Modification Number / Title: 6 / LT314 - Carrier Oil Water Separator					
Models of Systems Affected: Carrier Oil Water Separator				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>
Procurement													
<i>Modification Item 1 of 1:</i> LT314 - Carrier Oil Water Separator													
B Kits													
Recurring													
1.1.1) Oil Water Separator - NonOrganic ⁽⁷⁾	- / -	- / -	2 / 1.160	4 / 2.420	- / -	4 / 2.420	4 / 3.630	- / -	- / -	- / -	- / -	- / -	10 / 7.210
<i>Subtotal: Recurring</i>	- / 0.000	- / -	- / 1.160	- / 2.420	- / -	- / 2.420	- / 3.630	- / -	- / -	- / -	- / -	- / -	- / 7.210
<i>Subtotal: LT314 - Carrier Oil Water Separator</i>	- / -	- / -	2 / 1.160	4 / 2.420	- / -	4 / 2.420	4 / 3.630	- / -	- / -	- / -	- / -	- / -	10 / 7.210
<i>Subtotal: Procurement, All Modification Items</i>	- / 0.000	- / -	- / 1.160	- / 2.420	- / -	- / 2.420	- / 3.630	- / -	- / -	- / -	- / -	- / -	- / 7.210
Installation													
<i>Modification Item 1 of 1:</i> LT314 - Carrier Oil Water Separator	- / 0.000	- / -	- / 0.589	- / 3.645	- / -	- / 3.645	- / 5.834	- / 2.841	- / 6.098	- / -	- / -	- / -	- / 19.007
<i>Subtotal: Installation</i>	- / 0.000	- / -	- / 0.589	- / 3.645	- / -	- / 3.645	- / 5.834	- / 2.841	- / 6.098	- / -	- / -	- / -	- / 19.007
Total													
Total Cost (Procurement + Support + Installation)	0.000	-	1.749	6.065	-	6.065	9.464	2.841	6.098	-	-	-	26.217

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0981 / Items less than \$5 Million	Modification Number / Title: 6 / LT314 - Carrier Oil Water Separator

Modification Item 1 of 1: LT314 - Carrier Oil Water Separator

Manufacturer Information

Manufacturer Name: TBD	Manufacturer Location: TBD
Administrative Leadtime (in Months): 2	Production Leadtime (in Months): 12

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates		Nov 2014	Nov 2015				
Delivery Dates		Nov 2015	Nov 2016				

Installation Information

Method of Implementation: AIT:: Installation Name: Oil Water Separator

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / 0.589	2 / 3.129	- / -	2 / 3.129	- / -	- / -	- / -	- / -	- / -	2 / 3.718
FY 2016	- / -	- / -	- / -	- / 0.516	- / -	- / 0.516	4 / 5.834	- / -	- / -	- / -	- / -	4 / 6.350
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 2.841	2 / 6.098	- / -	- / -	4 / 8.939
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / 0.589	2 / 3.645	- / -	2 / 3.645	4 / 5.834	2 / 2.841	2 / 6.098	- / -	- / -	10 / 19.007

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	2	-	2	2	-	-	-	2	-	-	-	-	2	-	-	-	-	-	-	10
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	4	-	-	-	-	-	-	-	2	-	2	-	-	-	-	10

Footnotes:

(7) In FY17, the procurement unit cost is higher than for the other hulls due to the unique configuration of CVN 69. CVN 69 is the only hull which presently has the High Capacity Oil Water Separator and requires more extensive modification than the other hulls to meet the 15 PPM discharge requirement.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0981 / Items less than \$5 Million					Modification Number / Title: 7 / LT315 - LCC20 Electrical Improvements.			

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	2.504	2.980	-	-	-	-	-	-	-	-	-	5.484
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	2.504	2.980	-	-	-	-	-	-	-	-	-	5.484
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	2.504	2.980	-	-	-	-	-	-	-	-	-	5.484
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Procurement and installation of upgrade to USS MOUNT WHITNEY (LCC 20) Electrical Distribution System in support of the Extended Service Life Program. Procures and installs electrical switchboard upgrades.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0981 / Items less than \$5 Million				Modification Number / Title: 7 / LT315 - LCC20 Electrical Improvements.					
Models of Systems Affected: LCC20 Electrical Improvement				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: LT315 - LCC20 Electrical Improvements.													
B Kits													
Recurring													
1.1.1) LCC20 Electrical Improvement - NonOrganic ⁽⁸⁾	1 / 2.504	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 2.504	
Subtotal: Recurring	- / 2.504	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.504	
Subtotal: LT315 - LCC20 Electrical Improvements.	1 / 2.504	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 2.504	
Subtotal: Procurement, All Modification Items	- / 2.504	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.504	
Installation													
Modification Item 1 of 1: LT315 - LCC20 Electrical Improvements.	- / 0.000	- / 2.980	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.980	
Subtotal: Installation	- / 0.000	- / 2.980	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.980	
Total													
Total Cost (Procurement + Support + Installation)	2.504	2.980	-	-	-	-	-	-	-	-	-	5.484	

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0981 / Items less than \$5 Million	Modification Number / Title: 7 / LT315 - LCC20 Electrical Improvements.

Modification Item 1 of 1: LT315 - LCC20 Electrical Improvements.

Manufacturer Information							
Manufacturer Name: General Electric				Manufacturer Location: Pittsburgh, PA			
Administrative Leadtime (in Months): 2				Production Leadtime (in Months): 12			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: AIT:: Installation Name: LCC20 Electrical Improvement

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	1 / 2.980	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 2.980
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	1 / 2.980	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 2.980

Installation Schedule																															
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Out	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1

Footnotes:

⁽⁸⁾ Switchboard upgrades procured in FY13 require approximately 5 month land based government testing post delivery. Procurement of the Electrical switchboard upgrade (12 month PLT) is in FY13 with install in FY14.

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Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0981 / Items less than \$5 Million					Modification Number / Title: 8 / LT316 - Patrol Coastal ECDIS			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	3.346	1.437	1.574	3.831	-	3.831	0.395	-	-	-	-	10.583
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	3.346	1.437	1.574	3.831	-	3.831	0.395	-	-	-	-	10.583
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	3.346	1.437	1.574	3.831	-	3.831	0.395	-	-	-	-	10.583
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: Funding provided for Electronic Chart Display Information System-Navy (ECDIS-N) for the Patrol Coastal Ships. This modification installs hardware and software for an approved ECDIS-N for digital nautical charts aboard the PC-1 Class ships per CNO direction to transition from paper to electronic charts by the end of FY16.												

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0981 / Items less than \$5 Million				Modification Number / Title: 8 / LT316 - Patrol Coastal ECDIS					
Models of Systems Affected: PC ECDIS			Modification Type:					Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: LT316 - Patrol Coastal ECDIS													
B Kits													
Recurring													
1.1.1) ECDIS-N - NonOrganic ⁽⁹⁾	4 / 2.011	2 / 0.600	5 / 1.500	2 / 0.600	- / -	2 / 0.600	- / -	- / -	- / -	- / -	- / -	13 / 4.711	
Subtotal: Recurring	- / 2.011	- / 0.600	- / 1.500	- / 0.600	- / -	- / 0.600	- / -	- / -	- / -	- / -	- / -	- / 4.711	
Subtotal: LT316 - Patrol Coastal ECDIS	4 / 2.011	2 / 0.600	5 / 1.500	2 / 0.600	- / -	2 / 0.600	- / -	- / -	- / -	- / -	- / -	13 / 4.711	
Subtotal: Procurement, All Modification Items	- / 2.011	- / 0.600	- / 1.500	- / 0.600	- / -	- / 0.600	- / -	- / -	- / -	- / -	- / -	- / 4.711	
Installation													
Modification Item 1 of 1: LT316 - Patrol Coastal ECDIS	- / 1.335	- / 0.837	- / 0.074	- / 3.231	- / -	- / 3.231	- / 0.395	- / -	- / -	- / -	- / -	- / 5.872	
Subtotal: Installation	- / 1.335	- / 0.837	- / 0.074	- / 3.231	- / -	- / 3.231	- / 0.395	- / -	- / -	- / -	- / -	- / 5.872	
Total													
Total Cost (Procurement + Support + Installation)	3.346	1.437	1.574	3.831	-	3.831	0.395	-	-	-	-	10.583	

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0981 / Items less than \$5 Million	Modification Number / Title: 8 / LT316 - Patrol Coastal ECDIS

Modification Item 1 of 1: LT316 - Patrol Coastal ECDIS

Manufacturer Information

Manufacturer Name: NORTHROP GRUMMAN SYSTEEMS CORP. ⁽¹⁰⁾				Manufacturer Location: CHARLOTTESVILLE, VA			
Administrative Leadtime (in Months): 3				Production Leadtime (in Months): 6			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Sep 2014	Jul 2015	Nov 2015				
Delivery Dates	Mar 2015	Aug 2015	May 2016				

Installation Information

Method of Implementation: AIT:: Installation Name: ECDIS-N

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	2 / 1.335	2 / 0.837	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 2.172
FY 2014	- / -	- / -	- / -	2 / 0.790	- / -	2 / 0.790	- / -	- / -	- / -	- / -	- / -	2 / 0.790
FY 2015	- / -	- / -	- / 0.037	5 / 2.012	- / -	5 / 2.012	- / -	- / -	- / -	- / -	- / -	5 / 2.049
FY 2016	- / -	- / -	- / 0.037	1 / 0.429	- / -	1 / 0.429	1 / 0.395	- / -	- / -	- / -	- / -	2 / 0.861
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	2 / 1.335	2 / 0.837	- / 0.074	8 / 3.231	- / -	8 / 3.231	1 / 0.395	- / -	- / -	- / -	- / -	13 / 5.872

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	2	-	-	1	-	1	-	-	-	-	1	5	2	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13
Out	2	-	-	-	-	1	1	-	-	-	-	5	1	2	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13

Footnotes:

⁽⁹⁾ The Navigator of the Navy directed all ships to be paperless by the end of FY16. To comply, PCs must receive the navigation and ECDIS-N installations. Unit cost decreased due to new contract negotiated pricing (\$300K per unit).

⁽¹⁰⁾ Installing 8 units in FY16 to meet the Navigator of the Navy requirement by end of FY16 per COMPACFLT/COMUSFLTFORCOM INSTRUCTION 3530.1A.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0981 / Items less than \$5 Million					Modification Number / Title: 9 / LT316 - Patrol Coastal Navigation Upgrade			

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	4.910	1.222	0.422	5.586	-	5.586	0.640	-	-	-	-	12.780
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	4.910	1.222	0.422	5.586	-	5.586	0.640	-	-	-	-	12.780
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	4.910	1.222	0.422	5.586	-	5.586	0.640	-	-	-	-	12.780
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Funding provided for Navigation Upgrades for the Patrol Coastal Ships. The navigation sensor suite modernization provides essential technology improvements using the mobility mission support equipment, satellite-based position keeping, electronic heading, and automatic helm control.

[Navigation Upgrade]

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0981 / Items less than \$5 Million				Modification Number / Title: 9 / LT316 - Patrol Coastal Navigation Upgrade				
Models of Systems Affected: PC Navigation Upgrade				Modification Type:				Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Procurement												
Modification Item 1 of 1: LT316 - Patrol Coastal Navigation Upgrade												
B Kits												
Recurring												
1.1.1) Navigation Upgrade - NonOrganic ⁽¹¹⁾		8 / 2.327	3 / 1.200	1 / 0.400	1 / 0.400	- / -	1 / 0.400	- / -	- / -	- / -	- / -	13 / 4.327
Subtotal: Recurring		- / 2.327	- / 1.200	- / 0.400	- / 0.400	- / -	- / 0.400	- / -	- / -	- / -	- / -	- / 4.327
Subtotal: LT316 - Patrol Coastal Navigation Upgrade		8 / 2.327	3 / 1.200	1 / 0.400	1 / 0.400	- / -	1 / 0.400	- / -	- / -	- / -	- / -	13 / 4.327
Subtotal: Procurement, All Modification Items		- / 2.327	- / 1.200	- / 0.400	- / 0.400	- / -	- / 0.400	- / -	- / -	- / -	- / -	- / 4.327
Installation												
Modification Item 1 of 1: LT316 - Patrol Coastal Navigation Upgrade		- / 2.583	- / 0.022	- / 0.022	- / 5.186	- / -	- / 5.186	- / 0.640	- / -	- / -	- / -	- / 8.453
Subtotal: Installation		- / 2.583	- / 0.022	- / 0.022	- / 5.186	- / -	- / 5.186	- / 0.640	- / -	- / -	- / -	- / 8.453
Total												
Total Cost (Procurement + Support + Installation)		4.910	1.222	0.422	5.586	-	5.586	0.640	-	-	-	12.780

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0981 / Items less than \$5 Million	Modification Number / Title: 9 / LT316 - Patrol Coastal Navigation Upgrade

Modification Item 1 of 1: LT316 - Patrol Coastal Navigation Upgrade

Manufacturer Information

Manufacturer Name: TBD	Manufacturer Location: TBD
Administrative Leadtime (in Months): 3	Production Leadtime (in Months): 15

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Sep 2014	Mar 2015	Nov 2015				
Delivery Dates	Dec 2015	Jun 2016	Feb 2017				

Installation Information

Method of Implementation: AIT:: Installation Name: Navigation Upgrade

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	4 / 2.583	- / 0.022	- / -	4 / 2.560	- / 0.000	4 / 2.560	- / -	- / -	- / -	- / -	- / -	8 / 5.165
FY 2014	- / -	- / -	- / -	3 / 1.964	- / -	3 / 1.964	- / -	- / -	- / -	- / -	- / -	3 / 1.964
FY 2015	- / -	- / -	- / 0.022	1 / 0.640	- / -	1 / 0.640	- / -	- / -	- / -	- / -	- / -	1 / 0.662
FY 2016	- / -	- / -	- / -	- / 0.022	- / -	- / 0.022	1 / 0.640	- / -	- / -	- / -	- / -	1 / 0.662
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	4 / 2.583	- / 0.022	- / 0.022	8 / 5.186	- / -	8 / 5.186	1 / 0.640	- / -	- / -	- / -	- / -	13 / 8.453

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	4	-	-	-	-	-	-	-	-	-	1	5	2	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13
Out	4	-	-	-	-	-	-	-	-	-	-	5	1	2	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13

Footnotes:

⁽¹¹⁾ The Navigator of the Navy directed all ships to be paperless by the end of FY16. To comply, PCs must receive the navigation and ECDIS-N installations.

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0981 / Items less than \$5 Million						Modification Number / Title: 10 / LT316 - Patrol Coastal FLIR		
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	2.030	0.300	-	1.770	-	1.770	2.683	-	-	-	1.680	8.463
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	2.030	0.300	-	1.770	-	1.770	2.683	-	-	-	1.680	8.463
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	2.030	0.300	-	1.770	-	1.770	2.683	-	-	-	1.680	8.463
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: Funding provided for the Forward Looking Infrared (FLIR) mod on Patrol Coastal Ship. FLIR Mod replaces an obsolete system and installs an Electro-Optic system that provides situational awareness with visual imagery along with detailed ship system and target information.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0981 / Items less than \$5 Million				Modification Number / Title: 10 / LT316 - Patrol Coastal FLIR					
Models of Systems Affected: PC FLIR			Modification Type:					Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: LT316 - Patrol Coastal FLIR													
B Kits													
Recurring													
1.1.1) FLIR - NonOrganic ⁽¹²⁾	4 / 1.779	- / -	- / -	5 / 1.770	- / -	5 / 1.770	3 / 1.062	- / -	- / -	- / -	3 / 1.050	15 / 5.661	
Subtotal: Recurring	- / 1.779	- / -	- / -	- / 1.770	- / -	- / 1.770	- / 1.062	- / -	- / -	- / -	- / 1.050	- / 5.661	
Subtotal: LT316 - Patrol Coastal FLIR	4 / 1.779	- / -	- / -	5 / 1.770	- / -	5 / 1.770	3 / 1.062	- / -	- / -	- / -	3 / 1.050	15 / 5.661	
Subtotal: Procurement, All Modification Items	- / 1.779	- / -	- / -	- / 1.770	- / -	- / 1.770	- / 1.062	- / -	- / -	- / -	- / 1.050	- / 5.661	
Installation													
Modification Item 1 of 1: LT316 - Patrol Coastal FLIR	- / 0.251	- / 0.300	- / -	- / -	- / -	- / -	- / 1.621	- / -	- / -	- / -	- / 0.630	- / 2.802	
Subtotal: Installation	- / 0.251	- / 0.300	- / -	- / -	- / -	- / -	- / 1.621	- / -	- / -	- / -	- / 0.630	- / 2.802	
Total													
Total Cost (Procurement + Support + Installation)	2.030	0.300	-	1.770	-	1.770	2.683	-	-	-	1.680	8.463	

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015																					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9										P-1 Line Item Number / Title: 0981 / Items less than \$5 Million										Modification Number / Title: 10 / LT316 - Patrol Coastal FLIR											
Modification Item 1 of 1: LT316 - Patrol Coastal FLIR																															
Manufacturer Information																															
Manufacturer Name: FLIR Systems															Manufacturer Location: Portland, Oregon																
Administrative Leadtime (in Months): 3															Production Leadtime (in Months): 3																
Dates		FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020					
Contract Dates										Jan 2016																					
Delivery Dates										Apr 2016																					
Installation Information																															
Method of Implementation: AIT:: Installation Name: FLIR																															
Installation Cost		Prior Years		FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total		FY 2017		FY 2018		FY 2019		FY 2020		To Complete		Total							
		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)							
Prior Years		2 / 0.251		2 / 0.300		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		4 / 0.551					
FY 2014		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2015		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2016		- / -		- / -		- / -		- / -		- / -		- / -		5 / 1.057		- / -		- / -		- / -		- / -		- / -		5 / 1.057					
FY 2017		- / -		- / -		- / -		- / -		- / -		- / -		3 / 0.564		- / -		- / -		- / -		- / -		- / -		3 / 0.564					
FY 2018		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2019		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2020		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
To Complete		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		3 / 0.630		3 / 0.630					
Total		2 / 0.251		2 / 0.300		- / -		- / -		- / -		- / -		8 / 1.621		- / -		- / -		- / -		- / -		3 / 0.630		15 / 2.802					
Installation Schedule																															
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	2	-	2	-	-	-	-	-	-	-	-	-	-	5	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	3	15
Out	2	-	2	-	-	-	-	-	-	-	-	-	-	5	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	3	15
Footnotes: (12) FLIR installs take 2 weeks to complete. FY17 scheduled installations will be completed consecutively by alteration installation teams (AIT).																															

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0981 / Items less than \$5 Million	Modification Number / Title: 11 / LT318 - Carriers Passive Countermeasures System (PCMS)

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	12.816	11.010	11.290	21.110	-	21.110	20.200	23.225	19.450	3.400	-	122.501
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	12.816	11.010	11.290	21.110	-	21.110	20.200	23.225	19.450	3.400	-	122.501
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	12.816	11.010	11.290	21.110	-	21.110	20.200	23.225	19.450	3.400	-	122.501
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Classified effort.

[PCMS] PCMS Fielding plan has changed from original plan due to Carrier availability schedule changes. Original plan was to fund two CVN PCMS installs in FY14 (CVN 75 and CVN 76) and 2 installs in FY15 (CVN70 and CVN77). Subsequently, the decision was made to install on CVN 68 (also originally an FY14 avail) vice CVN 75 because the preference was to first complete west coast ships for operational reasons. Navy leadership determined that the highest priority for PCMS installations is the forward deployed carrier (CVN 76 in FY14); After discussion with PCMS Sponsors and PCMS program office, it was determined that CVN 68 PCMS installation could be deferred to FY18 without significant operational impact.

New Fielding Plan as follows: FY14 (1 ship), FY15 (1), FY16 (2), FY17 (1), FY18 (3), FY19 (1), FY20 (1). Avails that start in 1st qtr or early 2nd qtr will require funding in the previous FY to award AIT and support contracts.

Additionally, some funding is required post avail for post avail testing.

PEO CV PCMS funding is solely for installation. Procurement of material is done separately via a different sponsor and program office. Material is provided as GFE at the start of the availability.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0981 / Items less than \$5 Million					Modification Number / Title: 11 / LT318 - Carriers Passive Countermeasures System (PCMS)				
Models of Systems Affected: Carrier PCMS				Modification Type:					Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: LT318 - Carriers Passive Countermeasures System (PCMS)													
B Kits													
Recurring													
1.1.1) PCMS - Organic ⁽¹³⁾	- / 12.816	- / 11.010	- / 11.290	- / 21.110	- / -	- / 21.110	- / 20.200	- / 23.225	- / 19.450	- / 3.400	- / -	- / 122.501	
Subtotal: Recurring	- / 12.816	- / 11.010	- / 11.290	- / 21.110	- / -	- / 21.110	- / 20.200	- / 23.225	- / 19.450	- / 3.400	- / -	- / 122.501	
Subtotal: LT318 - Carriers Passive Countermeasures System (PCMS)	- / 12.816	- / 11.010	- / 11.290	- / 21.110	- / -	- / 21.110	- / 20.200	- / 23.225	- / 19.450	- / 3.400	- / -	- / 122.501	
Subtotal: Procurement, All Modification Items	- / 12.816	- / 11.010	- / 11.290	- / 21.110	- / -	- / 21.110	- / 20.200	- / 23.225	- / 19.450	- / 3.400	- / -	- / 122.501	
Installation													
Subtotal: Installation	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Total													
Total Cost (Procurement + Support + Installation)	12.816	11.010	11.290	21.110	-	21.110	20.200	23.225	19.450	3.400	-	122.501	

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Exhibit P-3a, Individual Modification: PB 2016 Navy					Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9			P-1 Line Item Number / Title: 0981 / Items less than \$5 Million			Modification Number / Title: 11 / LT318 - Carriers Passive Countermeasures System (PCMS)	
Modification Item 1 of 1: LT318 - Carriers Passive Countermeasures System (PCMS)							
Manufacturer Information							
Manufacturer Name: New MFG - Name				Manufacturer Location: New MFG - Loc			
Administrative Leadtime (<i>in Months</i>): 0				Production Leadtime (<i>in Months</i>): 0			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							
Installation Information							
Method of Implementation (Organic): No Quantities Associated with Install					Installation Quantity: 0		
Footnotes: ⁽¹³⁾ PCMS Fielding plan has changed from original plan due to Carrier availability schedule changes. Original plan was to fund two CVN PCMS installs in FY14 (CVN 75 and CVN 76) and 2 installs in FY15 (CVN70 and CVN77). Subsequently, the decision was made to install on CVN 68 (also originally an FY14 avail) vice CVN 75 because the preference was to first complete west coast ships for operational reasons. Navy leadership determined that the highest priority for PCMS installations is the forward deployed carrier (CVN 76 in FY14); After discussion with PCMS Sponsors and PCMS program office, it was determined that CVN 68 PCMS installation could be deferred to FY18 without significant operational impact. New Fielding Plan as follows: FY14 (1 ship), FY15 (1), FY16 (2), FY17 (1), FY18 (3), FY19 (1), FY20 (1). Avails that start in 1st qtr or early 2nd qtr will require funding in the previous FY to award AIT and support contracts. Additionally, some funding is required post avail for post avail testing. PEO CV PCMS funding is solely for installation. Procurement of material is done separately via a different sponsor and program office. Material is provided as GFE at the start of the availability.							

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Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0981 / Items less than \$5 Million					Modification Number / Title: 12 / LT319 - JSF Support - Heavy Unrep			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	0.000	-	-	0.838	-	0.838	3.045	2.207	-	-	-	6.090
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	0.000	-	-	0.838	-	0.838	3.045	2.207	-	-	-	6.090
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	0.000	-	-	0.838	-	0.838	3.045	2.207	-	-	-	6.090
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: Installation of Heavy UNREP (Heavy E-Stream) capability on CVN 68 Class Carriers is required to facilitate connected replenishment of F-35 engine Power Modules and Lift Fans. The F-35 engine, power module and lift fan each exceed size and weight capabilities of the current CVN 68 Class UNREP system.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0981 / Items less than \$5 Million				Modification Number / Title: 12 / LT319 - JSF Support - Heavy Unrep					
Models of Systems Affected: Heavy UNREP (Heavy E-Stream)				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: LT319 - JSF Support - Heavy Unrep													
B Kits													
Recurring													
1.1.1) Heavy Unrep Heavy E-Stream - NonOrganic ⁽¹⁴⁾	- / -	- / -	- / -	1 / 0.720	- / -	1 / 0.720	1 / 0.720	- / -	- / -	- / -	- / -	2 / 1.440	
Subtotal: Recurring	- / 0.000	- / -	- / -	- / 0.720	- / -	- / 0.720	- / 0.720	- / -	- / -	- / -	- / -	- / 1.440	
Subtotal: LT319 - JSF Support - Heavy Unrep	- / -	- / -	- / -	1 / 0.720	- / -	1 / 0.720	1 / 0.720	- / -	- / -	- / -	- / -	2 / 1.440	
Subtotal: Procurement, All Modification Items	- / 0.000	- / -	- / -	- / 0.720	- / -	- / 0.720	- / 0.720	- / -	- / -	- / -	- / -	- / 1.440	
Installation													
Modification Item 1 of 1: LT319 - JSF Support - Heavy Unrep	- / 0.000	- / -	- / -	- / 0.118	- / -	- / 0.118	- / 2.325	- / 2.207	- / -	- / -	- / -	- / 4.650	
Subtotal: Installation	- / 0.000	- / -	- / -	- / 0.118	- / -	- / 0.118	- / 2.325	- / 2.207	- / -	- / -	- / -	- / 4.650	
Total													
Total Cost (Procurement + Support + Installation)	0.000	-	-	0.838	-	0.838	3.045	2.207	-	-	-	6.090	

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Exhibit P-3a, Individual Modification: PB 2016 Navy				Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9		P-1 Line Item Number / Title: 0981 / Items less than \$5 Million				Modification Number / Title: 12 / LT319 - JSF Support - Heavy Unrep	

Modification Item 1 of 1: LT319 - JSF Support - Heavy Unrep

Manufacturer Information

Manufacturer Name: TBD ⁽¹⁵⁾				Manufacturer Location: TBD			
Administrative Leadtime (in Months): 3				Production Leadtime (in Months): 9			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates			Oct 2015				
Delivery Dates			Jul 2016				

Installation Information

Method of Implementation: [none specified]:: Installation Name: Heavy Unrep Heavy E-Stream

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / 0.118	- / -	- / 0.118	1 / 2.207	- / -	- / -	- / -	- / -	1 / 2.325
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.118	1 / 2.207	- / -	- / -	- / -	1 / 2.325
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	- / 0.118	- / -	- / 0.118	1 / 2.325	1 / 2.207	- / -	- / -	- / -	2 / 4.650

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	2
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	2

Footnotes:

⁽¹⁴⁾ Installation of Heavy UNREP (Heavy E-Stream) capability on CVN 68 Class Carriers is required to facilitate connected replenishment of F-35 engine Power Modules and Lift Fans. The F-35 engine, power module and lift fan each exceed size and weight capabilities of the current CVN 68 Class UNREP system.

⁽¹⁵⁾ Awaiting identification of manufacturer

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0981 / Items less than \$5 Million	Modification Number / Title: 13 / LT322 - LSD Boat Davit

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	0.000	-	2.355	7.058	-	7.058	4.411	2.529	2.607	5.535	26.330	50.825
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	0.000	-	2.355	7.058	-	7.058	4.411	2.529	2.607	5.535	26.330	50.825
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	0.000	-	2.355	7.058	-	7.058	4.411	2.529	2.607	5.535	26.330	50.825
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

[FMP Ship Units - LSD Davit] This SHIPALT replaces the Welin Lambie LUM 12A or Lakeshore Gravity Boat Davit currently installed on LSD 41/49 Class ships, with a new Slewing Arm Davit (SLAD) from Oldenburg Group Inc. The existing systems will be removed and the OGI SLAD will be installed in the same general location of the current systems. The new system is a SLAD design with single point pick up of the boats versus the two point pick up used by the existing systems.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0981 / Items less than \$5 Million				Modification Number / Title: 13 / LT322 - LSD Boat Davit				
Models of Systems Affected:			Modification Type:					Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Procurement												
Modification Item 1 of 1: LT322 - LSD Boat Davit												
B Kits												
Recurring												
1.1.1) FMP Ship Units - LSD Davit - NonOrganic ⁽¹⁶⁾	- / -	- / -	1 / 1.191	2 / 2.427	- / -	2 / 2.427	- / -	1 / 1.259	- / -	3 / 3.912	4 / 5.421	11 / 14.210
Subtotal: Recurring	- / 0.000	- / -	- / 1.191	- / 2.427	- / -	- / 2.427	- / -	- / 1.259	- / -	- / 3.912	- / 5.421	- / 14.210
Subtotal: LT322 - LSD Boat Davit	- / -	- / -	1 / 1.191	2 / 2.427	- / -	2 / 2.427	- / -	1 / 1.259	- / -	3 / 3.912	4 / 5.421	11 / 14.210
Subtotal: Procurement, All Modification Items	- / 0.000	- / -	- / 1.191	- / 2.427	- / -	- / 2.427	- / -	- / 1.259	- / -	- / 3.912	- / 5.421	- / 14.210
Installation												
Modification Item 1 of 1: LT322 - LSD Boat Davit	- / 0.000	- / -	- / 1.164	- / 4.631	- / -	- / 4.631	- / 4.411	- / 1.270	- / 2.607	- / 1.623	- / 20.909	- / 36.615
Subtotal: Installation	- / 0.000	- / -	- / 1.164	- / 4.631	- / -	- / 4.631	- / 4.411	- / 1.270	- / 2.607	- / 1.623	- / 20.909	- / 36.615
Total												
Total Cost (Procurement + Support + Installation)	0.000	-	2.355	7.058	-	7.058	4.411	2.529	2.607	5.535	26.330	50.825

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0981 / Items less than \$5 Million	Modification Number / Title: 13 / LT322 - LSD Boat Davit

Modification Item 1 of 1: LT322 - LSD Boat Davit

Manufacturer Information

Manufacturer Name: Oldenburg Group Inc	Manufacturer Location: Iron River, MI
Administrative Leadtime (in Months): 2	Production Leadtime (in Months): 10

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates		Mar 2015	Apr 2016				
Delivery Dates		Jan 2016	Feb 2017				

Installation Information

Method of Implementation: Industrial/AIT:: Installation Name: FMP Ship Units - LSD Davit

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / 1.164	1 / 2.560	- / -	1 / 2.560	- / -	- / -	- / -	- / -	- / -	1 / 3.724
FY 2016	- / -	- / -	- / -	- / 2.071	- / -	- / 2.071	2 / 4.411	- / -	- / -	- / -	- / -	2 / 6.482
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.270	1 / 2.607	- / -	- / -	1 / 3.877
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.623	3 / 7.733	3 / 9.356
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 13.176	4 / 13.176
Total	- / -	- / -	- / 1.164	1 / 4.631	- / -	1 / 4.631	2 / 4.411	- / 1.270	1 / 2.607	- / 1.623	7 / 20.909	11 / 36.615

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	1	-	-	-	2	-	-	-	-	-	-	1	-	-	-	-	-	-	-	7	11
Out	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	2	-	-	-	-	-	-	1	-	-	-	-	-	-	7	11

Footnotes:

⁽¹⁶⁾ FY15 installation funds are required for DSA, Advanced Planning, Shipyard Long Lead Time Material (LLTM), Integrated Logistics Support (ILS), In-Service Engineering Agent (ISEA) and Training. FY16 Installation costs higher for first time install and performing shock, vibration and Electromagnetic interference (EMI) Testing.

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0981 / Items less than \$5 Million	Modification Number / Title: 14 / LT321 MLP AFSB SOF Backfit

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	0.000	-	-	19.547	-	19.547	2.829	22.398	-	-	-	44.774
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	0.000	-	-	19.547	-	19.547	2.829	22.398	-	-	-	44.774
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	0.000	-	-	19.547	-	19.547	2.829	22.398	-	-	-	44.774
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Funds provided for MLP AFSB Special Operation Forces (SOF) component. MLP 3 AFSB SOF component will be procured and installed in 1 year to support an operational requirement to deploy NLT September 2016. Efforts include ship changes necessary to add radio infrastructure and increase bandwidth capacity, ship changes required to make AFSB compatible with night vision devices, and ship changes to add additional aircraft operating spots. Other efforts include ship changes and services for additional Twenty-foot Equivalent Unit (TEU) capacity, increased medical services (shock/triage/forward resuscitative surgery system), and capacity for storage/fueling capability for 4000 gallons of MOGAS. MLP 4 AFSB SOF component will procure in FY 17 with installation in FY18 after 2QFY18 ship delivery.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0981 / Items less than \$5 Million				Modification Number / Title: 14 / LT321 MLP AFSB SOF Backfit					
Models of Systems Affected:				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: LT321 MLP AFSB SOF Backfit													
B Kits													
Recurring													
2.1.1) LT321 MLP AFSB SOF . - NonOrganic	- / -	- / -	- / -	1 / 12.347	- / -	1 / 12.347	1 / 2.829	1 / 11.973	- / -	- / -	- / -	3 / 27.149	
Subtotal: Recurring	- / 0.000	- / -	- / -	- / 12.347	- / -	- / 12.347	- / 2.829	- / 11.973	- / -	- / -	- / -	- / 27.149	
Subtotal: LT321 MLP AFSB SOF Backfit	- / -	- / -	- / -	1 / 12.347	- / -	1 / 12.347	1 / 2.829	1 / 11.973	- / -	- / -	- / -	3 / 27.149	
Subtotal: Procurement, All Modification Items	- / 0.000	- / -	- / -	- / 12.347	- / -	- / 12.347	- / 2.829	- / 11.973	- / -	- / -	- / -	- / 27.149	
Support (All Modification Items)													
3.1) New Cost Element.	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Subtotal: Support	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Installation													
Modification Item 1 of 1: LT321 MLP AFSB SOF Backfit	- / 0.000	- / -	- / -	- / 7.200	- / -	- / 7.200	- / -	- / 10.425	- / -	- / -	- / -	- / 17.625	
Subtotal: Installation	- / 0.000	- / -	- / -	- / 7.200	- / -	- / 7.200	- / -	- / 10.425	- / -	- / -	- / -	- / 17.625	
Total													
Total Cost (Procurement + Support + Installation)	0.000	-	-	19.547	-	19.547	2.829	22.398	-	-	-	44.774	

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015																					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9										P-1 Line Item Number / Title: 0981 / Items less than \$5 Million										Modification Number / Title: 14 / LT321 MLP AFSB SOF Backfit											
Modification Item 1 of 1: LT321 MLP AFSB SOF Backfit																															
Manufacturer Information																															
Manufacturer Name: Various															Manufacturer Location: TBD																
Administrative Leadtime (in Months): 0															Production Leadtime (in Months): 0																
Dates		FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020					
Contract Dates																															
Delivery Dates																															
Installation Information																															
Method of Implementation: [none specified]:: Installation Name: LT321 MLP AFSB SOF .																															
Installation Cost		Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total																		
		<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>																		
Prior Years		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2014		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2015		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2016		- / -	- / -	- / -	1 / 7.200	- / -	1 / 7.200	- / -	- / -	- / -	- / -	- / -	1 / 7.200																		
FY 2017		- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 2.085	- / -	- / -	- / -	1 / 2.085																		
FY 2018		- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 8.340	- / -	- / -	- / -	1 / 8.340																		
FY 2019		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
FY 2020		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
To Complete		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																		
Total		- / -	- / -	- / -	1 / 7.200	- / -	1 / 7.200	- / -	2 / 10.425	- / -	- / -	- / -	3 / 17.625																		
Installation Schedule																															
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	3
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	3

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy **Date:** February 2015

Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment	P-1 Line Item Number / Title: 0989 / Chemical Warfare Detectors

ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	38.011	4.413	2.937	3.027	-	3.027	2.970	3.033	3.069	3.133	21.465	82.058
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	38.011	4.413	2.937	3.027	-	3.027	2.970	3.033	3.069	3.133	21.465	82.058
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	38.011	4.413	2.937	3.027	-	3.027	2.970	3.033	3.069	3.133	21.465	82.058

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

CHEMICAL & BIOLOGICAL DEFENSE PROGRAM (INSTALLATION REQUIREMENTS):

Public Law 103-160, Section 1703 created a Joint Service Chemical and Biological Defense Program (CBDP) to address ever growing threats from the aggressive proliferation of chemical and biological weapons. Joint CBDP funds the development and procurement of Chemical and Biological Defense (CBD) Equipment to enhance the warfighter's ability to survive and complete their mission in a chemical biological contaminated environment. The Navy is responsible for the associated installation/integration and sustainment funds only. The Navy's requirement for Joint Biological Point Detection System (JBPDS), Improved Point Detection System/Lifecycle Replacement (IPDS/LR), Joint Biological Agent Identification and Diagnostic System (JBAIDS), and Chemical Biological Radiological Nuclear (CBRN) Dismounted Reconnaissance Sets, Kits, and Outfits (DR SKO) has been validated by CNO in associated Joint Operational Requirements Documents.

Installation of Equipment

Funding is for installation of equipment including Fleet Modernization Program installations, installation of training equipment and installation of equipment in other shore facilities. Procurement of equipment is funded by the Joint Chemical Biological Defense Program.

[P3A / IPDS/LR]: The IPDS/LR (formerly SEACADS/IPDS) will improve the existing shipboard point detection system for detecting and identifying chemical nerve and blister agent contamination presence. Inventory objective for shipboard installations is 131.

[P3A - 2 / JBAIDS]: The JBAIDS will provide U.S. operating forces with a biological organism identification and diagnostic device that will identify and quantify biological organisms of operational concern and other pathogens of clinical significance for confirmatory and prognostic purposes. Inventory objective for shipboard JBAIDS installations is 21 and Refrigeration installations is 17.

[P3A - 4 / JBPDS BLK 1]: The JBPDS Block I will provide the Navy with automated, knowledge-based capability to detect and identify biological warfare agents in less than 20 minutes. The inventory objective for shipboard installations is 81.

[P3A - 5 / DRSKO Stowage]: The CBRN DRSKO consists of portable, commercial and government off-the-shelf equipment which provides Visit Board Search and Seizure (VBSS) forces with the capability to detect or deny the presence of Weapons of Mass Destruction (WMD) in support of WMD Interdiction (WMD-I) missions. The inventory objective for shipboard installations is 116.

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment		P-1 Line Item Number / Title: 0989 / Chemical Warfare Detectors
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy	Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment	P-1 Line Item Number / Title: 0989 / Chemical Warfare Detectors

ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:

Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
1 / CW001 CHEMICAL WARFARE PROGRAM IPDS/LR ()	P-3a		- / 7.528	- / 3.501	- / 2.868	- / 2.486	- / -	- / 2.486
2 / CW001 CHEMICAL WARFARE PROGRAM JBAIDS ()	P-3a		- / 4.948	- / -	- / 0.069	- / -	- / -	- / -
3 / CW001 CHEMICAL WARFARE PROGRAM JBAIDS REFRIGERATION UPGRADE ()	P-3a		- / 1.050	- / 0.557	- / -	- / 0.089	- / -	- / 0.089
4 / CW001 CHEMICAL WARFARE PROGRAM JBPDS BLK 1 ()	P-3a		- / 24.485	- / -	- / -	- / -	- / -	- / -
5 / DRSKO Stowage ()	P-3a		- / 0.000	- / 0.355	- / -	- / 0.452	- / -	- / 0.452
Total Gross/Weapon System Cost			- / 38.011	- / 4.413	- / 2.937	- / 3.027	- / -	- / 3.027

Exhibits Schedule			FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
1 / CW001 CHEMICAL WARFARE PROGRAM IPDS/LR ()	P-3a		- / 2.886	- / 2.925	- / 0.484	- / -	- / 0.001	- / 22.679
2 / CW001 CHEMICAL WARFARE PROGRAM JBAIDS ()	P-3a		- / -	- / -	- / -	- / -	- / 0.002	- / 5.019
3 / CW001 CHEMICAL WARFARE PROGRAM JBAIDS REFRIGERATION UPGRADE ()	P-3a		- / 0.084	- / -	- / -	- / -	- / 0.002	- / 1.782
4 / CW001 CHEMICAL WARFARE PROGRAM JBPDS BLK 1 ()	P-3a		- / -	- / 0.108	- / 2.585	- / -	- / 0.001	- / 27.179
5 / DRSKO Stowage ()	P-3a		- / -	- / -	- / -	- / 3.133	- / 21.459	- / 25.399
Total Gross/Weapon System Cost			- / 2.970	- / 3.033	- / 3.069	- / 3.133	- / 21.465	- / 82.058

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0989 / Chemical Warfare Detectors	Modification Number / Title: 1 / CW001 CHEMICAL WARFARE PROGRAM IPDS/LR

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	7.528	3.501	2.868	2.486	-	2.486	2.886	2.925	0.484	-	0.001	22.679
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	7.528	3.501	2.868	2.486	-	2.486	2.886	2.925	0.484	-	0.001	22.679
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	7.528	3.501	2.868	2.486	-	2.486	2.886	2.925	0.484	-	0.001	22.679
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

OPNAVINST 3400.10G articulates U.S. Navy Chemical, Biological and Radiological Defense (CBRD) policy and establishes functional responsibilities to ensure the highest level of the Fleet readiness and warfighting sustainability in a CBR environment. CBRD Improved Point Detection System/Lifecycle Replacement (IPDS/LR) will improve the existing shipboard point detection system for detecting and identifying chemical nerve and blister agent contamination presence. The equipment procurement is funded out of the Joint Service Chemical Biological Defense Program Budget.

[IPDS/LR] [IPDS/LR] Remarks: A total of sixty-six (66) completed. Because obsolescence issues with IPDS will make the system unsustainable starting in FY18, the IPDS/LR installation schedule has been accelerated and prioritized over JBPDS installation. Four (4) ships Installation delayed from FY14 to FY15 due to ship availability changes. A late FY14 below threshold reprograming of FY14 funding is being utilized to initiate DRSKO installation support and accelerates (2) IPDS-LR installs.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0989 / Chemical Warfare Detectors					Modification Number / Title: 1 / CW001 CHEMICAL WARFARE PROGRAM IPDS/LR				
Models of Systems Affected:				Modification Type:					Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: CW001 CHEMICAL WARFARE PROGRAM IPDS/LR													
B Kits													
Recurring													
1.1.1) IPDS/LR - NonOrganic		46 / 0.000	27 / -	20 / -	7 / -	- / -	7 / -	16 / -	12 / -	3 / -	- / -	- / 0.001	131 / 0.001
1.1.2) DSA COST - NonOrganic		- / -	- / 0.309	- / 0.194	- / 1.119	- / -	- / 1.119	- / 0.138	- / 0.467	- / -	- / -	- / -	- / 2.227
Subtotal: Recurring		- / 0.000	- / 0.309	- / 0.194	- / 1.119	- / -	- / 1.119	- / 0.138	- / 0.467	- / -	- / -	- / 0.001	- / 2.228
Subtotal: CW001 CHEMICAL WARFARE PROGRAM IPDS/LR		46 / 0.000	27 / 0.309	20 / 0.194	7 / 1.119	- / -	7 / 1.119	16 / 0.138	12 / 0.467	3 / -	- / -	- / 0.001	131 / 2.228
Subtotal: Procurement, All Modification Items		- / 0.000	- / 0.309	- / 0.194	- / 1.119	- / -	- / 1.119	- / 0.138	- / 0.467	- / -	- / -	- / 0.001	- / 2.228
Installation													
Modification Item 1 of 1: CW001 CHEMICAL WARFARE PROGRAM IPDS/LR		- / 7.528	- / 3.192	- / 2.674	- / 1.367	- / -	- / 1.367	- / 2.748	- / 2.458	- / 0.484	- / -	- / -	- / 20.451
Subtotal: Installation		- / 7.528	- / 3.192	- / 2.674	- / 1.367	- / -	- / 1.367	- / 2.748	- / 2.458	- / 0.484	- / -	- / -	- / 20.451
Total													
Total Cost (Procurement + Support + Installation)		7.528	3.501	2.868	2.486	-	2.486	2.886	2.925	0.484	-	0.001	22.679

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0989 / Chemical Warfare Detectors	Modification Number / Title: 1 / CW001 CHEMICAL WARFARE PROGRAM IPDS/LR

Modification Item 1 of 1: CW001 CHEMICAL WARFARE PROGRAM IPDS/LR

Manufacturer Information

Manufacturer Name: TBD				Manufacturer Location: TBD			
Administrative Leadtime (in Months): 0				Production Leadtime (in Months): 0			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: AIT:: Installation Name: IPDS/LR

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	40 / 7.528	6 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	46 / 7.528
FY 2014	- / -	17 / 3.192	10 / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	27 / 3.192
FY 2015	- / -	- / -	18 / 2.674	2 / -	- / -	2 / -	- / -	- / -	- / -	- / -	- / -	20 / 2.674
FY 2016	- / -	- / -	- / -	5 / 1.367	- / -	5 / 1.367	2 / -	- / -	- / -	- / -	- / -	7 / 1.367
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	14 / 2.748	2 / -	- / -	- / -	- / -	16 / 2.748
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	10 / 2.458	2 / -	- / -	- / -	12 / 2.458
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.484	- / -	- / -	3 / 0.484
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	40 / 7.528	23 / 3.192	28 / 2.674	7 / 1.367	- / -	7 / 1.367	16 / 2.748	12 / 2.458	5 / 0.484	- / -	- / -	131 / 20.451

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	40	5	7	6	5	4	8	7	9	2	1	2	2	4	4	4	4	3	3	3	3	2	1	1	1	-	-	-	-	-	131
Out	40	5	7	6	5	3	9	7	9	2	1	2	2	4	4	4	4	3	3	3	3	2	1	1	1	-	-	-	-	-	131

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0989 / Chemical Warfare Detectors					Modification Number / Title: 2 / CW001 CHEMICAL WARFARE PROGRAM JBAIDS			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	4.948	-	0.069	-	-	-	-	-	-	-	0.002	5.019
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	4.948	-	0.069	-	-	-	-	-	-	-	0.002	5.019
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	4.948	-	0.069	-	-	-	-	-	-	-	0.002	5.019
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: OPNAVINST 3400.10G articulates U.S. Navy Chemical, Biological and Radiological Defense (CBRD) policy and establishes functional responsibilities to ensure the highest level of the Fleet readiness and warfighting sustainability in a CBR environment. Joint Biological Agent Identification and Diagnostic System (JBAIDS) systems will identify and quantify biological organisms of operational concern and other pathogens of clinical significance for confirmatory and prognostic purposes. The CENTCOM HR urgent need (dated Aug 2009) modifies the JBAIDS ORD (dated May 2003) with the addition of detection capability for the 2009/A/H1N1 influenza. The equipment procurement is funded out of the Joint Service Chemical Biological Defense Program Budget P-1 Item Nomenclature: Joint Biological Agent Identification and Diagnostic System. Beginning in FY13, system will install with refrigeration unit.												
[JBAIDS] Remarks: A total of 20 completed of 21 planned. Last installation scheduled to occur 3rd quarter FY15. Delay of the last installation from 4th quarter FY14 to 3rd quarter FY15 was due to a change in ship availability of CVN-71. We could not accomplish during the major overhaul period so we are accomplishing during 1st pier-side availability.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0989 / Chemical Warfare Detectors					Modification Number / Title: 2 / CW001 CHEMICAL WARFARE PROGRAM JBAIDS				
Models of Systems Affected:				Modification Type:					Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: CW001 CHEMICAL WARFARE PROGRAM JBAIDS													
B Kits													
Non-Recurring													
1.1.1) JBAIDS - NonOrganic		20 / 0.000	- / -	1 / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.001	21 / 0.001	
1.1.2) DSA COST - NonOrganic		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.001	- / 0.001	
Subtotal: Non-Recurring		- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.002	- / 0.002	
Subtotal: CW001 CHEMICAL WARFARE PROGRAM JBAIDS		20 / 0.000	- / -	1 / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.002	21 / 0.002	
Subtotal: Procurement, All Modification Items		- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.002	- / 0.002	
Installation													
Modification Item 1 of 1: CW001 CHEMICAL WARFARE PROGRAM JBAIDS		- / 4.948	- / -	- / 0.069	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 5.017	
Subtotal: Installation		- / 4.948	- / -	- / 0.069	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 5.017	
Total													
Total Cost (Procurement + Support + Installation)		4.948	-	0.069	-	-	-	-	-	-	0.002	5.019	

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0989 / Chemical Warfare Detectors	Modification Number / Title: 2 / CW001 CHEMICAL WARFARE PROGRAM JBAIDS

Modification Item 1 of 1: CW001 CHEMICAL WARFARE PROGRAM JBAIDS

Manufacturer Information							
Manufacturer Name: TBD				Manufacturer Location: TBD			
Administrative Leadtime (in Months): 0				Production Leadtime (in Months): 0			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: AIT:: Installation Name: JBAIDS

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	20 / 4.948	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	20 / 4.948
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	1 / 0.069	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.069
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	20 / 4.948	- / -	1 / 0.069	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	21 / 5.017

Installation Schedule																															
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	20	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21	
Out	20	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21	

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0989 / Chemical Warfare Detectors	Modification Number / Title: 3 / CW001 CHEMICAL WARFARE PROGRAM JBAIDS REFRIGERATION UPGRADE

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	1.050	0.557	-	0.089	-	0.089	0.084	-	-	-	0.002	1.782
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	1.050	0.557	-	0.089	-	0.089	0.084	-	-	-	0.002	1.782
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	1.050	0.557	-	0.089	-	0.089	0.084	-	-	-	0.002	1.782
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

OPNAVINST 3400.10G articulates U.S. Navy Chemical, Biological and Radiological Defense (CBRD) policy and establishes functional responsibilities to ensure the highest level of Fleet readiness and warfighting sustainability in a CBR environment. Joint Biological Agent Identification and Diagnostic System (JBAIDS) systems will detect and identify biological organisms of operational concern and other pathogens of clinical significance for confirmatory and prognostic purposes. The CENTCOM HR urgent need (dated Aug 2009) modifies the JBAIDS ORD (dated May 2003) with the addition of detection capability for the 2009/A/H1N1 influenza. This requires the installation of added support equipment, hard-wired freezers. The equipment procurement is funded out of the Joint Service Chemical Biological Defense Program Budget P-1 Item Nomenclature: Joint Biological Agent Identification and Diagnostic System.

[JBAIDS REFRIGERATION UPGRADE] Remarks: A total of fifteen (15) completed of seventeen (17) planned.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0989 / Chemical Warfare Detectors						Modification Number / Title: 3 / CW001 CHEMICAL WARFARE PROGRAM JBAIDS REFRIGERATION UPGRADE			
Models of Systems Affected:				Modification Type:					Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: CW001 CHEMICAL WARFARE PROGRAM JBAIDS REFRIGERATION UPGRADE													
B Kits													
Recurring													
1.1.1) JBAIDS REFRIGERATION UPGRADE - NonOrganic	8 / 0.000	7 / -	- / -	1 / -	- / -	1 / -	1 / -	- / -	- / -	- / -	- / 0.001	17 / 0.001	
1.1.2) DSA COST - NonOrganic	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.001	- / 0.001	
Subtotal: Recurring	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.002	- / 0.002	
Subtotal: CW001 CHEMICAL WARFARE PROGRAM JBAIDS REFRIGERATION UPGRADE	8 / 0.000	7 / -	- / -	1 / -	- / -	1 / -	1 / -	- / -	- / -	- / -	- / 0.002	17 / 0.002	
Subtotal: Procurement, All Modification Items	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.002	- / 0.002	
Installation													
Modification Item 1 of 1: CW001 CHEMICAL WARFARE PROGRAM JBAIDS REFRIGERATION UPGRADE	- / 1.050	- / 0.557	- / -	- / 0.089	- / -	- / 0.089	- / 0.084	- / -	- / -	- / -	- / -	- / 1.780	
Subtotal: Installation	- / 1.050	- / 0.557	- / -	- / 0.089	- / -	- / 0.089	- / 0.084	- / -	- / -	- / -	- / -	- / 1.780	
Total													
Total Cost (Procurement + Support + Installation)	1.050	0.557	-	0.089	-	0.089	0.084	-	-	-	0.002	1.782	

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0989 / Chemical Warfare Detectors	Modification Number / Title: 3 / CW001 CHEMICAL WARFARE PROGRAM JBAIDS REFRIGERATION UPGRADE

Modification Item 1 of 1: CW001 CHEMICAL WARFARE PROGRAM JBAIDS REFRIGERATION UPGRADE

Manufacturer Information							
Manufacturer Name: TBD				Manufacturer Location: TBD			
Administrative Leadtime (in Months): 0				Production Leadtime (in Months): 0			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: AIT:: Installation Name: JBAIDS REFRIGERATION UPGRADE

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	8 / 1.050	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	8 / 1.050
FY 2014	- / -	7 / 0.557	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	7 / 0.557
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	1 / 0.089	- / -	1 / 0.089	- / -	- / -	- / -	- / -	- / -	1 / 0.089
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.084	- / -	- / -	- / -	- / -	1 / 0.084
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	8 / 1.050	7 / 0.557	- / -	1 / 0.089	- / -	1 / 0.089	1 / 0.084	- / -	- / -	- / -	- / -	17 / 1.780

Installation Schedule																															
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020					
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	8	-	1	2	4	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17
Out	8	-	1	2	2	2	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0989 / Chemical Warfare Detectors	Modification Number / Title: 4 / CW001 CHEMICAL WARFARE PROGRAM JBPDS BLK 1

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	24.485	-	-	-	-	-	-	0.108	2.585	-	0.001	27.179
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	24.485	-	-	-	-	-	-	0.108	2.585	-	0.001	27.179
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	24.485	-	-	-	-	-	-	0.108	2.585	-	0.001	27.179
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

OPNAVINST 3400.10G articulates U.S. Navy Chemical, Biological and Radiological Defense (CBRD) policy and establishes functional responsibilities to ensure the highest level of Fleet Readiness and warfighting sustainability in a CBR environment. Joint Biological Point Detection Systems (JBPDS BLK I) provides for improved biological agent detection and reporting. The JBPDS ORD (J2-B001-Revision 1, dated 7 January, 2002) validates the modification. The equipment procurement is funded out of the Joint Chemical Biological Defense Program Budget P-1 Item Nomenclature: (JP0100) JOINT BIO POINT DETECTION SYSTEM (JBPDS).

[JBPDS BLK 1] Remarks: A total of 74 completed of 81 planned. Due to a potential for a chemical point detection system capability gap because of obsolescence issues with IPDS starting in FY18, all JBPDS installations have been stopped as of 4th quarter FY13 to maximize IPDR-LR installations.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0989 / Chemical Warfare Detectors					Modification Number / Title: 4 / CW001 CHEMICAL WARFARE PROGRAM JBPDS BLK 1				
Models of Systems Affected:				Modification Type:					Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: CW001 CHEMICAL WARFARE PROGRAM JBPDS BLK 1													
B Kits													
Recurring													
1.1.1) JBPDS BLK 1 - NonOrganic		74 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	7 / -	- / -	- / 0.001	81 / 0.001	
1.1.2) DSA COST - NonOrganic		- / -	- / -	- / -	- / -	- / -	- / -	- / 0.108	- / -	- / -	- / -	- / 0.108	
Subtotal: Recurring		- / 0.000	- / -	- / -	- / -	- / -	- / -	- / 0.108	- / -	- / -	- / 0.001	- / 0.109	
Subtotal: CW001 CHEMICAL WARFARE PROGRAM JBPDS BLK 1		74 / 0.000	- / -	- / -	- / -	- / -	- / -	- / 0.108	7 / -	- / -	- / 0.001	81 / 0.109	
Subtotal: Procurement, All Modification Items		- / 0.000	- / -	- / -	- / -	- / -	- / -	- / 0.108	- / -	- / -	- / 0.001	- / 0.109	
Installation													
Modification Item 1 of 1: CW001 CHEMICAL WARFARE PROGRAM JBPDS BLK 1		- / 24.485	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.585	- / -	- / -	- / 27.070	
Subtotal: Installation		- / 24.485	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.585	- / -	- / -	- / 27.070	
Total													
Total Cost (Procurement + Support + Installation)		24.485	-	-	-	-	-	-	0.108	2.585	-	0.001	27.179

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0989 / Chemical Warfare Detectors	Modification Number / Title: 4 / CW001 CHEMICAL WARFARE PROGRAM JBPDS BLK 1

Modification Item 1 of 1: CW001 CHEMICAL WARFARE PROGRAM JBPDS BLK 1

Manufacturer Information

Manufacturer Name: TBD	Manufacturer Location: TBD
Administrative Leadtime (in Months): 0	Production Leadtime (in Months): 0

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: AIT:: Installation Name: JBPDS BLK 1

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	74 / 24.485	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	74 / 24.485
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	7 / 2.585	- / -	- / -	7 / 2.585
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	74 / 24.485	- / -	- / -	- / -	- / -	- / -	- / -	- / -	7 / 2.585	- / -	- / -	81 / 27.070

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	2	2	-	-	-	-	-	81	
Out	74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	2	2	-	-	-	-	-	81	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0989 / Chemical Warfare Detectors	Modification Number / Title: 5 / DRSKO Stowage

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	0.000	0.355	-	0.452	-	0.452	-	-	-	3.133	21.459	25.399
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	0.000	0.355	-	0.452	-	0.452	-	-	-	3.133	21.459	25.399
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	0.000	0.355	-	0.452	-	0.452	-	-	-	3.133	21.459	25.399
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

OPNAVINST 3400.10G articulates U.S. Navy Chemical, Biological and Radiological Defense (CBRD) policy and establishes functional responsibilities to ensure the highest level of the Fleet readiness and warfighting sustainability in a CBR environment. Chemical Biological Radiological Nuclear Dismounted Reconnaissance Sets, Kits, and Outfits (CBRN DRSKO) provides Navy Boarding Teams personnel protection from current and emerging CBRN hazards through detection, identification, sample collection, decontamination, marking, and hazard reporting for CBRN threats. Due to system size and storage requirements of equipment and materials, a ship alteration must be accomplished for adequate shelving, electrical power, ventilation, and stowage space security. The equipment procurement is funded out of the Joint Service Chemical Biological Defense Program Budget.

[DRSKO Stowage] Remarks: A total of 116 stowage alterations planned. A late FY14 below threshold reprogramming of FY14 funding is being utilized to initiate DRSKO installation support. FY14 funds are in support of DRSKO DSA costs. The Navy expects to receive some low rate production systems from the Joint Service Chemical and Biological Defense Program (CBDP). The DRSKO ship alteration have been accelerated and it is expected to be approved by the end of FY15 and ship installation drawings developed and approved by the ship planning yard in time to support installations starting in second quarter FY16.

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Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0989 / Chemical Warfare Detectors					Modification Number / Title: 5 / DRSKO Stowage				
Models of Systems Affected:				Modification Type:					Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: DRSKO Stowage													
B Kits													
Recurring													
1.1.1) DRSKO Stowage - NonOrganic	- / -	- / -	- / -	2 / -	- / -	2 / -	- / -	- / -	- / -	12 / -	102 / 0.001	116 / 0.001	
1.1.2) DSA COST - NonOrganic	- / -	- / 0.355	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.612	- / 2.788	- / 3.755	
Subtotal: Recurring	- / 0.000	- / 0.355	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.612	- / 2.789	- / 3.756	
Subtotal: DRSKO Stowage	- / -	- / 0.355	- / -	2 / -	- / -	2 / -	- / -	- / -	- / -	12 / 0.612	102 / 2.789	116 / 3.756	
Subtotal: Procurement, All Modification Items	- / 0.000	- / 0.355	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.612	- / 2.789	- / 3.756	
Installation													
Modification Item 1 of 1: DRSKO Stowage	- / 0.000	- / -	- / -	- / 0.452	- / -	- / 0.452	- / -	- / -	- / -	- / 2.521	- / 18.670	- / 21.643	
Subtotal: Installation	- / 0.000	- / -	- / -	- / 0.452	- / -	- / 0.452	- / -	- / -	- / -	- / 2.521	- / 18.670	- / 21.643	
Total													
Total Cost (Procurement + Support + Installation)	0.000	0.355	-	0.452	-	0.452	-	-	-	3.133	21.459	25.399	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy			Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9		P-1 Line Item Number / Title: 0989 / Chemical Warfare Detectors			Modification Number / Title: 5 / DRSKO Stowage

Modification Item 1 of 1: DRSKO Stowage

Manufacturer Information

Manufacturer Name: TBD			Manufacturer Location: TBDc		
Administrative Leadtime (in Months): 0			Production Leadtime (in Months): 0		

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: [none specified]:: Installation Name: DRSKO Stowage

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	2 / 0.452	- / -	2 / 0.452	- / -	- / -	- / -	- / -	- / -	2 / 0.452
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	12 / 2.521	- / -	12 / 2.521
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	102 / 18.670	102 / 18.670
Total	- / -	- / -	- / -	2 / 0.452	- / -	2 / 0.452	- / -	- / -	- / -	12 / 2.521	102 / 18.670	116 / 21.643

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	3	3	3	3	102	116	
Out	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	3	3	3	3	102	116	

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment							P-1 Line Item Number / Title: 0990 / Submarine Life Support System					
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:					Other Related Program Elements:				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	77.957	8.292	8.385	7.399	-	7.399	8.933	8.924	8.692	2.138	12.514	143.234
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	77.957	8.292	8.385	7.399	-	7.399	8.933	8.924	8.692	2.138	12.514	143.234
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	77.957	8.292	8.385	7.399	-	7.399	8.933	8.924	8.692	2.138	12.514	143.234
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: The FY 2016 funding request was reduced by \$1.103 million to account for the availability of prior year execution balances. [P40A / SUBMARINE LIFE SUPPORT SYSTEM]: 5D830 - PRODUCTION ENGINEERING The review and approval of any production contract technical documentation, or the separate development of this documentation to include, technical manuals, Preventive Maintenance Schedule (PMS), Level III production drawings, Provisioning Technical Documentation (PTD), Program Support Data (PSD) and Allowance Parts Lists (APL); Engineering & support for final design reviews. This work can be accomplished by NSWC PHILA as the in-service engineering agent, other Naval activities or contractors as appropriate. [P3A / CAMS IIA]: 5D009 - CENTRAL ATMOSPHERE MONITORING SYSTEM (CAMS) IIA A replacement atmosphere analyzer to replace the current CAMS I units on 688 Class submarines due to obsolescence. [P3A - 2 / LOW PRESSURE ELECTROLYZER]: 5D010 - THE LOW PRESSURE ELECTROLYZER (LPE)The LPE will replace the Electrolytic Oxygen Generators (EOG) currently being used on SSBN/SSGN Class submarines. The LPE also replaces the Oxygen Generating Plant (OGP) on SSN 21 Class submarines that has become unreliable and expensive to operate. The LPE produces oxygen at low pressure eliminating the need for high pressure oxygen storage. There will be two LPEs on SSBN/SSGN Class submarines and one LPE on SSN 21 Class submarines. There will be a total of 39 LPE units.												

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy						Date: February 2015	
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 9: Other Shipboard Equipment				P-1 Line Item Number / Title: 0990 / Submarine Life Support System			
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:			Other Related Program Elements:	

Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
SUBMARINE LIFE SUPPORT SYSTEM	P-40a		- / 6.169	- / 0.134	- / 0.084	- / 0.257	- / -	- / 0.257
1 / 5D009 CAMS IIA ()	P-3a		- / 15.636	- / -	- / -	- / 0.100	- / -	- / 0.100
2 / 5D010 LOW PRESSURE ELECTROLYZER ()	P-3a		- / 56.152	- / 8.158	- / 8.301	- / 7.042	- / -	- / 7.042
Total Gross/Weapon System Cost			- / 77.957	- / 8.292	- / 8.385	- / 7.399	- / -	- / 7.399

Exhibits Schedule			FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
SUBMARINE LIFE SUPPORT SYSTEM	P-40a		- / -	- / -	- / -	- / -	- / -	- / -
1 / 5D009 CAMS IIA ()	P-3a		- / -	- / -	- / -	- / -	- / -	- / 15.736
2 / 5D010 LOW PRESSURE ELECTROLYZER ()	P-3a		- / 8.604	- / 8.756	- / 8.592	- / 2.038	- / 12.264	- / 119.907
Total Gross/Weapon System Cost			- / 8.933	- / 8.924	- / 8.692	- / 2.138	- / 12.514	- / 143.234

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9								P-1 Line Item Number / Title: 0990 / Submarine Life Support System							Aggregated Items Title: SUBMARINE LIFE SUPPORT SYSTEM				

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) 5D830 PRODUCTION ENGINEERING																				
1.1) PRODUCTION ENGINEERING	A		-	-	6.169	-	-	0.134	-	-	0.084	-	-	0.257	-	-	-	-	-	0.257
Subtotal: 1) 5D830 PRODUCTION ENGINEERING			-	-	6.169	-	-	0.134	-	-	0.084	-	-	0.257	-	-	-	-	-	0.257
Total			-	-	6.169	-	-	0.134	-	-	0.084	-	-	0.257	-	-	-	-	-	0.257

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2017			FY 2018			FY 2019			FY 2020			To Complete			Total Cost		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) 5D830 PRODUCTION ENGINEERING																				
1.1) PRODUCTION ENGINEERING	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 1) 5D830 PRODUCTION ENGINEERING			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0990 / Submarine Life Support System					Modification Number / Title: 1 / 5D009 CAMS IIA			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	15.636	-	-	0.100	-	0.100	-	-	-	-	-	15.736
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	15.636	-	-	0.100	-	0.100	-	-	-	-	-	15.736
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	15.636	-	-	0.100	-	0.100	-	-	-	-	-	15.736
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: [CAMS IIA] 5D009 - CENTRAL ATMOSPHERE MONITORING SYSTEM (CAMS) IIA A replacement atmosphere analyzer to replace the current CAMS I units on 688 Class submarines due to obsolescence.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9					P-1 Line Item Number / Title: 0990 / Submarine Life Support System					Modification Number / Title: 1 / 5D009 CAMS IIA			
Models of Systems Affected:					Modification Type:					Related RDT&E PEs:			
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: 5D009 CAMS IIA													
B Kits													
Recurring													
1.1.1) CAMS IIA - NonOrganic ⁽¹⁾	32 / 15.636	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	32 / 15.636	
Subtotal: Recurring	- / 15.636	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 15.636	
Subtotal: 5D009 CAMS IIA	32 / 15.636	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	32 / 15.636	
Subtotal: Procurement, All Modification Items	- / 15.636	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 15.636	
Installation													
Modification Item 1 of 1: 5D009 CAMS IIA	- / 0.000	- / -	- / -	- / 0.100	- / -	- / 0.100	- / -	- / -	- / -	- / -	- / -	- / 0.100	
Subtotal: Installation	- / 0.000	- / -	- / -	- / 0.100	- / -	- / 0.100	- / -	- / -	- / -	- / -	- / -	- / 0.100	
Total													
Total Cost (Procurement + Support + Installation)	15.636	-	-	0.100	-	0.100	-	-	-	-	-	15.736	

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Exhibit P-3a, Individual Modification: PB 2016 Navy				Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9		P-1 Line Item Number / Title: 0990 / Submarine Life Support System			Modification Number / Title: 1 / 5D009 CAMS IIA		

Modification Item 1 of 1: 5D009 CAMS IIA

Manufacturer Information

Manufacturer Name: TBD				Manufacturer Location: TBD			
Administrative Leadtime (in Months): 0				Production Leadtime (in Months): 0			

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: AIT:: Installation Name: CAMS IIA

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	28 / 0.000	- / -	- / -	4 / 0.100	- / 0.000	4 / 0.100	- / -	- / -	- / -	- / -	32 / 0.000	64 / 0.100
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	28 / 0.000	- / -	- / -	4 / 0.100	- / -	4 / 0.100	- / -	- / -	- / -	- / -	32 / -	64 / 0.100

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	28	-	-	-	-	-	-	-	-	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32	64	
Out	28	-	-	-	-	-	-	-	-	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32	64	

Footnotes:

⁽¹⁾ Due to the delays in production and changes in ship availabilities, four CAMS IIA units will be installed in FY16.

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Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0990 / Submarine Life Support System					Modification Number / Title: 2 / 5D010 LOW PRESSURE ELECTROLYZER			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	56.152	8.158	8.301	7.042	-	7.042	8.604	8.756	8.592	2.038	12.264	119.907
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	56.152	8.158	8.301	7.042	-	7.042	8.604	8.756	8.592	2.038	12.264	119.907
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	56.152	8.158	8.301	7.042	-	7.042	8.604	8.756	8.592	2.038	12.264	119.907
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: [LOW PRESSURE ELECTROLYZER] The LPE will replace the Electrolytic Oxygen Generators (EOG) currently being used on SSBN/SSGN Class submarines. The LPE also replaces the Oxygen Generating Plant (OGP) on SSN 21 Class submarines that has become unreliable and expensive to operate. The LPE produces oxygen at low pressure eliminating the need for high pressure oxygen storage. There will be two LPEs on SSBN/SSGN Class submarines and one LPE on SSN 21 Class submarines. There will be a total of 39 LPE units.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9				P-1 Line Item Number / Title: 0990 / Submarine Life Support System						Modification Number / Title: 2 / 5D010 LOW PRESSURE ELECTROLYZER			
Models of Systems Affected: Low Pressure Electrolyzer				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
<i>Modification Item 1 of 1:</i> 5D010 LOW PRESSURE ELECTROLYZER													
B Kits													
Recurring													
1.1.1) LOW PRESSURE ELECTROLYZER - NonOrganic ⁽²⁾	20 / 56.152	2 / 7.158	3 / 6.801	2 / 6.042	- / -	2 / 6.042	3 / 7.104	3 / 7.256	2 / 7.592	- / -	4 / 10.264	39 / 108.369	
<i>Subtotal: Recurring</i>	- / 56.152	- / 7.158	- / 6.801	- / 6.042	- / -	- / 6.042	- / 7.104	- / 7.256	- / 7.592	- / -	- / 10.264	- / 108.369	
<i>Subtotal: 5D010 LOW PRESSURE ELECTROLYZER</i>	20 / 56.152	2 / 7.158	3 / 6.801	2 / 6.042	- / -	2 / 6.042	3 / 7.104	3 / 7.256	2 / 7.592	- / -	4 / 10.264	39 / 108.369	
<i>Subtotal: Procurement, All Modification Items</i>	- / 56.152	- / 7.158	- / 6.801	- / 6.042	- / -	- / 6.042	- / 7.104	- / 7.256	- / 7.592	- / -	- / 10.264	- / 108.369	
Installation													
<i>Modification Item 1 of 1:</i> 5D010 LOW PRESSURE ELECTROLYZER	- / 0.000	- / 1.000	- / 1.500	- / 1.000	- / -	- / 1.000	- / 1.500	- / 1.500	- / 1.000	- / 2.038	- / 2.000	- / 11.538	
<i>Subtotal: Installation</i>	- / 0.000	- / 1.000	- / 1.500	- / 1.000	- / -	- / 1.000	- / 1.500	- / 1.500	- / 1.000	- / 2.038	- / 2.000	- / 11.538	
Total													
Total Cost (Procurement + Support + Installation)	56.152	8.158	8.301	7.042	-	7.042	8.604	8.756	8.592	2.038	12.264	119.907	

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 9	P-1 Line Item Number / Title: 0990 / Submarine Life Support System	Modification Number / Title: 2 / 5D010 LOW PRESSURE ELECTROLYZER

Modification Item 1 of 1: 5D010 LOW PRESSURE ELECTROLYZER

Manufacturer Information

Manufacturer Name: TREADWELL CORP	Manufacturer Location: CT
Administrative Leadtime (in Months): 3	Production Leadtime (in Months): 13

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Nov 2013	Nov 2014	Nov 2015	Nov 2016	Nov 2017	Nov 2018	Nov 2019
Delivery Dates	Dec 2014	Dec 2015	Dec 2016	Dec 2017	Dec 2018	Dec 2019	Dec 2020

Installation Information

Method of Implementation: [none specified]:: Installation Name: LOW PRESSURE ELECTROLYZER

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	20 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	20 / 0.000
FY 2014	- / -	2 / 1.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 1.000
FY 2015	- / -	- / -	3 / 1.500	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 1.500
FY 2016	- / -	- / -	- / -	2 / 1.000	- / -	2 / 1.000	- / -	- / -	- / -	- / -	- / -	2 / 1.000
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	3 / 1.500	- / -	- / -	- / -	- / -	3 / 1.500
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 1.500	- / -	- / -	- / -	3 / 1.500
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 1.000	- / -	- / -	2 / 1.000
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.038	4 / 2.000	4 / 4.038
Total	20 / 0.000	2 / 1.000	3 / 1.500	2 / 1.000	- / -	2 / 1.000	3 / 1.500	3 / 1.500	2 / 1.000	- / 2.038	4 / 2.000	39 / 11.538

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	20	-	1	1	-	-	2	1	-	-	1	1	-	-	2	1	-	-	2	1	-	-	2	-	-	-	-	-	-	4	39
Out	20	-	1	1	-	-	2	1	-	-	1	1	-	-	2	1	-	-	2	1	-	-	2	-	-	-	-	-	-	4	39

Footnotes:

(2) P-3A submitted in place of P-23 and P-23A.

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy										Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 10: Reactor Plant Equipment								P-1 Line Item Number / Title: 1010 / Reactor Power Units				
ID Code (A=Service Ready, B=Not Service Ready) : A				Program Elements for Code B Items:				Other Related Program Elements:				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	1,151.697	-	298.200	-	-	-	321.110	-	-	-	Continuing	Continuing
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	1,151.697	-	298.200	-	-	-	321.110	-	-	-	Continuing	Continuing
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	1,151.697	-	298.200	-	-	-	321.110	-	-	-	Continuing	Continuing
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: The details of this program are classified CONFIDENTIAL and are submitted to Congress annually in the classified budget justification books.												

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy						Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 10: Reactor Plant Equipment				P-1 Line Item Number / Title: 1010 / Reactor Power Units				
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:			Other Related Program Elements:		
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
Reactor Power Units	P-40a		- / 1,151.697	- / -	- / 298.200	- / -	- / -	- / -
Total Gross/Weapon System Cost			- / 1,151.697	- / -	- / 298.200	- / -	- / -	- / -
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.								
Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.								

Justification:

The details of this program are classified CONFIDENTIAL and are submitted to Congress annually in the classified budget justification books.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 10								P-1 Line Item Number / Title: 1010 / Reactor Power Units							Aggregated Items Title: Reactor Power Units				

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) Reactor Power Units																				
1) Reactor Power Units	A		-	-	1,151.697	-	-	-	-	-	298.200	-	-	-	-	-	-	-	-	-
Subtotal: 1) Reactor Power Units			-	-	1,151.697	-	-	-	-	-	298.200	-	-	-	-	-	-	-	-	-
Total			-	-	1,151.697	-	-	-	-	-	298.200	-	-	-	-	-	-	-	-	-

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy	Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 10: Reactor Plant Equipment	P-1 Line Item Number / Title: 1020 / Reactor Components

ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:					Other Related Program Elements:				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	793.147	256.744	288.822	296.095	-	296.095	306.520	253.033	259.513	266.785	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	793.147	256.744	288.822	296.095	-	296.095	306.520	253.033	259.513	266.785	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	793.147	256.744	288.822	296.095	-	296.095	306.520	253.033	259.513	266.785	Continuing	Continuing
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The details of this program are classified CONFIDENTIAL and are submitted to Congress annually in the classified budget justification books.

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy							Date: February 2015	
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 10: Reactor Plant Equipment					P-1 Line Item Number / Title: 1020 / Reactor Components			
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:			Other Related Program Elements:		
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
Reactor Components	P-40a		- / 793.147	- / 256.744	- / 288.822	- / 296.095	- / -	- / 296.095
Total Gross/Weapon System Cost			- / 793.147	- / 256.744	- / 288.822	- / 296.095	- / -	- / 296.095
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown. Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.								

Justification:

The details of this program are classified CONFIDENTIAL and are submitted to Congress annually in the classified budget justification books.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 10								P-1 Line Item Number / Title: 1020 / Reactor Components							Aggregated Items Title: Reactor Components				

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total							
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)					
1) Reactor Components																									
1.1) Reactor Components	A		-	-	793.147	-	-	256.744	-	-	288.822	-	-	296.095	-	-	-	-	-	296.095					
Subtotal: 1) Reactor Components			-	-	793.147	-	-	256.744	-	-	288.822	-	-	296.095	-	-	-	-	-	296.095					
Total			-	-	793.147	-	-	256.744	-	-	288.822	-	-	296.095	-	-	-	-	-	296.095					

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 11: Ocean Engineering						P-1 Line Item Number / Title: 1130 / Diving and Salvage Equipment						
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:					Other Related Program Elements: 0204561N, 0204454N, 0204423N				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	55.423	5.588	10.572	15.982	-	15.982	9.460	8.941	9.140	9.334	0.002	124.442
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	55.423	5.588	10.572	15.982	-	15.982	9.460	8.941	9.140	9.334	0.002	124.442
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	55.423	5.588	10.572	15.982	-	15.982	9.460	8.941	9.140	9.334	0.002	124.442
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (<i>\$ in Millions</i>)	-	-	0.162	-	-	-	-	-	-	-	-	0.162
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

DIVING AND SALVAGE EQUIPMENT:

DIVING: This request provides funding for procurement of modern equipment to replace the Navy's archaic diving systems. The demand for divers' services for salvage, ship husbandry, repair and sanitizing work is rapidly increasing. The requested funding buys diving hardware which increases the efficiency and safety of the working diver. Program objectives are to: (1) provide increased safety for diver decompression and better recompression chamber patient monitoring capability, (2) increase underwater ship maintenance capabilities, (3) improve quick response capability, and (4) standardize the configuration of diving systems in the Fleet.

SALVAGE: This request provides program support for the procurement of critical salvage and underwater ship repair items. Public Law 513 (80th Congress, 10 USC 7361 ET SEQ) authorizes the Secretary of the Navy to provide, by contractor or otherwise, necessary salvage and diving equipment, services and facilities for public, private, and military vessels upon such terms and conditions as he may, in his discretion, determine to be in the best interest of the United States.

The U. S. Navy Supervisor of Salvage maintains the Emergency Ship Salvage Material (ESSM) System which consists of a network of bases that maintain, control, and issue material for salvage operations, underwater ship husbandry operations, pollution abatement operations, ocean engineering projects, special authorized projects, and equipment for use in national emergencies. The major bases are located in Williamsburg, Virginia; Stockton, California; Singapore; and Livorno, Italy. Satellite bases having smaller allowances are maintained at Sasebo, Japan; Pearl Harbor, Hawaii; and Bahrain. This system provides the Nation's first line of defense for major pollution abatement operations and the Navy's second line of defense for salvage operations.

[P40A / DIVING (N97)]: The DIVING EQUIPMENT to be procured are:

[P40A / HY106 - LIGHTWEIGHT DIVE SYSTEMS]: This system is completely self-contained, man-portable, and can be deployed from dockside or a ship of opportunity. The system will support two working divers and a standby diver to 190 feet of seawater (FSW) for up to a six hour mission performing ship husbandry, light salvage, and underwater inspection tasks. The Diver Equipment will interface with all Navy certified, air surface supplied diving systems. Required Inventory Objective (I/O) is 2.

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 11: Ocean Engineering		P-1 Line Item Number / Title: 1130 / Diving and Salvage Equipment
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements: 0204561N, 0204454N, 0204423N
[P40A / HY107 - PORTABLE RECOMPRESSION CHAMBERS]: The Transportable Recompression Chamber System provides an effective two-man evacuation, transport, treatment, and transfer under pressure capability in order to benefit a diver suffering a pressure related ailment requiring urgent hyperbaric treatment. This is the lightest, most transportable system available to the U. S. Navy. Required I/O is 16. [P40A / HY123 - FLY AWAY DIVE SYSTEMS III HP COMPOSITE FLASK REPLACEMENT]: The FADS III is a matrix of components designed to support manned diving to 850 fsw. It is made up of three major subsystems, the High Pressure (H.P.) Air System, the Mixed Gas System and the Saturation Diving System. The air system consists of a 5000 psi air rack using lightweight composite flasks, a portable diver's air console, and a 5000 psi air compressor packaged for flyaway applications. The mixed gas subsystem consists of H.P. racks for containment of various gas mixes required for diving operations, a mixed gas diving console, and a gas transfer system for charging mixed gas flasks, topside hyperbaric chamber for diver storage and decompression, diving bell and bell handling system. Support equipment includes diver life support items such as diver hot water heaters, hot water suits, dry suits, umbilicals, diver full face masks, small, man-portable, diesel-powered, 5000 psi compressors and diver communication boxes. The matrix concept is designed to provide maximum flexibility in assembling equipment necessary to support a dive mission. Required I/O is 2 High Pressure Air Systems, 95 Mixed Gas Systems, and 2 Fads III Support Equipment. [P40A / HY132 - STANDARD NAVY DOUBLE LOCK RECOMPRESSION CHAMBER (SNDL)]: HY132 Standard Navy Double Lock Recompression Chamber (SNDL): The Standard Navy Double Lock Recompression Chamber is a conventional chamber designed to be built using standard commercial specifications and standards. The SNDL provides a full range of recompression treatment to two patients and two attendants. These chambers are containerized to allow the chamber to be transported and installed for long term operations. These chambers will replace aging and difficult to maintain recompression chambers that will be retired due to fatigue and material flaws. Required I/O is 30. [P40A / HY176 - HP AIR COMPRESSORS]: This item replaces high pressure air compressors in existing divers' life support systems which have reached the end of their service life. Required I/O is 300. [P40A / HY177 - AIR PURIFICATION UNITS]: The Portable Air Monitor Purification Unit is made of 2 subsystems when charging diver's life support system (DLSS) flasks. The Portable Air Monitor Unit can monitor the diver's breathing air in accordance with the requirements of the U.S. Navy Dive Manual. The Portable Air Monitor Purification Unit can be inserted inline of the DLSS to purify the diver's breathing air in accordance with the requirements of the U.S. Navy Dive Manual. The Portable Air Monitor Purification Unit may be used in lieu of the semi-annual diver's air sampling program for breathing air compressors. Required I/O is 50 units. [P40A / HY179 - NAVY EXPERIMENTAL DIVING UNIT]: NEDU's mission is to support the Fleet diver through test and evaluation of diving equipment and procedures as well as hyperbaric systems for NAVSEA, Navy, and DoD activities. Funding is to procure equipment for test, facilities atmospheric control, life support, and physiological systems. These systems not only ensure the safety and lives of NEDU sailors performing experimental dives, but ultimately support the combat readiness and mission success of the Fleet sailors who use the equipment tested at NEDU. Funding is included to support the periodic upgrade of Ocean Simulation Facility (OSF) components. The OSF is the world's largest man-rated hyperbaric chamber affording space for 12 divers in 5 hyperbaric dry chambers, man-rated for dives to 2,250 feet of sea water (1000 psi) with a 50' x 15', 55,000-gallon wet-pot capacity, temperatures from 28 to 104 degrees Fahrenheit, an associated 1.3 million-cubic foot (37 km3) bottle field and uses a fully computerized data instrumentation and collection system. Unit prices vary depending on the specific equipment mix planned for upgrade in any single year. [P40A / HY192 - THERMAL DIVING SUITS]: New technology diving suits which can be used in cold or warm water to maintain a diver in a safe thermal environment. I/O is 1000. [P40A / HY193 - SURFACE SUPPLIED DIVING HELMET]: Replacement helmets for the current MK 21 which have reached the end of their service life. Some helmets will have heads-up displays with visual amplification (diver can see in total blackness). Required I/O is 250. [P40A / HY194 - CONTAMINATED WATER DIVING EQUIPMENT]: Surface supplied diving equipment (helmets, drysuits, umbilicals, surface exhaust consoles, etc.) specially designed for diving in contaminated water. Required I/O is 3. [P40A / HY199 - NAVY DIVE COMPUTER]: The Navy Dive Computer is a diver worn decompression computer, which provides primarily scuba divers with real time calculation of decompression limits/ obligations. I/O is 1400.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 11: Ocean Engineering		P-1 Line Item Number / Title: 1130 / Diving and Salvage Equipment
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements: 0204561N, 0204454N, 0204423N
[P40A / HY207 - EXTREME LIGHTWEIGHT DIVING SYSTEM (XLDS)]: System consists of the Interspiro DIVIATOR DP-1 Surface Supply System combined with the Interspiro DIVIATOR SCUBA System. This is a very lightweight system that allows the portability of SCUBA and some of the benefits of surface supplied diving. Required Inventory Objective I/O is 50.		
[P40A / HY208 - IMPROVED TRANSPORTABLE RECOMPRESSION CHAMPBER SYSTEMS (I-TRCS)]: This system will be a replacement for the aging TRCS chambers. It will run on 5000 psi air and utilize the new CASRA and COSRA for gas supplies. This will be a highly portable double lock chamber that will conduct a TT6A with all extensions and will be able to provide surface decompression for fleet divers. Required Inventory Objective I/O is 45.		
[P40A / HY209 - OXYGEN REGULATING CONSOLE ASSEMBLY (ORCA)]: System consists of a control panel and hoses that can interface with a surface supplied diving system (FADS III (air) or MK3 LWDS) in order to provide 100% oxygen to up to three (3) divers during decompression at 30 FSW and 20 FSW while in the water. This equipment is required when conducting longer decompression dives utilizing the dive tables contained in REV 6 of the USN Dive manual. Required Inventory Objective I/O is 40.		
[P40A / HY210 - COMPACT DIVER LIFE SUPPORT SYSTEM AIR SUPPLY]: HY 210 - COMPACT DIVER LIFE SUPPORT SYSTEM AIR SUPPLY - This is a portable Air Supply that has designated primary and secondary air cylinders with a simple, unregulated control panel. The air supply will provide 3000-5000 psi diver-breathing air to diving life support systems including but not limited to the SNDL., TRCS, FADS III, and LWDS. This is for use in surface supplied diving and hyperbaric treatment operations. Required Inventory Objective I/O is 25.		
[P40A / HY211 - COMPACT OXYGEN SUPPLY RACK ASSEMBLY (COSRA)]: This is a smaller version of the OSRA Supply Rack Assembly (OSRA) that will have 4 cylinders rather than 9 contained in the OSRA. The rack is anticipated to have 3 primary and 1 secondary cylinders with a simple, unregulated control panel. The rack will provide 3000psi oxygen to either an ORCA, FADS IV, TRCS or I-TRCS. This is for use in surface supplied diving and hyperbaric treatment operations. Required Inventory Objective I/O is 0.		
[P40A / HY212 - - PORTABLE DIVE SYSTEM CONTROL CONSOLE ASSEMBLY (CCA)]: This is a surface supplied diving system that will supply diving breathing gas from the surface to 3 divers. The system is not anticipated to have a volume tank as it will operate on separate high pressure breathing gas sources only. Required Inventory Objective I/O is 20.		
[P40A / HY213 - HP COMPOSITE FLASK REPLACEMENT]: The flasks used in the CAOS, ASRA, OSRA, HOSRA, CASRA, and COSRA all require replacement after 15 years. NAVSEA 00C has will provide the cylinders to fleet diving commands. Required Inventory Objective I/O is 2500.		
[P40A / HY214 - CONTAMINATED WATER DIVING (CWD) SURFACE DECONTAMINATION EQUIP]: This equipment includes Tender protective gear, tents, diver decontamination equipment, and capturing and disposal containers to be used during a major contaminated water diving event. Required Inventory Objective I/O is 3.		
[P40A / HY222 - 300 FSW NAVY DEEP DOUBLE LOCK RECOMPRESSION CHAMBER]: The 300 FSW Navy Deep Double Lock Recompression Chamber is a conventional chamber designed to be built using standard commercial specifications and standards; however it operates at a significantly higher pressure than the SNDL (HY132). The NDDL provides a full range of recompression treatment for one patient and one attendant down to a depth of 300 FSW. This chamber is containerized to allow the chamber to be transported and installed for long term operations. This chamber will be used to support fly away mixed gas operations utilizing the FMGS as well as deep MK-16 UBA operations where possible. Required Inventory Objective I/O is 1.		
[P40A / SALVAGE (N9I)]: The SALVAGE EQUIPMENTS to be procured are:		
[P40A / HY016 - DECK SYSTEMS]: The deck systems are composed of multiple portable hydraulic systems and components that are designed to handle synthetic line or wire rope to aid in moving or positioning of barges, ships, or other floating elements on the water or items resting on the ocean floor. Deck Systems consist of portable hydraulic driven capstans, portable hydraulic driven winches with horizontal capstans, hydraulic power units, control systems, hydraulic hoses and all ancillary equipment. Required I/O is 34.		
[P40A / HY043 - OCEANOGRAPHIC UMBILICAL]: The Navy maintains the SWISS, DEEP DRONE, ORION, CURV-21 and MAGNUM remotely operated vehicles for use in hazardous salvage, inspection, and pollution operations. These vehicles are remotely controlled through umbilicals which transmit all command and control functions to the vehicle as well as transmitting all sensor data from the vehicle to the ship. They are procured in different lengths for use in varying ocean depths down to 20,000 feet. The umbilical also acts as the handling line. Required I/O is 16 (12 plus 4 spares).		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 11: Ocean Engineering		P-1 Line Item Number / Title: 1130 / Diving and Salvage Equipment
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements: 0204561N, 0204454N, 0204423N
[P40A / HY050 - SYNTHETIC LINES]: This line is used for lifting, mooring, towing, rigging, and in conjunction with the remotely operated vehicles at the salvage site. Required I/O is 123. [P40A / HY062 - ROV SONAR SYSTEMS]: These sonars are used on the SWISS, DEEP DRONE, ORION, and CURV-21 remotely operated vehicles to locate items lost on the sea floor, aircraft debris fields, sunken hull sections, and submerged obstacles. Total I/O is 8 (6 operational plus 2 spares). [P40A / HY116 - PORTABLE SUBMERSIBLE PUMPS]: The submersible salvage pump system is designed move large volumes of fluid at a high discharge pressure resulting is a high lift capacity. The submersible pumps vary in discharge size of 2" to over 24" to meet designated response requirements. Systems are modular packaged for rapid deployment and transportation. Pump assemblies are designed to be used through limited access openings or to be positioned in confined spaces. Submersible salvage pump systems consist of submersible hydraulic pumps (2" to 24"), hydraulic power units, hydraulic hoses, and all ancillary equipment. Required I/O is 94. [P40A / HY136 - 30 KIP FADOSS]: The 30 KIP FADOSS is used to salvage objects from deep water. The primary function is to reduce the dynamic loads that are encountered due to ship motion. These systems will handle recovery of equipment up to a weight of 30,000 pounds. Required I/O 4. [P40A / HY131 - ROV HANDLING SYSTEM]: These systems are used to launch and recover remotely operated vehicles and to tend the deployed cable, compensate for ship motion, monitor cable tension, and store cable. Required I/O is 10 (5 operational and 5 spares). [P40A / HY140 - ROV CONTROL PACKAGE]: The ROV Control Package is used to control the various functions of the SWISS, DEEP DRONE, ORION, and CURV-21 ROVs. Required I/O is 6 (3 operational plus 3 spares). [P40A / HY142 - SALVAGE AIR COMPRESSOR]: The salvage air compressor systems are designed to generate high pressure air to be used by salvage response personnel to accomplish numerous possible salvage actions requiring pneumatic capability, including dewatering of flooded spaces to restore lost buoyancy, inflation of salvage lift bags and pontoons, operation of pneumatic tools and equipment that are employed in the salvage or recovery operation. Salvage Air Compressor Systems consist of multiple capacity diesel powered air compressor units including 125 CFM, 600 CFM, and 5000 psi models, air hoses for the rated air pressure and flow capacity, air manifolds, and all ancillary equipment. Required I/O is 36. [P40A / HY145 - COFFERDAM SYSTEM]: This system will contain a variety of cofferdams necessary to accomplish underwater repair tasks to hull plating, shafts, stern tubes and sea chests on several ship classes. The cofferdams are engineered structural habitats which provide a safe underwater dry environment for divers to work and require very little maintenance. Required I/O is 15. [P40A / HY146 - PROPELLER REPAIR KIT]: These kits will contain the tools necessary to repair minor propeller damage underwater. By accomplishing these repairs in-place, propeller removal and replacement can be avoided thereby saving maintenance funds and returning ships to service faster. Required I/O is 8. [P40A / HY147 - ROV TELEMETRY SYSTEM]: The ROV Telemetry System is the communication link between the surface controller and the vehicle. Required I/O is 6 (3 operational plus 3 spares). [P40A / HY153 - TENSIOMETERS]: Tensiometers are used to measure the tension exerted on a beach gear ground leg or heavy lift system. One system consists of two load sensing units with associated rigging and read-out meters. Required I/O is 66. [P40A / HY154 - WATER PURIFIERS]: Water Purifiers are capable of converting salty, brackish, or biologically polluted water into potable water. The systems are fully marinized for use aboard a ship of opportunity, and are complete with all necessary power sources, hoses, chemicals, and associated support equipment. Required I/O is 18. [P40A / HY155 - POWER GENERATORS]: The power generator systems are used aboard ship or ashore to provide electrical power during salvage and recovery operations. The power generator systems are composed of small diesel powered generator units (5kw, 7.5 kw, and 12 kw) and large diesel powered generator units (20 kw and 30 kw) and include power distribution panels, electrical distribution cabling, and all ancillary equipment. Required I/O is 47.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 11: Ocean Engineering		P-1 Line Item Number / Title: 1130 / Diving and Salvage Equipment
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements: 0204561N, 0204454N, 0204423N
[P40A / HY156 - SALVAGE VANS]: Salvage Vans are modified ISO 8ft x 8ft x 20ft shipping containers that are equipped with industrial shop equipment, hand tools, powered hand tools, lifting and hoisting devices, and other misc required material to fulfill the various missions of salvage and recovery. Each van is outfitted with humidity control devices for prolonging equipment life during storage. Required I/O is 10. [P40A / HY158 - ROV PROPULSION SYSTEMS]: ROV propulsion systems provide main propulsion and control of remotely operated vehicles. These consist of electric and hydraulic thruster motors, thrusters, controllers, and interconnect cabling and power supplies. Required I/O is 12 (8 operational plus 4 spares). [P40A / HY164 - FLYAWAY FADOSS SYSTEM]: This system consists of lightweight motion compensators, winches, rigging jewelry, and lines for lifting heavy objects off the sea floor. All of the components are designed to be flown to the salvage site and loaded aboard ships of opportunity. Required I/O is 4. [P40A / HY166 - ROV TOOL PACKAGES]: This tool package is utilized by remotely operated vehicles to accomplish work on objects on the sea floor and in the water column. These systems consist of dual manipulators, control systems, video inspection systems, range measuring systems, power supplies, hydraulic power units, and ancillary end effectors. I/O is 10 (5 operational and 5 spares). [P40A / HY169 - UWSH POWER TOOLS]: These tools will replace the hydraulic tool sets designed and issued to Fleet divers in the 1970's with improved technology. This technology improvement will provide tools which are more environmentally compatible, offer greater power, lighter weight and reduced maintenance. I/O is 15. [P40A / HY184 - SALVAGE SUPPORT SYSTEMS]: Salvage support systems are used to support Fleet Salvage Operations and include complex systems and equipment required for Command & Control, communications, supply, repair, rigging, and personnel support. Each system includes the storage and shipping containers necessary to forward deploy the systems and equipment to a salvage site. Humidity control devices are used for prolonging equipment life during storage. Required I/O is 10. [P40A / HY186 - SMART TOW SYSTEMS]: These systems consists of load cells, accelerometers, fire and flooding alarms, telemetry links and ancillary equipment to provide ship handlers with information critical to safe conduct of open ocean tows. I/O is 6. [P40A / HY190 - VIDEO EQUIPMENT]: Underwater video equipment used by divers to perform detailed inspections of ship hulls and appendages. Equipment is used extensively throughout the Fleet. This equipment will replace aging systems currently in use throughout the Fleet. I/O is 20. [P40A / HY195 - UNDERWATER RIGGING SUPPORT SYSTEM]: General and special purpose rigging equipment designed for use in underwater ship repair applications. I/O - 10. [P40A / HY196 - UWSH SUBMARINE SUPPORT SYSTEM]: Special purpose underwater tools and equipment used by divers to perform routine and emergent repairs on all classes of submarines. I/O - 16. [P40A / HY197 - UWSH PIERSIDE SUPPORT VANS]: Portable milvans and shippable containers outfitted with general and special purpose tools to support various underwater ship husbandry operations. I/O - 10 [P40A / HY198 - UWSH SURFACE SHIP SUPPORT SYSTEMS]: Special purpose underwater tools used by divers to perform routine and emergent repairs to all Classes of surface ships. I/O - 32 [P40A / HY200 - DEEP DRONE 21]: Modernization of the Remotely Operated Vehicle (ROV) DEEP DRONE to include power, telemetry, avionics, thrusters, camera systems, and tools. Required Inventory Objective I/O is 1. [P40A / HY201 - JETTING PUMPS]: System is designed to provide a high velocity water stream to move mud, sand, or silt. The system consists of a medium pressured, high flow rate pump that supplies water to specially designed diver operated jetting nozzles via high pressure hoses. The system is used mainly for jetting, but also can be used for firefighting and limited dewatering. Required Inventory Objective I/O is 22.		

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Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 11: Ocean Engineering		P-1 Line Item Number / Title: 1130 / Diving and Salvage Equipment
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements: 0204561N, 0204454N, 0204423N
[P40A / HY202 - 300/400 AMP PORTABLE ELECTRIC WELDER]: System consists of a portable electric powered welder, welding cables, a stinger and ground clamp, welding safety equipment, and a spare parts kit. The system is used for arc welding and oxygen-arc cutting. Required Inventory Objective I/O is 22. [P40A / HY203 - HYDRAULIC U/W TOOL KIT]: Tool kit consists of various hydraulic actuated tools operated by a diver to perform various tasks underwater. The kit also contains hydraulic hoses, various fittings, and accessories. Required Inventory Objective I/O is 25. [P40A / HY204 - 400 AMP WELDER - DIESEL]: System consists of a skid-mounted, portable, diesel powered welding generator, welding cables, a stinger and ground clamp, welding safety equipment, and a spare parts kit. The system is used for arc welding and oxygen-arc cutting. Required Inventory Objective I/O is 25. [P40A / HY205 - LIGHTING KIT SYSTEM]: System consists of extendable masts, 500-watt halogen floodlights, drop lights, extension cords, spare bulbs, and other miscellaneous items to support general lighting for salvage and oil pollution operations. The Lighting Kit System can use any 100-volt, single phase power source found at the salvage or pollution site. Required Inventory Objective I/O is 25. [P40A / HY206 - KERRIE CABLE UNDERWATER CUTTING SYSTEM]: Underwater cutting systems are used by salvage response personnel to cut through metal and other material either underwater or in air using an exothermic material. The underwater cutting systems include the exothermic material including Brocco Rod or Kerri Cable, pressurize oxygen gas hoses and regulators, cutting support fixtures, and all ancillary equipment. Required I/O is 28. [P40A / HY215 LIGHTWEIGHT MOORING SYSTEM]: This is a lightweight and highly portable system for establishing a mooring in shallow to deep water. The system shall include a mooring leg consisting of anchors, chain, synthetic line and associated jewelry and fittings. Total I/O is 8. [P40A / HY216 - SALVAGE/BDR MATERIAL KIT]: This system is for emergency response to ship casualties and provides the necessary material to construct custom patches and cofferdams. The kit also includes tools to install the custom built items in place over the damaged hull sections. I/O is 25. [P40A / HY217 - SALVAGE LIFT BAGS (22K lbs)]: This system provides a buoyant force using compressed air to lift or support items in the water column. These Lift Bags are sized to provide a force of approximately 22,000 lbs. The I/O is 22. [P40A / HY218 SALVAGE LIFT BAGS (35 TONS)]: This system provides a buoyant force using compressed air to lift or support items in the water column. These Lift Bags are sized to provide a force of approximately 35 tons. The I/O is 16. [P40A / HY219 - PORTABLE SALVAGE CRANE]: A portable crane system for use on a vessel of opportunity to provide a lifting force during salvage operations. I/O is 4. [P40A / HY220 - AUV SEARCH SYSTEM]: The AUV Search System will survey the ocean floor using a suite of sensors to locate and identify targets of interest. The sensors include Side Scan Sonar, multibeam, sub bottom profile, and still photo. The complete system includes a vehicle, sensor suite, A-frame handling system, and operations/shipping container. I/O is 1. [P40A / HY221 - ADVANCED POWER GENERATOR]: This system generates electrical power using solar and wind energy and stores it in super efficient Lithium Ion Batteries. The system is capable of supplying electrical power to operate a Command Van, Salvage Shop Van and a Salvage BDR Rigging Van for up to 5 days with no traditional petroleum fueled electrical power generator support. I/O is 8.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy						Date: February 2015	
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 11: Ocean Engineering				P-1 Line Item Number / Title: 1130 / Diving and Salvage Equipment			
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:		Other Related Program Elements: 0204561N, 0204454N, 0204423N		

Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
Diving and Salvage Equipment	P-40a, P-5a		- / 55.423	- / 5.588	- / 10.572	- / 15.982	- / -	- / 15.982
Total Gross/Weapon System Cost			- / 55.423	- / 5.588	- / 10.572	- / 15.982	- / -	- / 15.982

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 11							P-1 Line Item Number / Title: 1130 / Diving and Salvage Equipment								Aggregated Items Title: Diving and Salvage Equipment					
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.																				
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) DIVING (N97)																				
1.1) HY106 - LIGHTWEIGHT DIVE SYSTEMS	A		1,424K	2	2.848	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.2) HY107 - PORTABLE RECOMPRESSION CHAMBERS	A		540,000.00	1	0.540	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.3) HY123 - FLY AWAY DIVE SYSTEMS III HP COMPOSITE FLASK REPLACEMENT	A		292,666.67	24	7.024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.4) HY132 - STANDARD NAVY DOUBLE LOCK RECOMPRESSION CHAMBER (SNDL) ^(†)	A		2,055K	3	6.166	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.5) HY176 - HP AIR COMPRESSORS ^(†)	A		27,000.00	11	0.297	68,000.00	1	0.068	69,500.00	2	0.139	71,000.00	1	0.071	-	-	-	71,000.00	1	0.071
1.6) HY177 - AIR PURIFICATION UNITS ^(†)	A		546,000.00	1	0.546	129,250.00	4	0.517	42,600.00	5	0.213	43,500.00	6	0.261	-	-	-	43,500.00	6	0.261
1.7) HY179 - NAVY EXPERIMENTAL DIVING UNIT ^(†)	A		1,143K	4	4.573	583,000.00	1	0.583	658,000.00	1	0.658	582,000.00	1	0.582	-	-	-	582,000.00	1	0.582
1.8) HY192 - THERMAL DIVING SUITS ^{(1)(†)}	A		7,700.00	10	0.077	2,500.00	2	0.005	26,000.00	12	0.312	26,666.67	12	0.320	-	-	-	26,666.67	12	0.320
1.9) HY193 - SURFACE SUPPLIED DIVING HELMET ^{(2)(†)}	A		21,703.70	27	0.586	6,600.00	5	0.033	7,000.00	5	0.035	7,000.00	5	0.035	-	-	-	7,000.00	5	0.035
1.10) HY194 - CONTAMINATED WATER DIVING EQUIPMENT ^{(3)(†)}	A		446,000.00	1	0.446	379,000.00	1	0.379	-	-	-	390,000.00	1	0.390	-	-	-	390,000.00	1	0.390
1.11) HY199 - NAVY DIVE COMPUTER ^(†)	A		1,756.36	472	0.829	1,089.29	56	0.061	1,088.89	45	0.049	1,109.09	55	0.061	-	-	-	1,109.09	55	0.061
1.12) HY207 - EXTREME LIGHTWEIGHT DIVING SYSTEM (XLDS) ^(†)	A		41,000.00	1	0.041	41,500.00	2	0.083	42,500.00	2	0.085	-	-	-	-	-	-	-	-	-
1.13) HY208 - IMPROVED	A		-	-	-	400,000.00	1	0.400	425,000.00	1	0.425	325,000.00	2	0.650	-	-	-	325,000.00	2	0.650

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 11						P-1 Line Item Number / Title: 1130 / Diving and Salvage Equipment									Aggregated Items Title: Diving and Salvage Equipment					
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.																				
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
TRANSPORTABLE RECOMPRESSION CHAMPBER SYSTEMS (I-TRCS) (4)(t)																				
1.15) HY210 - COMPACT DIVER LIFE SUPPORT SYSTEM AIR SUPPLY (5)(t)	A		180,000.00	2	0.360	188,000.00	1	0.188	34,909.09	11	0.384	35,727.27	11	0.393	-	-	-	35,727.27	11	0.393
1.16) HY211 - COMPACT OXYGEN SUPPLY RACK ASSEMBLY (COSRA) (t)	A		180,000.00	2	0.360	188,000.00	1	0.188	-	-	-	-	-	-	-	-	-	-	-	-
1.17) HY212 - - PORTABLE DIVE SYSTEM CONTROL CONSOLE ASSEMBLY (CCA) (6)(t)	A		114,500.00	2	0.229	317,000.00	1	0.317	119,500.00	2	0.239	122,000.00	2	0.244	-	-	-	122,000.00	2	0.244
1.18) HY213 - HP COMPOSITE FLASK REPLACEMENT (t)	A		4,530.61	196	0.888	4,656.00	125	0.582	4,732.39	71	0.336	4,840.91	88	0.426	-	-	-	4,840.91	88	0.426
1.19) HY214 - CONTAMINATED WATER DIVING (CWD) SURFACE DECONTAMINATION EQUIP (t)	A		-	-	-	-	-	-	569,000.00	1	0.569	-	-	-	-	-	-	-	-	-
1.20) HY222 - 300 FSW NAVY DEEP DOUBLE LOCK RECOMPRESSION CHAMBER (t)	A		-	-	-	-	-	-	-	-	-	3,300K	1	3.300	-	-	-	3,300K	1	3.300
Subtotal: 1) DIVING (N97)			-	-	25.810	-	-	3.404	-	-	3.444	-	-	6.733	-	-	-	-	-	6.733
2) DIVING AND/OR SALVAGE (N95)																				
2.1) HY132 - STANDARD NAVY DOUBLE LOCK RECOMPRESSION CHAMBER (SNDL)	A		1,450K	3	4.351	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 2) DIVING AND/ OR SALVAGE (N95)			-	-	4.351	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3) SALVAGE (N9I)																				

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015				
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Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
3.1) HY016 - DECK SYSTEMS ^{(7)(†)}	A		35,375.00	8	0.283	55,500.00	2	0.111	59,000.00	1	0.059	-	-	-	-	-	-	-	-	-
3.2) HY043 - OCEANOGRAPHIC UMBILICAL ^(†)	A		821,000.00	1	0.821	-	-	-	982,000.00	1	0.982	-	-	-	-	-	-	-	-	-
3.3) HY050 - SYNTHETIC LINES ^(†)	A		-	-	-	-	-	-	203,500.00	2	0.407	-	-	-	-	-	-	-	-	-
3.4) HY062 - ROV SONAR SYSTEMS	A		186,000.00	1	0.186	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.5) HY116 - PORTABLE SUBMERSIBLE PUMPS ^{(8)(†)}	A		190,400.00	10	1.904	87,333.33	3	0.262	89,000.00	4	0.356	-	-	-	-	-	-	-	-	-
3.6) HY136 - 30 KIP FADOSS	A		362,000.00	1	0.362	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.8) HY140 - ROV CONTROL PACKAGE ^(†)	A		991,000.00	1	0.991	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.9) HY142 - SALVAGE AIR COMPRESSOR ⁽⁹⁾	A		35,500.00	4	0.142	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.10) HY145 - COFFERDAM SYSTEM ^(†)	A		879,500.00	2	1.759	135,000.00	1	0.135	139,666.67	3	0.419	133,333.33	3	0.400	-	-	-	133,333.33	3	0.400
3.11) HY146 - PROPELLER REPAIR KIT ^(†)	A		421,000.00	2	0.842	-	-	-	209,500.00	2	0.419	-	-	-	-	-	-	-	-	-
3.12) HY147 - ROV TELEMETRY SYSTEM	A		398,000.00	1	0.398	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.13) HY153 - TENSIMETERS ^(†)	A		16,230.77	13	0.211	15,400.00	10	0.154	15,400.00	5	0.077	-	-	-	-	-	-	-	-	-
3.14) HY154 - WATER PURIFIERS	A		140,000.00	1	0.140	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.15) HY155 - POWER GENERATORS ^{(10)(†)}	A		11,062.50	16	0.177	6,000.00	2	0.012	-	-	-	-	-	-	-	-	-	-	-	-
3.16) HY156 - SALVAGE VANS ^{(11)(†)}	A		138,250.00	4	0.553	-	-	-	196,000.00	1	0.196	199,000.00	1	0.199	-	-	-	199,000.00	1	0.199
3.17) HY158 - ROV PROPULSION SYSTEMS	A		596,000.00	1	0.596	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
3.18) HY164 - FLYAWAY FADOSS SYSTEM ^(†)	A		642,500.00	2	1.285	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.20) HY169 - UWSH POWER TOOLS	A		145,000.00	1	0.145	-	-	-	-	-	-	162,666.67	3	0.488	-	-	-	162,666.67	3	0.488
3.21) HY184 - SALVAGE SUPPORT SYSTEMS ^{(12)(†)}	A		454,750.00	4	1.819	205,500.00	2	0.411	215,000.00	2	0.430	-	-	-	-	-	-	-	-	-
3.22) HY186 - SMART TOW SYSTEMS ^{(13)(†)}	A		36,000.00	1	0.036	-	-	-	160,000.00	1	0.160	-	-	-	-	-	-	-	-	-
3.23) HY190 - VIDEO EQUIPMENT	A		257,000.00	1	0.257	-	-	-	180,000.00	1	0.180	170,000.00	5	0.850	-	-	-	170,000.00	5	0.850
3.24) HY195 - UNDERWATER RIGGING SUPPORT SYSTEM ^(†)	A		525,000.00	2	1.050	149,500.00	2	0.299	139,000.00	3	0.417	149,000.00	2	0.298	-	-	-	149,000.00	2	0.298
3.25) HY196 - UWSH SUBMARINE SUPPORT SYSTEM ^{(14)(†)}	A		537,571.43	7	3.763	-	-	-	1,095K	2	2.190	386,200.00	5	1.931	-	-	-	386,200.00	5	1.931
3.26) HY197 - UWSH PIERSIDE SUPPORT VANS ^(†)	A		577,000.00	1	0.577	200,000.00	1	0.200	-	-	-	-	-	-	-	-	-	-	-	-
3.27) HY198 - UWSH SURFACE SHIP SUPPORT SYSTEMS ^{(15)(†)}	A		167,071.43	14	2.339	163,500.00	2	0.327	-	-	-	133,000.00	2	0.266	-	-	-	133,000.00	2	0.266
3.28) HY200 - DEEP DRONE 21	A		3,072K	1	3.072	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.29) HY201 - JETTING PUMPS ^(†)	A		175,000.00	3	0.525	-	-	-	207,000.00	3	0.621	210,000.00	1	0.210	-	-	-	210,000.00	1	0.210
3.30) HY202 - 300/400 AMP PORTABLE ELECTRIC WELDER	A		7,000.00	8	0.056	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.31) HY203 - HYDRAULIC U/W TOOL KIT ^(†)	A		53,181.82	11	0.585	63,333.33	3	0.190	65,000.00	3	0.195	-	-	-	-	-	-	-	-	-
3.32) HY204 - 400 AMP WELDER - DIESEL ^(†)	A		32,375.00	8	0.259	-	-	-	20,000.00	1	0.020	-	-	-	-	-	-	-	-	-

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Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
3.33) HY205 - LIGHTING KIT SYSTEM ^(†)	A		12,900.00	10	0.129	17,000.00	2	0.034	-	-	-	-	-	-	-	-	-	-	-	-
3.36) HY216 - SALVAGE/BDR MATERIAL KIT ^(†)	A		-	-	-	49,000.00	1	0.049	-	-	-	-	-	-	-	-	-	-	-	-
3.40) HY220 - AUV SEARCH SYSTEM ^(†)	A		-	-	-	-	-	-	-	-	-	4,607K	1	4.607	-	-	-	4,607K	1	4.607
<i>Subtotal: 3) SALVAGE (N9I)</i>			-	-	25.262	-	-	2.184	-	-	7.128	-	-	9.249	-	-	-	-	-	9.249
Total			-	-	55.423	-	-	5.588	-	-	10.572	-	-	15.982	-	-	-	-	-	15.982

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 11	P-1 Line Item Number / Title: 1130 / Diving and Salvage Equipment	Aggregated Items Title: Diving and Salvage Equipment

(†) indicates the presence of a P-5a

Footnotes:

- (1) HY192 - THERMAL DIVING SUITS: Suits that have an active heating system, to keep diver warm, have higher unit costs than standard dry suits. The units bought previous to FY15 are standard Dry Suits. Starting in FY15, will begin to procure active heating systems. These include a tube suit, u/w heat pump, battery pack, and charging system. Unit cost estimate is based on contractor estimates.
- (2) HY193 - SURFACE SUPPLIED DIVING HELMET: Systems will range in unit cost based on which system is procured (with or without heads-up display/visual amplification).
- (3) HY194 - CONTAMINATED WATER DIVING EQUIPMENT: We are funding part of our inventory objective in each of the three years (FY14, FY16, FY17). At the end of FY17 our inventory objective (3 systems) will be complete and we will have certified the equipment for use.
- (4) HY208 - IMPROVED TRANSPORTABLE RECOMPRESSION CHAMBER SYSTEMS: Initial two years of procurement (FY14 & 15) are planned as Low Rate Initial Production (LRIP). It is standard practice to assume a higher estimated cost for these units due to the manufacturers inexperience with new equipment and the need to set up production lines and procedures.
- (5) HY210 - COMPACT DIVER LIFE SUPPORT SYSTEMS, AIR SUPPLY: Unit cost decreases from \$188K in FY14 to \$35K in FY15 due to the fact that the systems being built are different. They meet the same purpose (i.e. 5000 PSI High Pressure Air Supply for use in Diving) but are of a different design.
- (6) HY212 - PORTABLE DIVE SYSTEM CONTROL CONSOLE ASSEMBLY (CCA): Unit cost decreases from \$317K in FY14 to \$120K in FY 15 due to the fact that the consoles being built are different. The system built in FY14 provided both oxygen and air down to a diver. The systems being built in FY15 and forward only provide air.
- (7) HY016 - DECK CAPSTANS: Unit cost variation is dependent on the specific components required IAW the procurement schedule.
- (8) HY116 - PORTABLE SUBMERSIBLE PUMPS: Unit cost variation is dependent on the specific components required IAW the procurement schedule.
- (9) HY142 - SALVAGE AIR COMPRESSOR: Unit cost variation is dependent on the specific components required IAW the procurement schedule.
- (10) HY155 - POWER GENERATORS: Unit cost variation is dependent on the specific components required IAW the procurement schedule.
- (11) HY156 - SALVAGE VANS: Unit cost variation is dependent on the specific components required IAW the procurement schedule.
- (12) HY184 - SALVAGE SUPPORT SYSTEMS - Unit cost variation is dependent on the specific components required IAW the procurement schedule.
- (13) HY186 - SMART TOW SYSTEMS: Current version incorporates almost 7 years of Fleet Feedback on the performance of the SMART Tow system. Significant technical enhancements have been implemented in order to improve reliability and performance of the system in most arduous sea conditions. Fleet requirements to tow larger combatants under no-manning conditions have resulted in a substantially larger system with additional sensors and higher order programming to ensure the tows are completed safely over greater distances. Unit costs reflect current market analysis of the advance technology components employed in the system.
- (14) HY196 - UWSH SUBMARINE SUPPORT SYSTEM: These systems have a large cost range variance due the number and complexity of the tools and equipment components required which is driven by the differing complexity, size, configuration and depth of the submarine systems on which they are employed over the 5 classes of submarines supported.
- (15) HY198 UWSH SURFACE SHIP SUPPORT SYSTEMS: Unit cost is subject to the ship class and component complexity supported causing a wide variance in unit cost.

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Exhibit P-5a, Procurement History and Planning: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 11			P-1 Line Item Number / Title: 1130 / Diving and Salvage Equipment					Aggregated Items: Diving and Salvage Equipment				
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1) DIVING (N97)												
1.4) HY132 - STANDARD NAVY DOUBLE LOCK RECOMPRESSION CHAMBER (SNDL)		2013	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	Oct 2013	Oct 2014	1	1,259K	Y		
1.5) HY176 - HP AIR COMPRESSORS		2014	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	May 2014	May 2015	1	68,000.00	Y		
1.5) HY176 - HP AIR COMPRESSORS		2015	Unknown / TBD	C / CPAF	WASHINGTON, DC	Apr 2015	Apr 2016	2	69,500.00	Y		
1.5) HY176 - HP AIR COMPRESSORS		2016	Unknown / TBD	C / TBD	WASHINGTON, DC	Apr 2016	Apr 2017	1	71,000.00	Y		
1.6) HY177 - AIR PURIFICATION UNITS		2014	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	May 2014	May 2015	4	129,250.00	Y		
1.6) HY177 - AIR PURIFICATION UNITS		2015	Unknown / TBD	C / CPAF	WASHINGTON, DC	Apr 2015	Apr 2016	5	42,600.00	Y		
1.6) HY177 - AIR PURIFICATION UNITS		2016	Unknown / TBD	C / CPAF	WASHINGTON, DC	Apr 2016	Apr 2017	6	43,500.00	Y		
1.7) HY179 - NAVY EXPERIMENTAL DIVING UNIT		2013	Navy Experimental Diving Unit / Panama City, FL	Various	Panama City, FL	Apr 2013	Apr 2014	1	768,000.00	Y		
1.7) HY179 - NAVY EXPERIMENTAL DIVING UNIT		2014	GLOBAL PCCI / IRVINE, CA	C / CPAF	WASHINGTON, DC	Jul 2014	Jul 2015	1	583,000.00	Y		
1.7) HY179 - NAVY EXPERIMENTAL DIVING UNIT		2015	Unknown / TBD	Various	Panama City, FL	Apr 2015	Apr 2016	1	658,000.00	Y		
1.7) HY179 - NAVY EXPERIMENTAL DIVING UNIT		2016	Unknown / TBD	Various	Panama City, FL	Apr 2016	Apr 2017	1	582,000.00	Y		
1.8) HY192 - THERMAL DIVING SUITS ⁽¹⁾		2014	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	May 2014	May 2015	2	2,500.00	Y		
1.8) HY192 - THERMAL DIVING SUITS ⁽¹⁾		2015	Unknown / TBD	C / CPAF	WASHINGTON, DC	Apr 2015	Apr 2016	12	26,000.00	Y		
1.8) HY192 - THERMAL DIVING SUITS ⁽¹⁾		2016	Unknown / TBD	C / CPAF	WASHINGTON, DC	Apr 2016	Apr 2017	12	26,666.67	Y		
1.9) HY193 - SURFACE SUPPLIED DIVING HELMET ⁽²⁾		2013	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	Oct 2013	Apr 2014	15	6,666.67	Y		
1.9) HY193 - SURFACE SUPPLIED DIVING HELMET ⁽²⁾		2014	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	May 2014	Nov 2014	5	6,600.00	Y		
1.9) HY193 - SURFACE SUPPLIED DIVING HELMET ⁽²⁾		2015	Unknown / TBD	C / CPAF	WASHINGTON, DC	Apr 2015	Oct 2015	5	7,000.00	Y		

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Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.9) HY193 - SURFACE SUPPLIED DIVING HELMET ⁽²⁾		2016	Unknown / TBD	C / CPAF	WASHINGTON, DC	Apr 2016	Oct 2016	5	7,000.00	Y		
1.10) HY194 - CONTAMINATED WATER DIVING EQUIPMENT ⁽³⁾		2014	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	May 2014	May 2015	1	379,000.00	Y		
1.10) HY194 - CONTAMINATED WATER DIVING EQUIPMENT ⁽³⁾		2016	Unknown / Unknown	C / CPAF	WASHINGTON, DC	Apr 2016	Apr 2017	1	390,000.00	Y		
1.11) HY199 - NAVY DIVE COMPUTER		2013	NEDU / Panama City, FL	Various	WASHINGTON, DC	Mar 2013	Mar 2014	126	1,071.43	Y		
1.11) HY199 - NAVY DIVE COMPUTER		2014	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	May 2014	May 2015	56	1,089.29	Y		
1.11) HY199 - NAVY DIVE COMPUTER		2015	Unknown / TBD	C / CPAF	WASHINGTON, DC	Apr 2015	Apr 2016	45	1,088.89	Y		
1.11) HY199 - NAVY DIVE COMPUTER		2016	Unknown / TBD	C / CPAF	WASHINGTON, DC	Apr 2016	Apr 2017	55	1,109.09	Y		
1.12) HY207 - EXTREME LIGHTWEIGHT DIVING SYSTEM (XLDS)		2013	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	Oct 2013	Apr 2014	1	41,000.00	Y		
1.12) HY207 - EXTREME LIGHTWEIGHT DIVING SYSTEM (XLDS)		2014	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	May 2014	Nov 2014	2	41,500.00	Y		
1.12) HY207 - EXTREME LIGHTWEIGHT DIVING SYSTEM (XLDS)		2015	Unknown / TBD	C / CPAF	WASHINGTON, DC	Apr 2015	Oct 2015	2	42,500.00	Y		
1.13) HY208 - IMPROVED TRANSPORTABLE RECOMPRESSION CHAMPBER SYSTEMS (I-TRCS) ⁽⁴⁾		2014	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	May 2014	May 2015	1	400,000.00	Y		
1.13) HY208 - IMPROVED TRANSPORTABLE RECOMPRESSION CHAMPBER SYSTEMS (I-TRCS) ⁽⁴⁾		2015	TBD / TBD	TBD	WASHINGTON, DC	Apr 2015	Apr 2016	1	425,000.00	Y		
1.13) HY208 - IMPROVED TRANSPORTABLE RECOMPRESSION CHAMPBER SYSTEMS (I-TRCS) ⁽⁴⁾		2016	TBD / TBD	TBD	WASHINGTON, DC	Apr 2016	Apr 2017	2	325,000.00	Y		
1.15) HY210 - COMPACT DIVER LIFE SUPPORT SYSTEM AIR SUPPLY ⁽⁵⁾		2014	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	May 2014	May 2015	1	188,000.00	Y		

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Exhibit P-5a, Procurement History and Planning: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 11			P-1 Line Item Number / Title: 1130 / Diving and Salvage Equipment					Aggregated Items: Diving and Salvage Equipment				
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.15) HY210 - COMPACT DIVER LIFE SUPPORT SYSTEM AIR SUPPLY ⁽⁵⁾		2015	Unknown / TBD	TBD	WASHINGTON, DC	Apr 2015	Apr 2016	11	34,909.09	Y		
1.15) HY210 - COMPACT DIVER LIFE SUPPORT SYSTEM AIR SUPPLY ⁽⁵⁾		2016	Unknown / TBD	TBD	WASHINGTON, DC	Apr 2016	Apr 2017	11	35,727.27	Y		
1.16) HY211 - COMPACT OXYGEN SUPPLY RACK ASSEMBLY (COSRA)		2014	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	May 2014	May 2015	1	188,000.00	Y		
1.17) HY212 - - PORTABLE DIVE SYSTEM CONTROL CONSOLE ASSEMBLY (CCA) ⁽⁶⁾		2013	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	Oct 2013	Aug 2014	2	114,500.00	Y		
1.17) HY212 - - PORTABLE DIVE SYSTEM CONTROL CONSOLE ASSEMBLY (CCA) ⁽⁶⁾		2014	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	May 2014	Mar 2015	1	317,000.00	Y		
1.17) HY212 - - PORTABLE DIVE SYSTEM CONTROL CONSOLE ASSEMBLY (CCA) ⁽⁶⁾		2015	Unknown / TBD	TBD	WASHINGTON, DC	Apr 2015	Feb 2016	2	119,500.00	Y		
1.17) HY212 - - PORTABLE DIVE SYSTEM CONTROL CONSOLE ASSEMBLY (CCA) ⁽⁶⁾		2016	Unknown / TBD	TBD	WASHINGTON, DC	Apr 2016	Feb 2017	2	122,000.00	Y		
1.18) HY213 - HP COMPOSITE FLASK REPLACEMENT		2013	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	Apr 2013	Apr 2014	124	4,564.52	Y		
1.18) HY213 - HP COMPOSITE FLASK REPLACEMENT		2014	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	May 2014	May 2015	125	4,656.00	Y		
1.18) HY213 - HP COMPOSITE FLASK REPLACEMENT		2015	Unknown / TBD	C / CPAF	WASHINGTON, DC	Apr 2015	Apr 2016	71	4,732.39	Y		
1.18) HY213 - HP COMPOSITE FLASK REPLACEMENT		2016	Unknown / TBD	C / CPAF	WASHINGTON, DC	Apr 2016	Apr 2017	88	4,840.91	Y		
1.19) HY214 - CONTAMINATED WATER DIVING (CWD) SURFACE DECONTAMINATION EQUIP		2015	Unknown / TBD	C / CPAF	WASHINGTON, DC	Apr 2015	Apr 2016	1	569,000.00	Y		
1.20) HY222 - 300 FSW NAVY DEEP DOUBLE LOCK RECOMPRESSION CHAMBER		2016	TBD / TBD	TBD	WASHINGTON, DC	Apr 2016	Apr 2017	1	3,300K	Y		
3) SALVAGE (N9I)												
3.1) HY016 - DECK SYSTEMS ⁽⁷⁾		2013	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	Oct 2013	Apr 2014	2	57,500.00	Y		
3.1) HY016 - DECK SYSTEMS ⁽⁷⁾		2014	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	May 2014	Nov 2014	2	55,500.00	Y		

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Exhibit P-5a, Procurement History and Planning: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 11				P-1 Line Item Number / Title: 1130 / Diving and Salvage Equipment				Aggregated Items: Diving and Salvage Equipment				
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
3.1) HY016 - DECK SYSTEMS ⁽⁷⁾		2015	Unknown / TBD	C / CPAF	WASHINGTON, DC	Apr 2015	Oct 2015	1	59,000.00	Y		
3.2) HY043 - OCEANOGRAPHIC UMBILICAL		2015	Unknown / TBD	C / CPAF	WASHINGTON, DC	Apr 2015	Apr 2016	1	982,000.00	Y		
3.3) HY050 - SYNTHETIC LINES		2015	Unknown / TBD	C / CPAF	WASHINGTON, DC	Apr 2015	Apr 2016	2	203,500.00	Y		
3.5) HY116 - PORTABLE SUBMERSIBLE PUMPS ⁽⁸⁾		2013	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	Jun 2013	Jun 2014	2	134,000.00	Y		
3.5) HY116 - PORTABLE SUBMERSIBLE PUMPS ⁽⁸⁾		2014	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	May 2014	May 2015	3	87,333.33	Y		
3.5) HY116 - PORTABLE SUBMERSIBLE PUMPS ⁽⁸⁾		2015	Unknown / TBD	C / CPAF	WASHINGTON, DC	Apr 2015	Apr 2016	4	89,000.00	Y		
3.8) HY140 - ROV CONTROL PACKAGE		2013	PHOENIX INTL / LARGO MD	C / CPAF	WASHINGTON, DC	Oct 2013	Sep 2014	1	991,000.00	Y		
3.10) HY145 - COFFERDAM SYSTEM		2014	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	Apr 2014	Apr 2015	1	135,000.00	Y		
3.10) HY145 - COFFERDAM SYSTEM		2015	Unknown / TBD	C / CPAF	WASHINGTON, DC	Apr 2015	Apr 2016	3	139,666.67	Y		
3.10) HY145 - COFFERDAM SYSTEM		2016	Unknown / TBD	C / CPAF	WASHINGTON, DC	Apr 2016	Apr 2017	3	133,333.33	Y		
3.11) HY146 - PROPELLER REPAIR KIT		2015	Unknown / TBD	C / CPAF	WASHINGTON, DC	Apr 2015	Apr 2016	2	209,500.00	Y		
3.13) HY153 - TENSIMETERS		2013	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	Oct 2013	Apr 2014	6	15,000.00	Y		
3.13) HY153 - TENSIMETERS		2014	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	Apr 2014	Oct 2014	10	15,400.00	Y		
3.13) HY153 - TENSIMETERS		2015	Unknown / TBD	C / CPAF	WASHINGTON, DC	Apr 2015	Oct 2015	5	15,400.00	Y		
3.15) HY155 - POWER GENERATORS ⁽¹⁰⁾		2014	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	Apr 2014	Apr 2015	2	6,000.00	Y		
3.16) HY156 - SALVAGE VANS ⁽¹¹⁾		2013	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	Oct 2013	Sep 2014	1	190,000.00	Y		
3.16) HY156 - SALVAGE VANS ⁽¹¹⁾		2015	Unknown / TBD	C / CPAF	WASHINGTON, DC	Apr 2015	Mar 2016	1	196,000.00	Y		
3.18) HY164 - FLYAWAY FADOSS SYSTEM		2013	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	Jun 2013	Jun 2014	1	751,000.00	Y		
3.21) HY184 - SALVAGE SUPPORT SYSTEMS ⁽¹²⁾		2013	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	Oct 2013	Apr 2014	1	207,000.00	Y		
3.21) HY184 - SALVAGE SUPPORT SYSTEMS ⁽¹²⁾		2014	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	Apr 2014	Oct 2014	2	205,500.00	Y		
3.21) HY184 - SALVAGE SUPPORT SYSTEMS ⁽¹²⁾		2015	Unknown / TBD	C / CPAF	WASHINGTON, DC	Apr 2015	Oct 2015	2	215,000.00	Y		

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Exhibit P-5a, Procurement History and Planning: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 11				P-1 Line Item Number / Title: 1130 / Diving and Salvage Equipment				Aggregated Items: Diving and Salvage Equipment				
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
3.22) HY186 - SMART TOW SYSTEMS ⁽¹³⁾		2015	Unknown / TBD	C / CPAF	WASHINGTON, DC	Apr 2015	Apr 2016	1	160,000.00	Y		
3.24) HY195 - UNDERWATER RIGGING SUPPORT SYSTEM		2014	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	Apr 2014	Apr 2015	2	149,500.00	Y		
3.24) HY195 - UNDERWATER RIGGING SUPPORT SYSTEM		2015	Unknown / TBD	C / CPAF	WASHINGTON, DC	Apr 2015	Apr 2016	3	139,000.00	Y		
3.24) HY195 - UNDERWATER RIGGING SUPPORT SYSTEM		2016	Unknown / TBD	C / CPAF	WASHINGTON, DC	Apr 2016	Apr 2017	2	149,000.00	Y		
3.25) HY196 - UWSH SUBMARINE SUPPORT SYSTEM ⁽¹⁴⁾		2013	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	Oct 2013	Aug 2014	2	306,500.00	Y		
3.25) HY196 - UWSH SUBMARINE SUPPORT SYSTEM ⁽¹⁴⁾		2015	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	Apr 2015	Feb 2016	2	1,095K	Y		
3.25) HY196 - UWSH SUBMARINE SUPPORT SYSTEM ⁽¹⁴⁾		2016	Unknown / TBD	C / CPAF	WASHINGTON, DC	Apr 2016	Feb 2017	5	386,200.00	Y		
3.26) HY197 - UWSH PIERSIDE SUPPORT VANS		2014	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	Apr 2014	Apr 2015	1	200,000.00	Y		
3.27) HY198 - UWSH SURFACE SHIP SUPPORT SYSTEMS ⁽¹⁵⁾		2013	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	Dec 2012	Dec 2013	8	174,250.00	Y		
3.27) HY198 - UWSH SURFACE SHIP SUPPORT SYSTEMS ⁽¹⁵⁾		2014	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	Apr 2014	Apr 2015	2	163,500.00	Y		
3.27) HY198 - UWSH SURFACE SHIP SUPPORT SYSTEMS ⁽¹⁵⁾		2016	Unknown / TBD	C / CPAF	WASHINGTON, DC	Apr 2016	Apr 2017	2	133,000.00	Y		
3.29) HY201 - JETTING PUMPS		2013	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	Oct 2013	Apr 2014	1	200,000.00	Y		
3.29) HY201 - JETTING PUMPS		2015	Unknown / TBD	C / CPAF	WASHINGTON, DC	Apr 2015	Oct 2015	3	207,000.00	Y		
3.31) HY203 - HYDRAULIC U/W TOOL KIT		2013	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	Oct 2013	Apr 2014	5	62,400.00	Y		
3.31) HY203 - HYDRAULIC U/W TOOL KIT		2014	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	Apr 2014	Oct 2014	3	63,333.33	Y		
3.31) HY203 - HYDRAULIC U/W TOOL KIT		2015	Unknown / TBD	C / CPAF	WASHINGTON, DC	Apr 2015	Oct 2015	3	65,000.00	Y		
3.32) HY204 - 400 AMP WELDER - DIESEL		2015	Unknown / TBD	C / CPAF	WASHINGTON, DC	Apr 2015	Apr 2016	1	20,000.00	Y		
3.33) HY205 - LIGHTING KIT SYSTEM		2013	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	Oct 2013	Apr 2014	2	16,000.00	Y		
3.33) HY205 - LIGHTING KIT SYSTEM		2014	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	Apr 2014	Oct 2014	2	17,000.00	Y		
3.36) HY216 - SALVAGE/BDR MATERIAL KIT		2014	GLOBAL PCCI / IRVINE CA	C / CPAF	WASHINGTON, DC	Apr 2014	Apr 2015	1	49,000.00	Y		

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Exhibit P-5a, Procurement History and Planning: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 11				P-1 Line Item Number / Title: 1130 / Diving and Salvage Equipment				Aggregated Items: Diving and Salvage Equipment				
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
3.40) HY220 - AUV SEARCH SYSTEM		2016	TBD / TBD	C / CPAF	WASHINGTON, DC	Apr 2016	Apr 2017	1	4,607K	Y		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 12: Small Boats							P-1 Line Item Number / Title: 1210 / Standard Boats					
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:					Other Related Program Elements:				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	297.839	28.676	126.445	29.982	-	29.982	30.160	33.138	34.884	35.633	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	297.839	28.676	126.445	29.982	-	29.982	30.160	33.138	34.884	35.633	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	297.839	28.676	126.445	29.982	-	29.982	30.160	33.138	34.884	35.633	Continuing	Continuing
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-
Description: The FY 2016 funding request was reduced by \$2.893 million to account for the availability of prior year execution balances. Naval Sea Systems Command (NAVSEA) -- Boats are procured to fill allowances established by CNO and NAVSEA and to replace boats now in service which are beyond economical repair at shore activities and aboard ships. Total inventory objectives change based on Fleet requirements. H0001 BASE OPERATING FORCES Force Protection Boat (Small) - Light gasoline twin outboard engine powered (up to 150 HP each) aluminum boats from 7 to 8.2 meters (24 to 27 ft) in length used primarily for fleet force protection, maritime interdiction, law enforcement operations, at Naval activities and adjacent ports and waterways duties. Can operate in areas where the environment (sea states/climatology) does not present a significant challenge. Service life is 7 years. CNIC Force Protection Boat (Small) - Gasoline twin outboard engine aluminum boats approximately 8.5 meters (27 ft) in length with a narrow beam to aid in transport. Used primarily for fleet security, force protection/anti-terrorism, maritime interdiction and law enforcement operations at Naval activities and adjacent ports and waterways. The boats are provided with shouldering capabilities and foundations suitable for weapons. The boats operate primarily at Naval activities in sheltered harbors and waterways. Service life is 7 years. CNIC Force Protection Boat (Medium) - Gasoline outboard engine powered aluminum boats approximately 10 meters (33 ft) in length used primarily for fleet force protection, maritime interdiction, law enforcement operations at Naval activities and adjacent ports and waterways duties. Needed for operations in areas where the environment (sea states/climatology) is significant enough to necessitate the larger boat and resultant larger engines to meet the performance/operational requirements. Service life is 7 years. CNIC Force Protection Boat (Large) - Gasoline twin outboard engine powered aluminum boats approximately 11 meters (36 ft.) in length with a wide beam used primarily for fleet force protection, maritime interdiction, law enforcement operations, at Naval activities and adjacent ports and waterways duties. Needed in areas where the environment (sea states/climatology) necessitates a larger boat for dependability. Service life is 7 years. CNIC Workboat (Medium) - Diesel inboard-engine powered steel boats up to approximately 11 meters (36 ft) in length used primarily for multi-purpose workboat applications at Naval activities and adjacent ports and waterways duties, such as towing and pusher boat capabilities, line handling, harbor cleaning, and security barrier tending. Habitability, maneuverability and bollard pull power are commensurate												

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 12: Small Boats		P-1 Line Item Number / Title: 1210 / Standard Boats
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:
with operational requirements associated with barrier and moderately sized vessel assist (i.e., barges, boats, etc.). The Workboat (Medium) is capable of performing operations in areas where the operating environment (sea states/climatology) is not significant enough to necessitate the larger boat, but includes the capabilities necessary to meet operational requirements. Service life is 20 years. CNIC Workboat (Large) - Diesel inboard-engine powered steel boats over approximately 11 meters (36 ft) in length used primarily for multi-purpose workboat applications at Naval activities and adjacent ports and waterways. Duties include towing and pusher tugboat capabilities, diver support, ship's husbandry, cargo carrier, personnel ferry, harbor cleaning, firefighting and security barrier tending. Habitability, maneuverability and bollard pull power are commensurate with operational requirements associated with large sized vessel assist (i.e., ships, derricks, etc.). The Workboat (Large) is needed for operations in areas where the operating environment (including sea states/climatology) is significant enough to necessitate the larger boat and include the capabilities necessary to meet operational requirements. Service life is 25 years. CNIC Utility Boat Small - Gasoline outboard engine powered aluminum boats approximately 8 meters (26 feet) in length. Used for a variety of missions including search and rescue, craft maintenance, diver support, and transfer of personnel and light cargo. Service life is 10 years. Combo ASD Tug Trainer - Diesel inboard engine and Z-drive powered boats approximately 9 meters (30 feet) in length. These dual purpose boats are used to train harbor tugboat masters and are also used for security barrier tending and other light towing/craft assist missions within harbors. Boats are equipped with a hawser winch, a bow staple, an aft tow cleat, and navigation and communications equipment arranged to mimic a harbor tugboat. Service life is 20 years. NAVFAC Pusher Boat - Inboard diesel engine(s) powered boats approximately 12 meters (40 feet) in length. Used primarily for movements of floating crane barges within harbors. Service life is 20 years. H0002 AMPHIBIOUS ASSAULT SHIPS 11M (36ft) Rigid Inflatable Boat (RIB) - Carried as a ship's boat or assigned to a shore activity to perform a variety of operations including personnel and light cargo transfer, anchorage administration Anti-Terrorism/Force Protection (AT/FP) operations and swimmer defense, visit/boarding/search and maritime interdiction, Amphibious Assault Vehicle (AAV) safety boat and Advanced Amphibious Assault Vehicle (AAAV) assist boat. Service life is 12 years. H0003 EXPLOSIVE ORDNANCE DISPOSAL FORCES Explosive Ordnance Disposal (EOD) Support Craft (RIB) - Used for area search, MK 5 and MK 16 Underwater Breathing Apparatus (UBA)/Diving Training, Mammal Operations, Ordnance/mine recovery, parachute insertion support and Command and Control. Service life is 10 years. SPAWAR 11M (36ft) EOD Type RIB - The 11m RIBs are required to support the emergent establishment of an enduring MK 18 unmanned underwater vehicle family of systems capability for near term operational missions in the shallow water and very shallow water environments in the Fifth Fleet area of responsibility. Operational missions include Intelligence Preparation of the Operational Environment/Mine Countermeasure Missions. Service life is 7-10 years. H0004 NAVAL SPECIAL WARFARE NSW Short Range Support Craft - Used in support of combat swimmer-diver training evolutions and the Special Warfare Combatant Craft (SWCC) Basic Crewman Training curriculum. Service life is 10 years. NSW Long Range Support Craft - SEAL combat swimmer/SEAL Delivery Vehicle (SDV)/surface swimmer safety craft for offshore/open ocean training support. Provides transportation to/from training areas, dive supervisor/event officer-in-charge/corpsman safety support platform and injured diver/swimmer egress platform for Naval Special Warfare. Service life is 10 years. Visit, Board, Search, and Seizure (VBSS) Craft - Provide operational commander a capability to conduct VBSS and Maritime Interception Operations (MIO) from an Afloat Staging Base in conjunction with an overwatch craft and other friendly forces. Service life is 7 years.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 12: Small Boats		P-1 Line Item Number / Title: 1210 / Standard Boats
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:
H0005 RIVERINE ACTIVITIES		
Riverine Multi-Mission Craft - Provides the Navy with, but not limited to, High Value Unit Escort, Maritime Infrastructure Protection; Coastal Riverine Security; Visit Board Search and Seizure (VBSS), VBSS Overwatch and/or Mine Warfare Support. Service life is 8 years.		
MK VI Patrol Boat - Naval Expeditionary Combat Command (NECC) Riverine Forces require a tactically sized, highly reliable, combatant craft capable of operating from land or maritime platforms. The mission of the MK VI is to provide the operational commander a capability to persistently patrol shallow littoral areas beyond sheltered harbors and bays, and into less sheltered open water out to the Departure Sea Area (DSA) for the purpose of force protection of friendly and coalition forces and critical infrastructure. Mission profiles may include: patrol of Maritime Pre-positioning Force (MPF) and Joint Logistics Over the Shore (JLOTS) anchorage and marshaling areas, offshore economic infrastructure Gulf Oil Platforms (GOPLATs), High-Value Asset (HVA) shipping escort, over watch of Maritime Interdiction Operations (MIO) / Vessel Board, Search and Seizure (VBSS) operations, Theater Security Cooperation (TSC), and Security Force Assistance (SFA). Service life is 7-10 years.		
High Value Unit Escorts - Provides the Navy with, but not limited to, High Value Unit Escort, Maritime Infrastructure Protection; Coastal Riverine Security; Visit Board Search and Seizure (VBSS), VBSS Overwatch and/or Mine Warfare Support. Service life is 8 years.		
H0006 SUPPORT FORCES		
7M (24ft) Rigid Inflatable Boat (RIB) - Diesel powered, primarily used as ship's lifeboats, search and rescue boats, liberty boats, and for general transportation on auxiliaries, combatants, carriers, amphibious, and shore activities. Also used for Anti-Terrorism/Force Protection (AT/FP) and Maritime Interdiction Operation/Vessel Boarding Search and Seizure (MIO/VBSS) operations. Service life is 12 years.		
H0007 FLEET LOGISTICS SUPPORT		
7M (24ft) Rigid Inflatable Boat (RIB) - Diesel powered, primarily used as ship's lifeboats, search and rescue boats, liberty boats, and for general transportation on auxiliaries, combatants, carriers, amphibious, and shore activities. Also used for Anti-Terrorism/Force Protection (AT/FP) and Maritime Interdiction Operation/Vessel Boarding Search and Seizure (MIO/VBSS) operations. Service life is 12 years.		
H0008 NAVAL COASTAL WARFARE		
Patrol Boat (small) - Light gasoline twin outboard engine powered (up to 150 HP each) aluminum boats from 7 to 8.2 meters (24 to 27 ft) in length used primarily for fleet force protection, maritime interdiction, law enforcement operations, at Naval activities and adjacent ports and waterways duties. Can operate in areas where the environment (sea states/climatology) does not present a significant challenge. Service life is 7 years.		
Patrol Boat (Large) - Twin diesel engine powered aluminum boats over 9 meters (30 ft) in length used primarily for fleet force protection, maritime interdiction, law enforcement operations, at Naval activities and adjacent ports and waterways duties. Needed in areas where the environment (sea states/climatology) necessitates a larger boat for dependability. Too heavy to meet the performance/operational requirements with outboard engines. Service life is 7 years.		
H0009 WARFARE INTEGRATION		
Dive Boat Replacement - Operations involving diving or the need to deploy support equipment at or near the water. Examples include dive operations focusing on underwater ships husbandry of Fleet assets, training, underwater survey and RDT&E, as well as, general ports and waterways operations, routine harbor maintenance and cleanup duties, and to assist in patrol, rescue, firefighting and picket operations. Aluminum hull from 50 to 60 ft, walkthrough cabin, seating for coxswain & navigator, bench seating for four passengers, bitts forward & aft, engine guard rail, dive door (stbd.), certified hoisting fittings & hoisting sling. Cabin light, sliding windows, wiper assembly, heater, Very High Frequency (VHF) radio w/hailer, spotlight, electric bilge pump, battery charger, spare parts, aluminum trailer w/pintle hitch. Service life: 15-20 years.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 12: Small Boats		P-1 Line Item Number / Title: 1210 / Standard Boats
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:
H0010 POLLUTION CONTROL EQUIPMENT		
Oil boom Platform - 30' Boom Platform (BP) Boat used for Oil Spill Response operations, working in conjunction with 25ft UBs and Rapid Response Skimmers (RRS). Typical mission requires UB and BP to sprint to the oil spill location ahead of the RRS. After spill assessment, 24" response boom (aboard BP) is tied off to UB, which is used to payout/deploy boom to surround spill while the RRS recovers the oil. BP crew delivers and unravels the boom during oil skimming operations. Typical mission duration is 3-8 hours. Service life is 10 years.		
Utility Boats - 25' Utility Boats (UB) used for Oil Spill Response operations, working in conjunction with Boom Platforms (BPs) and Rapid Response Skimmers (RRS). Typical mission requires UB and BP to sprint to the oil spill location ahead of the RRS. After spill assessment, 24" response boom (aboard BP) is tied off to UB, which is used to payout/deploy boom to surround spill while the RRS recovers the oil. UB crew tends boom during oil skimming operations, accessing boom over low gunwales or via dive door on UB. Typical mission duration is 3-8 hours. Service life is 10 years.		
Rapid Response Skimmers - Rapid Response Skimmers (RRS) used for Oil Spill Response operations, working in conjunction with Boom Platforms (BPs) and Utility Boats (UBs). Typical mission requires UB and BP to sprint to the oil spill location ahead of the RRS. After spill assessment, 24" response boom (aboard BP) is tied off to UB, which is used to payout/deploy boom to surround spill while the RRS recovers the oil. The RRS "skims" the oil off of the top of the water and holds it in an onboard storage container for proper disposal and processing. Typical mission duration is 3-24 hours. Service life is 10 years.		
H0830 PRODUCTION ENGINEERING		
Production Engineering funds are used for engineering and technical support of boat and combatant craft acquisition and the development of integrated logistics support documentation to include technical data packages, provisioning, technical manuals, preventative maintenance documents and naval training systems plans. Technical support shall include acceptance trials, test and evaluation, inspections of production facilities, methods and quality assurance procedures and processes during and after construction. Additionally, official Navy boat inventory management, pre-delivery and post-delivery inspections and preparing documentation regarding boat and combatant craft procurement contract closeout and may be accomplished. Boats will not be safe or suitable to perform Navy boat and combatant craft missions if acquisition engineering technical support and integrated logistics support are not funded and completed. Boats will not be properly accounted for in accordance with OPNAV 4780.6E if boat inventory management is not provided.		
H0CA5 DIVE BOATS		
Operations involving diving or the need to deploy support equipment at or near the water. Examples include dive operations focusing on underwater ships husbandry of Fleet assets, training, underwater survey and RDT&E, as well as, general ports and waterways operations, routine harbor maintenance and cleanup duties, and to assist in patrol, rescue, firefighting and picket operations. Aluminum hull from 50 to 60 ft, walkthrough cabin, seating for coxswain & navigator, bench seating for four passengers, bitts forward & aft, engine guard rail, dive door (stbd), certified hoisting fittings & hoisting sling. Cabin light, sliding windows, wiper assembly, heater, VHF radio w/hailer, spotlight, electric bilge pump, battery charger, spare parts, aluminum trailer w/pintle hitch. Service life: 15-20 years.		
H0CA6 RANGE SUPPORT CRAFT		
Workboat type vessel to serve US Navy Weapons Systems Training and Validation, assisting fleet operations conducting acoustical, thermal and cross-section measurements and testing. Hulls to be steel or aluminum with aluminum superstructure and corrosion resistant systems, components and hardware to operate in industrial conditions with minimal maintenance. Sea kindliness underway and while loitering for extended periods are among the primary operational requirements. A large open workspace on the after deck with a retrieval ramp providing access to the water and appropriate weapons handling machinery. Weapons systems equipment to be handled includes missiles, torpedoes, surface and air launched Remotely Operated Vehicles (ROVs) and targets. Minimal freeboard height aft is necessary for crew safety while accessing and operating the weapons retrieval mechanism without compromising stability. Habitability requirements include berthing, galley, mess, lounge, head(s), generator set(s), HVAC system and defrosters. The boat must be able to accommodate extreme loading conditions (i.e., from a full weapons load topside to light load). The boat must be as stable and as wide as possible to provide the inherent stability characteristics necessary to perform the operations and necessary to provide ergonomics for the crew and passengers. Requirements include communications, navigation and other electronics systems necessary to support the sophisticated training, validation and recording of specialized measurements to support a wide variety of operations. A Commercial Off The Shelf (COTS) boat built to recognize commercial standards can accomplish specific operational requirements for the mission. Service Life is 25 years.		
H0CAB FORCE PROTECTION BOAT (SMALL)		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 12: Small Boats		P-1 Line Item Number / Title: 1210 / Standard Boats
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:
Light gasoline twin outboard engine powered (up to 150 HP each) aluminum boats from 7 to 8.2 meters (24 to 27 ft) in length used primarily for fleet force protection, maritime interdiction, law enforcement operations, at Naval activities and adjacent ports and waterways duties. Can operate in areas where the environment (sea states/climatology) does not present a significant challenge. Service life is 7 years. H0G86 OCO SUPPLEMENTAL Current existing systems require replacements for boats due to excessive wear and tear. The boats are being maintained; however, they are not designed for the operational tempo (OPTEMPO) and harsh operating conditions in which they will be employed. The Force Protection Coastal (FPC) boats will provide capability called for in Visit, Board, Search and Seizure (VBSS) overwatch Urgent Operational Needs Statement (UONS) that cannot be met with existing boats. The Riverine Patrol boats, 7m EOD RIBS, and Force Protection Large are for boats already in theater. SSPBV Blocking Vessels Blocking Vessels - 250' Off Shore Vessels (OSVs) also referred to as Blocking Vessels (BVs) operating at each Strategic Weapons Facility (Bangor, Washington and Kings Bay, Georgia). The Blocking Vessels are a key security component in the transit of SSBNs to and from the dive point. Service Life is 25 years.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy						Date: February 2015	
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 12: Small Boats				P-1 Line Item Number / Title: 1210 / Standard Boats			
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:			Other Related Program Elements:	
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
Standard Boats	P-40a, P-5a, P-21		- / 297.839	- / 28.676	- / 126.445	- / 29.982	- / -
Total Gross/Weapon System Cost			- / 297.839	- / 28.676	- / 126.445	- / 29.982	- / -
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown. Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.							

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy																Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 12									P-1 Line Item Number / Title: 1210 / Standard Boats							Aggregated Items Title: Standard Boats					
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.																					
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total			
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	
1) H0001 - Base Operating Forces																					
1.1) Force Protection Small	A		3,387K	3	10.161	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1.2) CNIC Force Protection Small ^(†)	A		361,500.00	4	1.446	-	-	-	391,000.00	5	1.955	-	-	-	-	-	-	-	-	-	
1.3) CNIC Force Protection Medium ^(†)	A		558,022.22	45	25.111	-	-	-	450,000.00	10	4.500	459,000.00	12	5.508	-	-	-	459,000.00	12	5.508	
1.4) CNIC Force Protection Large	A		11,379K	3	34.136	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1.5) CNIC Workboat Medium ^(†)	A		1,200K	7	8.403	862,000.00	2	1.724	-	-	-	905,000.00	3	2.715	-	-	-	905,000.00	3	2.715	
1.6) CNIC Workboat Large ^(†)	A		-	-	-	1,529K	3	4.587	-	-	-	1,622K	3	4.866	-	-	-	1,622K	3	4.866	
Subtotal: 1) H0001 - Base Operating Forces			-	-	79.257	-	-	6.311	-	-	6.455	-	-	13.089	-	-	-	-	-	13.089	
2) H0002 - Amphibious Assault Ships																					
2.1) 11M (36FT) Rigid Inflatable Boat (RIB) ^(†)	A		1,676K	6	10.055	593,000.00	6	3.558	600,000.00	3	1.800	-	-	-	-	-	-	-	-	-	
Subtotal: 2) H0002 - Amphibious Assault Ships			-	-	10.055	-	-	3.558	-	-	1.800	-	-	-	-	-	-	-	-	-	
3) H0003 - Explosive Ordnance Forces																					
3.1) EOD Support Craft (RIB) ^(†)	A		559,625.00	16	8.954	-	-	-	264,000.00	9	2.376	266,000.00	9	2.394	-	-	-	266,000.00	9	2.394	
3.2) SPAWAR 11M EOD TYPE RIB	A		1,800K	2	3.600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 3) H0003 - Explosive Ordnance Forces			-	-	12.554	-	-	-	-	-	2.376	-	-	2.394	-	-	-	-	-	2.394	
4) H0004 - Naval Special Warfare																					
4.1) NSW Long Range Support Craft	A		372,291.67	24	8.935	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4.2) NSW Short Range Support Craft	A		1,794K	3	5.382	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4.3) E-VBSS ^(†)	A		-	-	-	975,000.00	3	2.925	1,003K	6	6.018	1,014K	4	4.056	-	-	-	1,014K	4	4.056	
Subtotal: 4) H0004 - Naval Special Warfare			-	-	14.317	-	-	2.925	-	-	6.018	-	-	4.056	-	-	-	-	-	4.056	
5) H0005 - Riverine Activities																					
5.1) Riverine Multi-Mission Craft	A		4,085K	11	44.936	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 12						P-1 Line Item Number / Title: 1210 / Standard Boats						Aggregated Items Title: Standard Boats								
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.																				
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
5.2) MK VI Patrol Boat ^(†)	A		6,363K	3	19.089	-	-	5.562	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 5) H0005 - Riverine Activities			-	-	64.025	-	-	5.562	-	-	-	-	-	-	-	-	-	-	-	-
6) H0006 - Support Forces																				
6.1) 7M (24FT) Rigid Inflatable Boat (RIB) ^(†)	A		500,093.75	32	16.003	188,000.00	25	4.700	193,000.00	19	3.667	195,000.00	16	3.120	-	-	-	195,000.00	16	3.120
Subtotal: 6) H0006 - Support Forces			-	-	16.003	-	-	4.700	-	-	3.667	-	-	3.120	-	-	-	-	-	3.120
7) H0007 - Fleet Logistics Support																				
7.1) 7M (24FT) Rigid Inflatable Boat (RIB) ^(†)	A		500,125.00	8	4.001	188,000.00	4	0.752	-	-	-	195,000.00	3	0.585	-	-	-	195,000.00	3	0.585
Subtotal: 7) H0007 - Fleet Logistics Support			-	-	4.001	-	-	0.752	-	-	-	-	-	0.585	-	-	-	-	-	0.585
8) H0008 - Naval Coastal Warfare																				
8.1) Reserve Patrol Boat Small	A		-	-	0.681	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8.2) Reserve Patrol Boat Large ^(†)	A		1,329K	2	2.658	1,022K	1	1.022	1,051K	1	1.051	-	-	-	-	-	-	-	-	-
Subtotal: 8) H0008 - Naval Coastal Warfare			-	-	3.339	-	-	1.022	-	-	1.051	-	-	-	-	-	-	-	-	-
9) H0009 - Warfare Integration																				
9.1) Dive Boat Replacement ^(†)	A		1,814K	2	3.629	-	-	-	1,890K	1	1.890	1,927K	2	3.854	-	-	-	1,927K	2	3.854
Subtotal: 9) H0009 - Warfare Integration			-	-	3.629	-	-	-	-	-	1.890	-	-	3.854	-	-	-	-	-	3.854
10) H0010 - Pollution Control Equipment																				
10.1) Oilboom Platform ^(†)	A		-	-	-	-	-	-	183,000.00	2	0.366	187,000.00	1	0.187	-	-	-	187,000.00	1	0.187
10.2) Utility Boats ^(†)	A		-	-	-	-	-	-	130,000.00	5	0.650	132,000.00	5	0.660	-	-	-	132,000.00	5	0.660
10.3) Rapid Response Skimmer ^(†)	A		-	-	-	380,000.00	8	3.040	389,000.00	6	2.334	394,000.00	3	1.182	-	-	-	394,000.00	3	1.182
10.4) OSR OB Engine ^(†)	A		-	-	-	-	-	-	-	-	-	10,000.00	2	0.020	-	-	-	10,000.00	2	0.020
Subtotal: 10) H0010 - Pollution Control Equipment			-	-	0.000	-	-	3.040	-	-	3.350	-	-	2.049	-	-	-	-	-	2.049
11) H0830 - Production Engineering																				
11.1) Production Engineering	A		-	-	5.920	-	-	0.333	-	-	0.389	-	-	0.380	-	-	-	-	-	0.380

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 12						P-1 Line Item Number / Title: 1210 / Standard Boats									Aggregated Items Title: Standard Boats					
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.																				
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
11.2) Production Engineering (Naval Coastal Warfare)	A		-	-	0.280	-	-	0.059	-	-	0.052	-	-	0.048	-	-	-	-	-	0.048
Subtotal: 11) H0830 - Production Engineering			-	-	6.200	-	-	0.392	-	-	0.441	-	-	0.428	-	-	-	-	-	0.428
12) H0900 - Consulting Services																				
12.1) Consulting Services	A		-	-	5.032	-	-	0.392	-	-	0.372	-	-	0.396	-	-	-	-	-	0.396
12.2) Consulting Services (Naval Coastal Warfare)	A		-	-	0.242	-	-	0.022	-	-	0.025	-	-	0.011	-	-	-	-	-	0.011
Subtotal: 12) H0900 - Consulting Services			-	-	5.274	-	-	0.414	-	-	0.397	-	-	0.407	-	-	-	-	-	0.407
13) H0CA5 - Dive Boats																				
13.1) Dive Boats	A		2,259K	3	6.777	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 13) H0CA5 - Dive Boats			-	-	6.777	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14) H0CA6 - Range Supprt Craft																				
14.1) Range Support Craft	A		18,362K	2	36.723	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 14) H0CA6 - Range Supprt Craft			-	-	36.723	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15) H0CAB - Force Protection Boat (Small)																				
15.1) Force Protection Boat (Small)	A		-	-	2.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15.2) Small Escort Vessels (33')	A		-	-	9.979	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 15) H0CAB - Force Protection Boat (Small)			-	-	11.979	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16) H0G86 - OCO																				
16.1) OCO - Patrol Boat (Large) (Reserve)	A		651,000.00	2	1.302	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16.2) OCO - RIBS	A		500,000.00	2	1.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16.3) OCO - 7M EOD RIBs (Reserve)	A		234,000.00	6	1.404	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16.4) OCO - Force Protection - Coastal (Reserve)	A		4,000K	5	20.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 16) H0G86 - OCO			-	-	23.706	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17) SSPBV																				

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 12								P-1 Line Item Number / Title: 1210 / Standard Boats							Aggregated Items Title: Standard Boats				

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
17.1) Blocking Vessels ^(t)	A		-	-	-	-	-	-	24,750K	4	99.000	-	-	-	-	-	-	-	-	-
Subtotal: 17) SSPBV			-	-	0.000	-	-	-	-	-	99.000	-	-	-	-	-	-	-	-	-
Total			-	-	297.839	-	-	28.676	-	-	126.445	-	-	29.982	-	-	-	-	-	29.982

(t) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 12				P-1 Line Item Number / Title: 1210 / Standard Boats				Aggregated Items: Standard Boats				
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
1) H0001 - Base Operating Forces												
1.2) CNIC Force Protection Small		2015	TBD / TBD	C / FFP	NAVSEA	May 2015	Oct 2015	5	391,000.00	N		
1.3) CNIC Force Protection Medium		2015	TBD / TBD	C / IDIQ	NAVSEA	Mar 2015	Oct 2015	10	450,000.00	N		
1.3) CNIC Force Protection Medium		2016	TBD / TBD	C / IDIQ	NAVSEA	May 2016	Dec 2016	12	459,000.00	N		
1.5) CNIC Workboat Medium		2014	Marine Group / Chula Vista, CA	C / FFP	NAVSEA	Jul 2014	Nov 2015	2	862,000.00	N		
1.5) CNIC Workboat Medium		2016	TBD / TBD	C / FFP	NAVSEA	Jun 2016	Dec 2016	3	905,000.00	N		
1.6) CNIC Workboat Large		2014	Marine Group / Chula Vista, CA	C / FFP	NAVSEA	Aug 2014	Nov 2016	3	1,529K	N		
1.6) CNIC Workboat Large		2016	TBD / TBD	C / FFP	NAVSEA	Jun 2016	Sep 2017	3	1,622K	N		
2) H0002 - Amphibious Assault Ships												
2.1) 11M (36FT) Rigid Inflatable Boat (RIB)		2014	Willard Marine / Anaheim, CA	C / FFP	NAVSEA	Sep 2014	Jun 2015	6	593,000.00	N		
2.1) 11M (36FT) Rigid Inflatable Boat (RIB)		2015	TBD / TBD	C / FFP	NAVSEA	Jun 2015	Mar 2016	3	600,000.00	N		
3) H0003 - Explosive Ordnance Forces												
3.1) EOD Support Craft (RIB)		2015	TBD / TBD	C / FFP	NAVSEA	Apr 2015	Oct 2015	9	264,000.00	N		
3.1) EOD Support Craft (RIB)		2016	TBD / TBD	C / FFP	NAVSEA	Jun 2016	Dec 2016	9	266,000.00	N		
4) H0004 - Naval Special Warfare												
4.3) E-VBSS		2014	USMI / Gulport, MS	C / IDIQ	NAVSEA	Aug 2014	Sep 2015	3	975,000.00	N		
4.3) E-VBSS		2015	TBD / TBD	C / FFP	NAVSEA	Jun 2015	Dec 2015	6	1,003K	N		
4.3) E-VBSS		2016	TBD / TBD	C / FFP	NAVSEA	Jun 2016	Dec 2016	4	1,014K	N		
5) H0005 - Riverine Activities												
5.2) MK VI Patrol Boat		2012	Safeboats / Port Orchard, WA	C / FFP	NAVSEA	May 2012	Mar 2015	2	6,300K	N		
5.2) MK VI Patrol Boat		2013	Safeboats / Port Orchard, WA	C / FFP	NAVSEA	Jan 2013	Nov 2015	1	6,489K	N		
6) H0006 - Support Forces												
6.1) 7M (24FT) Rigid Inflatable Boat (RIB)		2014	Willard Marine / Anaheim, CA	C / FFP	NAVSEA	Sep 2014	Feb 2015	25	188,000.00	N		
6.1) 7M (24FT) Rigid Inflatable Boat (RIB)		2015	Willard Marine / Anaheim, CA	C / FFP	NAVSEA	Nov 2014	Apr 2015	19	193,000.00	N		
6.1) 7M (24FT) Rigid Inflatable Boat (RIB)		2016	TBD / TBD	C / FFP	NAVSEA	May 2016	Dec 2016	16	195,000.00	N		
7) H0007 - Fleet Logistics Support												
7.1) 7M (24FT) Rigid Inflatable Boat (RIB)		2013	Willard Marine / Anaheim, CA	C / FFP	NAVSEA	Sep 2014	Feb 2015	4	185,000.00	N		
7.1) 7M (24FT) Rigid Inflatable Boat (RIB)		2014	Willard Marine / Anaheim, CA	C / FFP	NAVSEA	Nov 2014	Apr 2015	4	188,000.00	N		

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Exhibit P-5a, Procurement History and Planning: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 12			P-1 Line Item Number / Title: 1210 / Standard Boats					Aggregated Items: Standard Boats				
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
7.1) 7M (24FT) Rigid Inflatable Boat (RIB)		2016	TBD / TBD	C / FFP	NAVSEA	May 2016	Dec 2016	3	195,000.00	N		
8) H0008 - Naval Coastal Warfare												
8.2) Reserve Patrol Boat Large		2014	TBD / TBD	C / FFP	NAVSEA	Mar 2015	Nov 2015	1	1,022K	N		
8.2) Reserve Patrol Boat Large		2015	TBD / TBD	C / FFP	NAVSEA	Jun 2015	Feb 2016	1	1,051K	N		
9) H0009 - Warfare Integration												
9.1) Dive Boat Replacement		2013	Marine Group / Chula Vista, CA	C / IDIQ	NAVSEA	Oct 2014	Oct 2015	2	1,814K	N		
9.1) Dive Boat Replacement		2015	Marine Group / Chula Vista, CA	C / IDIQ	NAVSEA	Oct 2014	Oct 2015	1	1,890K	N		
9.1) Dive Boat Replacement		2016	TBD / TBD	C / FFP	NAVSEA	Jul 2016	Feb 2017	2	1,927K	N		
10) H0010 - Pollution Control Equipment												
10.1) Oilboom Platform		2015	TBD / TBD	C / FFP	NAVSEA	Jul 2015	Jan 2016	2	183,000.00	N		
10.1) Oilboom Platform		2016	TBD / TBD	C / FFP	NAVSEA	Jul 2016	Jan 2017	1	187,000.00	N		
10.2) Utility Boats		2015	TBD / TBD	C / FFP	NAVSEA	Jul 2015	Dec 2015	5	130,000.00	N		
10.2) Utility Boats		2016	TBD / TBD	C / FFP	NAVSEA	Jul 2016	Dec 2016	5	132,000.00	N		
10.3) Rapid Response Skimmer		2014	Kvichak Marine / Seattle, WA	C / IDIQ	NAVSEA	Sep 2014	Mar 2015	8	380,000.00	N		
10.3) Rapid Response Skimmer		2015	TBD / TBD	C / FFP	NAVSEA	Jul 2015	Jan 2016	6	389,000.00	N		
10.3) Rapid Response Skimmer		2016	TBD / TBD	C / FFP	NAVSEA	Jul 2016	Jan 2017	3	394,000.00	N		
10.4) OSR OB Engine		2016	TBD / TBD	PO	NAVSEA	Jun 2016	Nov 2016	2	10,000.00	N		
17) SSPBV												
17.1) Blocking Vessels ^(†)		2015	Hornbeck Offshore Services / Covington, LA	C / TBD	Washington Navy Yard, DC	Feb 2015	Feb 2015	4	24,750K	N		

^(†) indicates the presence of a P-21

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Exhibit P-21, Production Schedule: PB 2016 Navy																							Date: February 2015									
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 12										P-1 Line Item Number / Title: 1210 / Standard Boats													Aggregated Items: Standard Boats									
Items <i>(Units in Each)</i>							Fiscal Year 2012											Fiscal Year 2013														
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2011	BAL DUE AS OF 1 OCT	Calendar Year 2012											Calendar Year 2013											B A L			
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L		A U G	S E P	
17) SSPBV																																
17.1) Blocking Vessels																																
	20	2015	NAVY		4	-	4																									4
								O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L

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Exhibit P-21, Production Schedule: PB 2016 Navy																							Date: February 2015												
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 12										P-1 Line Item Number / Title: 1210 / Standard Boats													Aggregated Items: Standard Boats												
Items <i>(Units in Each)</i>							Fiscal Year 2014											Fiscal Year 2015																	
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2013	BAL DUE AS OF 1 OCT	Calendar Year 2014											Calendar Year 2015											B A L						
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L		A U G	S E P				
17) SSPBV																																			
17.1) Blocking Vessels																																			
	20	2015	NAVY		4	-	4																A4												-
								O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L			

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Exhibit P-21, Production Schedule: PB 2016 Navy																				Date: February 2015												
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 12										P-1 Line Item Number / Title: 1210 / Standard Boats										Aggregated Items: Standard Boats												
Items <i>(Units in Each)</i>							Fiscal Year 2016										Fiscal Year 2017															
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2015	BAL DUE AS OF 1 OCT	Calendar Year 2016										Calendar Year 2017										B A L					
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y		J U N	J U L	A U G	S E P	
17) SSPBV																																
17.1) Blocking Vessels																																
	20	2015	NAVY		4	4	-	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L

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Exhibit P-21, Production Schedule: PB 2016 Navy									Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 12					P-1 Line Item Number / Title: 1210 / Standard Boats				Aggregated Items: Standard Boats				
		Production Rates (Each / Year)			Procurement Leadtime (Months)								
MFR Ref #	MFR Name - Location	MSR For 2016	1-8-5 For 2016	MAX For 2016	Initial				Reorder				
					ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1	
1	Hornbeck Offshore Services - Covington, LA	-	-	-	-	-	-	-	-	-	-	-	

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 13: Training Equipment								P-1 Line Item Number / Title: 1320 / Other Ships Training Equipment				
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:					Other Related Program Elements:				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	127.151	32.845	17.152	66.538	-	66.538	16.855	13.908	28.457	29.063	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	127.151	32.845	17.152	66.538	-	66.538	16.855	13.908	28.457	29.063	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	127.151	32.845	17.152	66.538	-	66.538	16.855	13.908	28.457	29.063	Continuing	Continuing
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	0.213	0.195	-	-	-	-	-	0.208	0.096	Continuing	Continuing
Flyaway Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-
Description: The equipment procured under the Other Ships Training Equipment line supports Hull, Mechanical, and Electrical (HM&E) and Combat Systems training requirements.												
[P40A / (H5265) SURFACE SUSTAINING TTE]: Funds procure Hull Mechanical & Electrical (HM&E) and Combat System technical training equipment (TTE) identified by the Naval Education & Training Command (NETC) for the training activities. Provides equipment to augment existing TTE due to increased student throughput; replaces equipment beyond economical repair and procures new equipment.												
[P40A / (H5374) LCS SEAFRAME SIMULATORS]: Funds procure LCS Simulators for the respective LCS homeports and the Surface Warfare Officer School (SWOS), Newport, R.I. Simulators are needed to meet the Train to Qualify Key Performance Parameter (KPP) requirement of the Capabilities Development Document. Funding is for procurements of hardware and software associated with building the trainers, and installation of this hardware and software at the LCS Training Facilities in each homeport and at SWOS. Trainers are required for each ship type, with initial procurements for the San Diego homeport and SWOS, followed by procurements for the Mayport and Norfolk homeports within the FYDP. Throughput of LCS crews requires more than one simulator of each type in a homeport.												
LCS Part Task Trainers - Devices that permit selected aspects of a task (Bridge, Combat Systems, Mission Bay Components) to be practiced independently of other elements of the task, and independently of the Intergrated Tactical Trainers (ITTs) to most efficiently address Train to Qualify (T2Q) and Train to Certify (T2C) objectives while managing student throughput.												
LCS Virtual Ship Training System - Comprehensive network infrastructure and computing environment, including Virtual Reality Labs (VRLs), within the LCS Training Facilities to support delivery and management of all components of LCS Training.												
LCS Mission Bay Trainers - Enable the qualification, training, and team certification of the individuals and teams working in the Mission Bay, to include prepping and launching/recovering of mission module off-hull remote vehicles, and operating of the cranes, doors, and other associated equipment in the Mission Bay. Includes full-scale replicas of the Mission Bay for both variants. FY16 funding supports the outfitting of the LCS Training facility at Mayport, FL for the first LCS-1 Variant Ship (LCS-9).												
LCS 1 and LCS 2 Intergrated Tactical Trainers - Number and type of trainers in San Diego, Mayport and Norfolk: Dependent on the Navy's Strategic Laydown. These are full scale simulations and/or stimulations of Tactical Software enabling integrated team training of Bridge, Combat Systems, Engineering, and Mission Package systems/watchstations. Follow on ITT procurements (FY16 and follow) will include intergrated crew served weapon simulators (discussed below). FY16 funds the procurement of one LCS-1 Variant ITT for Mayport and the Second LCS-2 Variant ITT for San Diego (2 ITTs procured in FY16).												

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 13: Training Equipment		P-1 Line Item Number / Title: 1320 / Other Ships Training Equipment
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:
SWOS Bridge Trainer - Devices that permit selected aspects of Bridge tasks (including Readiness Control Officer tasks) to be practiced independently of Combat Systems Operations as found in more capable ITTs. This facilitates more efficient accomplishment of T2Q and T2C objectives. This trainer supports Officer pipeline training at SWOS, Newport in support of Division Officer, Department Head, and PXO/PCO pipeline training for Officer of the Deck Training. Crew Served Weapons Simulators - Funds support tactical deployment of small arms weapons stations topside. Two stand-alone units procured for follow on integration with current ITTs in San Diego. Future Crew Served weapons simulators will be integrated into procurement of follow-on ITTs beginning with FY16 Mayport procurement. [P40A / (H5276) SUBSURFACE SUSTAINING TTE]: Funds procure Subsurface HM&E Fleet and Team Trainer Technical Training Equipment (TTE), Training Enhancement Changes (TECs), support equipment, and various upgrades to simulators / stimulators, such as the Submarine Bridge Trainer (SBT), Submarine Ship Control Operator Trainer (SCOT), and Next Generation Firefighter Trainer (FFT) identified by the Submarine Learning Center (SLC) and approved by Chief of Naval Operations (CNO), for use at the submarine training activities. This TTE/Training Unique Equipment (TUE), sustains a better quality of training and replaces equipment beyond economical repair or procures new equipment. Funds also procure Submarine High Risk Trainer procurement for Pressurized Submarine Escape Trainers and Damage Control Wet Trainers. Fleet Interactive Display Equipment (FIDE) trainers are provided for nuclear power plant training. FIDEs support multiple ship classes and FIDE configurations at 9 different geographic sites, each requiring different levels of installation work; thus the cost for the program varies widely from year to year depending on the combination of these factors. Virginia (VA) Class trainers are procured for the 2nd and 3rd home ports and for configuration updates to existing trainers. [P40A / NEXT GENERATION FIRE FIGHTER TRAINER]: TYCOM approved the requirement and funding to replace all existing Firefighter Trainers with a new Firefighter Trainer that meets the rigors of the USS MIAMI Flag Panel Fire Review. The Next Generation Firefighter Trainer is the replacement trainer for all seven submarine sites. Funds will procure the Next Generation Firefighting Trainers that will permit high temperature environments and multi-level firefighting scenarios for Submarine Crews to rehearse basic and team firefighting proficiency. This trainer will replace the brick and mortar low temperature firefighting trainers that have reached end of service life.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy						Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 13: Training Equipment				P-1 Line Item Number / Title: 1320 / Other Ships Training Equipment				
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:			Other Related Program Elements:		
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
Other Ships Training Equipment	P-40a		- / 127.151	- / 32.845	- / 17.152	- / 66.538	- / -	- / 66.538
Total Gross/Weapon System Cost			- / 127.151	- / 32.845	- / 17.152	- / 66.538	- / -	- / 66.538
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown. Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.								

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 13									P-1 Line Item Number / Title: 1320 / Other Ships Training Equipment						Aggregated Items Title: Other Ships Training Equipment				

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) (H5265) SURFACE SUSTAINING TTE																				
1.1) SURFACE SUSTAINING TTE	A		-	-	10.298	-	-	0.696	-	-	0.705	-	-	-	-	-	-	-	-	-
Subtotal: 1) (H5265) SURFACE SUSTAINING TTE			-	-	10.298	-	-	0.696	-	-	0.705	-	-	-	-	-	-	-	-	-
2) (H5374) LCS SEAFRAME SIMULATORS																				
2.1) LCS PART TASK TRAINERS	A		-	-	-	-	-	-	-	-	2.000	-	-	-	-	-	-	-	-	-
2.2) LCS VIRTUAL SHIP TRAINING SYSTEM	A		-	-	-	-	-	-	-	-	3.000	-	-	8.180	-	-	-	-	-	8.180
2.3) LCS MISSION BAY TRAINERS	A		-	-	17.300	-	-	21.926	-	-	-	-	-	11.817	-	-	-	-	-	11.817
2.4) LCS INTERGRATED TACTICAL TRAINERS	A		-	-	25.311	-	-	-	-	-	4.630	-	-	38.034	-	-	-	-	-	38.034
2.5) SWOS Bridge Trainer	A		-	-	-	-	-	1.500	-	-	-	-	-	-	-	-	-	-	-	-
2.6) Crew Served Weapons Simulators	A		-	-	-	-	-	-	-	-	-	-	-	1.000	-	-	-	-	-	1.000
Subtotal: 2) (H5374) LCS SEAFRAME SIMULATORS			-	-	42.611	-	-	23.426	-	-	9.630	-	-	59.031	-	-	-	-	-	59.031
3) (H5276) SUBSURFACE SUSTAINING TTE																				
3.1) FIDE CVN	A		-	-	13.273	-	-	1.724	-	-	3.490	-	-	3.409	-	-	-	-	-	3.409
3.2) FIDE SUB	A		-	-	21.276	-	-	5.160	-	-	1.929	-	-	3.056	-	-	-	-	-	3.056
3.3) SUSTAINING TTE	A		-	-	35.602	-	-	0.447	-	-	0.374	-	-	0.386	-	-	-	-	-	0.386
3.4) SCOT	A		-	-	4.091	-	-	1.392	-	-	1.024	-	-	0.656	-	-	-	-	-	0.656
Subtotal: 3) (H5276) SUBSURFACE SUSTAINING TTE			-	-	74.242	-	-	8.723	-	-	6.817	-	-	7.507	-	-	-	-	-	7.507
Total			-	-	127.151	-	-	32.845	-	-	17.152	-	-	66.538	-	-	-	-	-	66.538

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy										Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 14: Production Facilities Equipment							P-1 Line Item Number / Title: 1445 / Operating Forces IPE					
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:					Other Related Program Elements:				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	440.698	46.868	39.409	71.138	-	71.138	75.538	66.454	67.909	69.338	Continuing	Continuing
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	440.698	46.868	39.409	71.138	-	71.138	75.538	66.454	67.909	69.338	Continuing	Continuing
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	440.698	46.868	39.409	71.138	-	71.138	75.538	66.454	67.909	69.338	Continuing	Continuing
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: The FY 2016 funding request was reduced by \$5.6 million to account for the availability of prior year execution balances. [P40A / KN100: INDUSTRIAL PLANT EQUIPMENT (IPE) REPLACEMENT/AFLOAT SUPPORT]: These funds are used to procure industrial plant equipment for afloat (surface combatant) activities which provide maintenance capabilities for Sailors to maintain Ship's mission essential, operational readiness while deployed. The upgraded IPE increases deployed maintenance capability and enhances strike group's ability to remain on station through Casualty Report (CASREP) avoidance. The program provides new industrial plant equipment to replace equipment beyond economical repair and to upgrade capabilities for ship maintenance and repair. [P40A / KN200: NAVY MARITIME MAINTENANCE ENTERPRISE SOLUTION]: This funding supports the Navy Maritime Maintenance Enterprise Solution (NMMES) Initiative. NMMES is an operational, sustainment, technical refresh, and modernization strategic investment that has standardized NAVSEA and Fleet ship maintenance functions ashore, controlling and managing all aspects of ship maintenance at the Naval Shipyards, Regional Maintenance Centers (RMCs), and Ship Repair Facilities. NMMES manages finance, supply, personnel, time & attendance, repair work processes & planning, scheduling and execution, shop work flow, configuration management, environmental health & safety, quality assurance, up-line management reporting and other functions. NMMES standardizes and institutionalizes the Navy's ship maintenance business practice processes. These processes are fully embedded in the NMMES IT systems to gain efficiencies in the maintenance process. NMMES systems provide the functionality and processes to continually address the maintenance needs of the Fleet, and have a critical role in the efficient brokering, planning, material ordering, financial performance, and execution of shore maintenance. This funding will support procurement of commercial-off-the-shelf (COTS) hardware and software in support of NMMES IT systems, including the Electronic Technical Work Document (ETWD) initiative. [P40A / KN300: SHIPYARD CAPITAL INVESTMENT PROGRAM (CIP)]: This line item provides funding for the Shipyard Capital Investment Program in support of the consolidated Naval Shipyard and Intermediate Maintenance Facilities (IMF) at the four mission funded Naval Shipyards. Funds will be used for the procurement and execution of Class 3 & 4 plant and personal property projects to maintain, modernize and improve the infrastructure and industrial base at the mission funded Naval Shipyard/IMF activities. Funding will allow for the acquisition of equipment and OP,N related Automated Data Processing (ADP) Hardware/Software necessary to perform the mission of repairing, conversion, and modernization of fleet ships and submarines in the most economical, efficient, environmentally sound and safe manner possible. [P40A / SHIPYARD CAPITAL INVESTMENT PROGRAM (CIP)]: FY16 funding level is consistent with CIP historic levels prior to FY14. This is necessary to achieve a reasonable re-capitalization rate and to meet the 6% investment statutory requirement.												

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 14: Production Facilities Equipment		P-1 Line Item Number / Title: 1445 / Operating Forces IPE
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:
F16 and FY17 funding above FY15 levels is required for 19 additional equipment procurements needed to support CVN, surface ship, and submarine depot maintenance at the Naval Shipyards. These procurements include:		
NNSY, PNSY, PSNSY 60 TON DOCK CRANES SERVICE LIFE EXTENSIONS (7 TOTAL) - Integral to waterfront operations. Dock cranes perform 8,000 lifts per submarine availability supporting critical path maintenance operations. Service life extensions offer significant savings in comparison to new crane procurements.		
PNSY VIRGINIA CLASS PROPULSOR ENCLOSURE, BOW DOME RING and SAIL RACETRACK - Will be unable to execute current VA Class availability schedule at PNSY without this equipment.		
NNSY, PHNSY, PNSY EMERGENCY DIESEL GENERATORS (6 TOTAL) - Fukushima Daiichi nuclear disaster and hurricane Sandy have shown the need for readily available backup power.		
PSNSY 25 TON PORTAL CRANE PROCUREMENTS - Integral to OHIO Class maintenance at delta pier.		
PSNSY HORIZONTAL BORING MILL MODERNIZATION - Existing machine is inoperable. \$870K modernization project is planned vice a \$9M replacement.		
PSNSY CNC METAL SPINNING LATHE - Required to support submarine and CVN depot maintenance at PSNSY.		
[P40A / KN400: SHIP MAINTENANCE INVESTMENT PROGRAM]: This line item provides funding to support capital investments for the Regional Maintenance Centers (RMCs) and Trident Refit Facility (TRF) Kings Bay (KB). Funds will be used for the procurement and execution of personal property projects (including Industrial Plant Equipment (IPE), IT HW/SW, portal/bridge cranes, MILCON collateral equipment, etc.) of a capital nature (greater then \$250K) to maintain and modernize the ship maintenance industrial base, with a focus on reducing total ownership costs. These personal property projects are required for the RMCs and TRF KB to perform their mission of repairing, conversion, and modernization of fleet ships and submarines.		
[P40A / KN502: NAVY SUBMARINE SUPPORT TO NAVBASE GUAM]: Fund OPN Industrial Plant Equipment (IPE) procurements supporting MILCON P566, NAVBASE Guam Emergent Repair Facility (ERF) Expansion.		
[P40A / KN504: Commander, U.S. Pacific Fleet (PACFLT)]: These funds are used by PACFLT to procure investment items required to maintain and modernize the Fleet's ship maintenance industrial base with a focus on reducing total ownership costs.		
[P40A / Load Bank System, X-51]: Tests capability of ships onboard generators.		
[P40A / Link 16 System, C-190]: Evaluates capability of ships Link16 data communication system.		
[P40A / A-47 Gantry Cranes (C700)]: Conveys iron plates.		
[P40A / Milling Machine, X51]: Machines materials in precise shapes and sizes.		
[P40A / Heat and Vacuum System, X-51]: Drys parts and equipment quickly and effectively under heat and vacuum.		
[P40A / Lathe, X-31]: Shapes various work piece by programmed CNC (Computer Numerical Control).		
[P40A / Environmental Welding Chamber]: Environmental Welding Chamber is an environmentally controlled chamber for doing titanium welding.		
[P40A / Burning Oven]: The Burning Oven is used to burn out old paint from work pieces before repair.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 14: Production Facilities Equipment		P-1 Line Item Number / Title: 1445 / Operating Forces IPE
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:
[P40A / CNC Plasma Cutting Machine]: CNC Plasma Cutting Machine [P40A / LOX/LIN Provider]: The LOX/LIN Provider is a mobile nitrogen charger to submarines berthed at pier. [P40A / CNC Lathe]: CNC Lathe utilizes computer numerical control (CNC) and is used to shape a workpiece by rotating it around a horizontal axis. [P40A / Boring, Drilling and Milling (BDM) Machine]: Boring, Drilling and Milling (BDM) Machine used for boring, drilling and milling work pieces of various materials such as heating exchanger tube sheet, AMMO elevator platform and rader foundation. [P40A / Metal Gear Shaper]: Metal Gear Shaper [P40A / Parts Cleaning Machine]: The parts cleaning machine is used to clean sensitive parts such as optical parts for periscope. [P40A / Propeller Shaft Lathe]: Propeller Shaft Lathe replaces obsolete equipment intially installed in the 1940s. [P40A / Optical Emission Mass (OEM) Spectrometer]: Provides upgraded accuracy, precision and reliability with updated technologies to improve laboratory services. [P40A / Horizontal Boring Machine, X-31]: This equipment is used for boring work pieces such as a water break cover of catapult for aircraft carrier and the foundation of emergency diegel generator. [P40A / Vertical Slotting Machine]: The equipment is used for grinding a keyway. [P40A / High Pressure Aire Compressor, C950]: Provides High Pressure Air supplied to submarines. [P40A / DD # 5 & 6 Vertical Reciprocating Conveyor]: Equipment to transfer the materials between dock side and ships. [P40A / Abrasive Blast and Recovery System, X-71]: Equipment to be utilized in the blasting of a ship's tank. [P40A / Dehumidifier / Dust Collecting System]: System controls the humidity of ship's tank during blasting and painting. [P40A / Gas Chromatograph Mass Spectrometer (GC-MS)]: GC-MS will provide upgraded acuracy, precision and reliability with updated technologies to maintain the laboratry capability in testing High Quality Water supplied to CVN. [P40A / Scanning Electron Microscope (SEM)]: SEM will provide upgraded accuracy, precision, reliability and image resolution with updated technologies to improve laboratory services. [P40A / 60 Ton Portal Crane #1 for Berth 5 Upgrade]: 60 ton portal crane #1 for Berth 5 upgrade to support 7th Fleet ship maintenance and repair. [P40A / 60 Ton Portal Crane #2 for Berth 5 Upgrade]: 60 ton portal crane #2 for Berth 5 upgrade to support 7th Fleet ship maintenance and repair. [P40A / KN800: INTEGRATED CONDITION ASSESSMENT SYSTEM (ICAS) NEW INSTALL]: Funding procures all new installations of the Integrated Condition Assessment System (ICAS) hardware and software aboard Surface Fleet hulls. New Installation include: ICAS workstation hardware (including Palm Pilot Portable Data Terminal (PDTs)), latest version of ICAS system software, Configuration Data Set (CDS) (including the implementation of developed enhancements), firewall (if applicable), remote monitoring utility (RMU), ILS and ship's force training. Manage contractor efforts, prepare installation plans, perform ship checks, procure material, oversee shipboard installation and Quality Assurance (QA), develop/implement CDS, install/test all software and CDSs, provide ship's force training.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 14: Production Facilities Equipment		P-1 Line Item Number / Title: 1445 / Operating Forces IPE
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:
[P40A / KN900: INTEGRATED CONDITION ASSESSMENT SYSTEM (ICAS) TECH REFRESH]: Funding procures all technical refresh upgrades of the Integrated Condition Assessment System (ICAS) hardware and software aboard Surface Fleet hulls. Upgrades will include: ICAS workstation hardware (including Palm Pilot Portable Data Terminal (PDTs)), latest version of ICAS system software, Configuration Data Set (CDS) groom (including the implementation of developed enhancements) and ship's force refresher training. Manage contractor efforts, prepare installation plans, perform ship checks, procure material, oversee shipboard installation and Quality Assurance (QA), develop/implement CDS updates, install/test all software and CDSs, provide ship's force training. [P40A / KN505 - Joint Ops Center- PACOM]: This is a classified Program		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy						Date: February 2015	
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 14: Production Facilities Equipment				P-1 Line Item Number / Title: 1445 / Operating Forces IPE			
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:			Other Related Program Elements:	
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
Operating Forces IPE	P-40a, P-5a		- / 440.698	- / 46.868	- / 39.409	- / 71.138	- / -
Total Gross/Weapon System Cost			- / 440.698	- / 46.868	- / 39.409	- / 71.138	- / -
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown. Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.							

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 14									P-1 Line Item Number / Title: 1445 / Operating Forces IPE						Aggregated Items Title: Operating Forces IPE					
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.																				
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) KN100: INDUSTRIAL PLANT EQUIPMENT (IPE) REPLACEMENT/AFLOAT SUPPORT																				
1.1) AFLOAT IPE SUPPORT (BFIMA UPGRADE) - SURFACE SUPPORT	A		-	-	1.857	-	-	0.299	-	-	0.295	-	-	0.300	-	-	-	-	-	0.300
Subtotal: 1) KN100: INDUSTRIAL PLANT EQUIPMENT (IPE) REPLACEMENT/AFLOAT SUPPORT			-	-	1.857	-	-	0.299	-	-	0.295	-	-	0.300	-	-	-	-	-	0.300
2) KN200: NAVY MARITIME MAINTENANCE ENTERPRISE SOLUTION																				
2.1) NAVY MARITIME MAINTENANCE ENTERPRISE SOLUTION SUPPORT	A		-	-	2.077	-	-	2.768	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 2) KN200: NAVY MARITIME MAINTENANCE ENTERPRISE SOLUTION			-	-	2.077	-	-	2.768	-	-	-	-	-	-	-	-	-	-	-	-
3) KN300: SHIPYARD CAPITAL INVESTMENT PROGRAM (CIP)																				
3.1) SHIPYARD CAPITAL INVESTMENT PROGRAM (CIP)	A		-	-	420.148	-	-	32.691	-	-	25.073	-	-	51.300	-	-	-	-	-	51.300
Subtotal: 3) KN300: SHIPYARD CAPITAL INVESTMENT PROGRAM (CIP)			-	-	420.148	-	-	32.691	-	-	25.073	-	-	51.300	-	-	-	-	-	51.300
4) KN400: SHIP MAINTENANCE INVESTMENT PROGRAM																				
4.1) SHIP MAINTENANCE INVESTMENT PROGRAM	A		-	-	5.590	-	-	2.400	-	-	3.608	-	-	6.223	-	-	-	-	-	6.223
Subtotal: 4) KN400: SHIP MAINTENANCE INVESTMENT PROGRAM			-	-	5.590	-	-	2.400	-	-	3.608	-	-	6.223	-	-	-	-	-	6.223
5) KN502: NAVY SUBMARINE SUPPORT TO NAVBASE GUAM																				
5.1) NAVY SUBMARINE SUPPORT TO NAVBASE GUAM	A		-	-	-	-	-	4.485	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 5) KN502: NAVY SUBMARINE SUPPORT TO NAVBASE GUAM			-	-	0.000	-	-	4.485	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 14						P-1 Line Item Number / Title: 1445 / Operating Forces IPE									Aggregated Items Title: Operating Forces IPE					
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.																				
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
6) KN504: Commander, U.S. Pacific Fleet (PACFLT)																				
6.1) Load Bank System, X-51 ^(†)	A		-	-	-	-	-	-	1,785K	1	1.785	-	-	-	-	-	-	-	-	-
6.2) Link 16 System, C-190 ^(†)	A		-	-	-	-	-	-	1,598K	1	1.598	-	-	-	-	-	-	-	-	-
6.3) A-47 Gantry Cranes (C700) ^(†)	A		-	-	-	-	-	-	784,000.00	2	1.568	-	-	-	-	-	-	-	-	-
6.4) Milling Machine, X51 ^(†)	A		-	-	-	-	-	-	535,000.00	1	0.535	-	-	-	-	-	-	-	-	-
6.5) Heat and Vacuum System, X-51 ^(†)	A		-	-	-	-	-	-	814,000.00	1	0.814	-	-	-	-	-	-	-	-	-
6.6) Lathe, X-31 ^(†)	A		-	-	-	-	-	-	599,000.00	1	0.599	-	-	-	-	-	-	-	-	-
6.7) Environmental Welding Chamber ^(†)	A		-	-	-	-	-	-	-	-	-	300,000.00	1	0.300	-	-	-	300,000.00	1	0.300
6.8) Burning Oven ^(†)	A		-	-	-	-	-	-	-	-	-	700,000.00	1	0.700	-	-	-	700,000.00	1	0.700
6.9) CNC Plasma Cutting Machine ^(†)	A		-	-	-	-	-	-	-	-	-	415,000.00	1	0.415	-	-	-	415,000.00	1	0.415
6.10) LOX/LIN Provider ^(†)	A		-	-	-	-	-	-	-	-	-	700,000.00	2	1.400	-	-	-	700,000.00	2	1.400
6.11) CNC Lathe ^(†)	A		-	-	-	-	-	-	-	-	-	900,000.00	1	0.900	-	-	-	900,000.00	1	0.900
6.12) Boring, Drilling and Milling (BDM) Machine ^(†)	A		-	-	-	-	-	-	-	-	-	2,233K	1	2.233	-	-	-	2,233K	1	2.233
6.13) Metal Gear Shaper ^(†)	A		-	-	-	-	-	-	-	-	-	400,000.00	1	0.400	-	-	-	400,000.00	1	0.400
6.14) Parts Cleaning Machine ^(†)	A		-	-	-	-	-	-	-	-	-	700,000.00	1	0.700	-	-	-	700,000.00	1	0.700
Subtotal: 6) KN504: Commander, U.S. Pacific Fleet (PACFLT)			-	-	0.000	-	-	-	-	-	6.899	-	-	7.048	-	-	-	-	-	7.048
7) KN800: INTEGRATED CONDITION ASSESSMENT SYSTEM (ICAS) NEW INSTALL																				
7.1) INTEGRATED CONDITION ASSESSMENT SYSTEM (ICAS)	A		-	-	3.387	-	-	2.064	-	-	2.161	-	-	2.063	-	-	-	-	-	2.063
Subtotal: 7) KN800: INTEGRATED CONDITION ASSESSMENT SYSTEM (ICAS) NEW INSTALL			-	-	3.387	-	-	2.064	-	-	2.161	-	-	2.063	-	-	-	-	-	2.063

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 14						P-1 Line Item Number / Title: 1445 / Operating Forces IPE									Aggregated Items Title: Operating Forces IPE				

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
8) KN900: INTEGRATED CONDITION ASSESSMENT SYSTEM (ICAS) TECH REFRESH																				
8.1) INTEGRATED CONDITION ASSESSMENT SYSTEM (ICAS)	A		-	-	7.639	-	-	2.161	-	-	1.373	-	-	1.604	-	-	-	-	-	1.604
Subtotal: 8) KN900: INTEGRATED CONDITION ASSESSMENT SYSTEM (ICAS) TECH REFRESH			-	-	7.639	-	-	2.161	-	-	1.373	-	-	1.604	-	-	-	-	-	1.604
9) KN505 - Joint Ops Center- PACOM ⁽¹⁾																				
9.1) Joint Operations Center	A		-	-	-	-	-	-	-	-	-	-	-	2.600	-	-	-	-	-	2.600
Subtotal: 9) KN505 - Joint Ops Center- PACOM			-	-	0.000	-	-	-	-	-	-	-	-	2.600	-	-	-	-	-	2.600
Total			-	-	440.698	-	-	46.868	-	-	39.409	-	-	71.138	-	-	-	-	-	71.138

(t) indicates the presence of a P-5a

Footnotes:

⁽¹⁾ This is a classified Program

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Exhibit P-5a, Procurement History and Planning: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 14			P-1 Line Item Number / Title: 1445 / Operating Forces IPE					Aggregated Items: Operating Forces IPE				
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
6) KN504: Commander, U.S. Pacific Fleet (PACFLT)												
6.1) Load Bank System, X-51		2015	TBD ⁽²⁾ / TBD	C / FP	NAVSUP FLC Puget	Mar 2015	Mar 2016	1	1,785K	N	Sep 2014	
6.2) Link 16 System, C-190		2015	TBD ⁽³⁾ / TBD	C / FP	NAVSUP FLC YOKOSUKA	Apr 2015	Apr 2016	1	1,598K	N	Nov 2014	
6.3) A-47 Gantry Cranes (C700)		2015	TBD ⁽⁴⁾ / TBD	C / FP	NCC / NAVFAC FE	May 2015	May 2016	2	784,000.00	N	Nov 2014	
6.4) Milling Machine, X51		2015	TBD ⁽⁵⁾ / TBD	C / FP	DLA	Jul 2015	Jul 2016	1	535,000.00	N	Jan 2015	
6.5) Heat and Vacuum System, X-51		2015	TBD ⁽⁶⁾ / TBD	C / FP	NAVSUP FLC YOKOSUKA	Jul 2015	Jul 2016	1	814,000.00	N	Jan 2015	
6.6) Lathe, X-31		2015	TBD ⁽⁷⁾ / TBD	C / FP	DLA	Aug 2015	Aug 2016	1	599,000.00	N	Feb 2015	
6.7) Environmental Welding Chamber		2016	TBD ⁽⁸⁾ / TBD	C / TBD	NAVSUP FLC Puget	Jul 2016	Jul 2017	1	300,000.00	N	Mar 2016	May 2016
6.8) Burning Oven		2016	TBD ⁽⁹⁾ / TBD	C / TBD	NAVSUP FLC YOKOSUKA	Sep 2016	Sep 2017	1	700,000.00	N	Mar 2016	Mar 2016
6.9) CNC Plasma Cutting Machine		2016	TBD ⁽¹⁰⁾ / TBD	C / TBD	DLA	May 2016	May 2017	1	415,000.00	N	Feb 2016	Feb 2016
6.10) LOX/LIN Provider		2016 ⁽¹¹⁾	TBD ⁽¹²⁾ / TBD	C / TBD	NAVFAC FE	Sep 2016	Sep 2017	2	700,000.00	N	Jun 2016	Jun 2016
6.11) CNC Lathe		2016	TBD ⁽¹³⁾ / TBD	C / TBD	DLA	Jul 2016	Jul 2017	1	900,000.00	N	Apr 2016	Apr 2016
6.12) Boring, Drilling and Milling (BDM) Machine		2016	TBD ⁽¹⁴⁾ / TBD	C / TBD	DLA	Jul 2016	Jul 2017	1	2,233K	N	Apr 2016	Apr 2016
6.13) Metal Gear Shaper		2016	TBD ⁽¹⁵⁾ / TBD	C / TBD	DLA	Jun 2016	Jun 2017	1	400,000.00	N	Mar 2016	Mar 2016
6.14) Parts Cleaning Machine		2016	TBD ⁽¹⁶⁾ / TBD	C / TBD	NAVSUP FLC YOKOSUKA	Sep 2016	Sep 2016	1	700,000.00	N	May 2016	Jul 2016
Footnotes: ⁽²⁾ Manufacturer to be determined upon contract award. ⁽³⁾ Manufacturer to be determined upon contract award. ⁽⁴⁾ Manufacturer to be determined upon contract award. ⁽⁵⁾ Manufacturer to be determined upon contract award. ⁽⁶⁾ Manufacturer to be determined upon contract award. ⁽⁷⁾ Manufacturer to be determined upon contract award. ⁽⁸⁾ Manufacturer to be determined upon contract award. ⁽⁹⁾ Manufacturer to be determined upon contract award. ⁽¹⁰⁾ Manufacturer to be determined upon contract award. ⁽¹¹⁾ Manufacturer to be determined after contract award. ⁽¹²⁾ Manufacturer to be determined upon contract award.												

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Exhibit P-5a, Procurement History and Planning: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 14	P-1 Line Item Number / Title: 1445 / Operating Forces IPE	Aggregated Items: Operating Forces IPE
(13) Manufacturer to be determined upon contract award. (14) Manufacturer to be determined upon contract award. (15) Manufacturer to be determined upon contract award. (16) Manufacturer TBD following contract award.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy	Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 15: Other Ship Support	P-1 Line Item Number / Title: 1480 / Nuclear Alterations

ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:					Other Related Program Elements:				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	402.126	106.328	118.129	132.625	-	132.625	109.256	140.814	89.456	72.821	-	1,171.555
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	402.126	106.328	118.129	132.625	-	132.625	109.256	140.814	89.456	72.821	-	1,171.555
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	402.126	106.328	118.129	132.625	-	132.625	109.256	140.814	89.456	72.821	-	1,171.555
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The details of this program are classified CONFIDENTIAL and are submitted to Congress annually in the classified budget justification books.

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy						Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 15: Other Ship Support					P-1 Line Item Number / Title: 1480 / Nuclear Alterations			
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:			Other Related Program Elements:		
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
Nuclear Alterations	P-40a		- / 402.126	- / 106.328	- / 118.129	- / 132.625	- / -	- / 132.625
Total Gross/Weapon System Cost			- / 402.126	- / 106.328	- / 118.129	- / 132.625	- / -	- / 132.625
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.								
Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.								

Justification:

The details of this program are classified CONFIDENTIAL and are submitted to Congress annually in the classified budget justification books.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 15								P-1 Line Item Number / Title: 1480 / Nuclear Alterations							Aggregated Items Title: Nuclear Alterations				

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) New P40A Grouping																				
1.1) Nuclear Alterations	A		-	-	402.126	-	-	106.328	-	-	118.129	-	-	132.625	-	-	-	-	-	132.625
Subtotal: 1) New P40A Grouping			-	-	402.126	-	-	106.328	-	-	118.129	-	-	132.625	-	-	-	-	-	132.625
Total			-	-	402.126	-	-	106.328	-	-	118.129	-	-	132.625	-	-	-	-	-	132.625

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy										Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 15: Other Ship Support							P-1 Line Item Number / Title: 1600 / LCS Common Mission Modules Equipment					
ID Code (A=Service Ready, B=Not Service Ready) : A				Program Elements for Code B Items:				Other Related Program Elements:				
Line Item MDAP/MAIS Code: 374			Item MDAP/MAIS Code(s):									
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	314.083	35.966	30.938	23.500	-	23.500	23.991	14.775	15.844	17.083	721.485	1,197.665
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	314.083	35.966	30.938	23.500	-	23.500	23.991	14.775	15.844	17.083	721.485	1,197.665
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	314.083	35.966	30.938	23.500	-	23.500	23.991	14.775	15.844	17.083	721.485	1,197.665
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	1.691	1.875	2.173	-	2.173	0.081	0.094	0.073	0.075	Continuing	Continuing
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: Littoral Combat Ship (LCS) focused mission packages provide the operational commander with capabilities to perform littoral mine countermeasures (MCM) operations, a detect-to-engage capability to counter small boat threats, and a detect-to-engage capability to counter enemy submarines. A mission package (MP) is a combination of warfare mission modules (MM) with specialized crew, support equipment, and vehicles, including embarked manned helicopters and unmanned aircraft and maritime systems. Mission Modules are packaged in a modular fashion so that they can be quickly swapped in and out pier side on any LCS platform. The program has an inventory objective of 24 MCM mission packages, 24 surface warfare (SUW) mission packages, and 16 anti-submarine warfare (ASW) mission packages. Mission package procurement and delivery are aligned with the ship delivery schedule, mission area demand signal from the combatant commanders, and the retirement of legacy platforms. This means that 64 interchangeable mission packages will be available for use among the two seaframe variants of the LCS class to support global warfighting and peacetime presence requirements. The LCS MMs program has developed two principal Seaframe-installed components to facilitate MP operation, the Mission Package Computing Environment (MPCE) and the Data Mission Payload. Additionally, each MP uses tailored Support Containers (SCs) whose designs are based upon an International Organization for Standardization (ISO) compliant base container. The initial SUW, MCM, and ASW MPs utilize the common equipment, infrastructure, and services to the maximum extent possible. Future MMs and MPs will utilize the common infrastructure and services as well. The base container is built to print with adjustable interior rails that can be reconfigured for a variety of applications. The containers are built to a lightweight design and specialized to accommodate particular mission systems with maximum efficiency. The Common Mission Modules Equipment (Line Item Number 1600) by itself or support containers by themselves do not comprise a Mission Package and are only deployable when part of a complete Mission Package. A Mission Package is deployable and capable of meeting its focused mission requirements on an LCS only when it includes the full complement of Common Mission Modules Equipment combined with all the mission systems that comprise the LCS MCM Mission Module (Line Item Number 1601), or combined with all the mission systems that comprise the LCS ASW Mission Module (Line Item Number 1602), or combined with all the mission systems that comprise the LCS SUW Mission Module (Line Item Number 1603). Additionally, the LCS MCM Mission Package also requires all the mission systems included in the Remote Minehunting System (RMS) (Line Item Number 1605). Other Related Budgets: BLIs: OPN 1601, OPN 1602, OPN 1603, OPN 1605, OPN 4248, OPN 2622, OPN 2624, WPN 4221, WPN 4225, RDT&E 0603596N [P40A / LM005 - OBSOLESCENCE MISSION MODULE ECPs]: Supports Engineering Change Proposals (ECPs) for the obsolete systems in the MCM and SUW mission packages. ECPs are required to add the RT-1944/U Multiband Radio to LCS 1-2 and to replace existing radios (which have been de-certified for operational use) in the MCM mission package including all Remote Multi-Mission Vehicle (RMMV) and Unmanned Surface Vehicles (USVs). ECPs are required to retrofit MCM Mission Package #1 RMMV (two vehicles) to the Multiple Vehicle Communications System (MVCS) common communications system.												

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 15: Other Ship Support		P-1 Line Item Number / Title: 1600 / LCS Common Mission Modules Equipment
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:
Line Item MDAP/MAIS Code: 374	Item MDAP/MAIS Code(s):	
[P40A / LM006 - LCS MISSION MODULES RADIO]: Communications terminal equipment to provide communications capability for LCS Mission Modules from off-board vehicles to the seaframe. Includes installation and checkout on-board the seaframe. [P40A / LM007 - C-HAWKLINK SUPPORT EQUIPMENT]: The C-Hawklink Support Equipment consists of a C-Band to Ku-Band radio conversion equipment set to enable the SH-60B and MH-60R helicopters interoperability with LCS Seaframe and Mission Modules via the Ku-Band Tactical Control Data Link. [P40A / LM008 - MPCE]: Commercial Off The Shelf (COTS)- Based Common Computing environment will support legacy Mission Package (MP) Command & Control (C2) applications and transition to Modular Open Systems Approach (MOSA) & Navy Open Architecture Computing Environment (OACE). It also provides a common computing environment to support the execution of Mission Package Application Software (MPAS), the shipboard tactical software associated with each mission package that enables execution of its focused mission. Includes installation and checkout on-board the seaframe. [P40A / LM009 - DATA MISSION PAYLOAD]: Provides the capability to extend the communications range of the LCS mission module vehicles over the horizon. It provides the LCS mission modules and seaframe with a network-centric capability that may be installed on air and surface vehicles supporting multiple sensors operating in the maritime environment. [P40A / LM010 - MISSION PACKAGE INTEGRATION]: The system engineering partner from industry is responsible for assembling each mission package, via the consolidation of the requisite modules, and ensuring that all integration and interface requirements are met. [P40A / LM012 - TRAINING EQUIPMENT]: Procurement of training systems for the LCS Mission Module detachment training at the San Diego LCS Training Facility (LTF), future LTF sites and other formal training locations. Systems include: Common Mission Package Trainer (CMPT) tactical team trainer Technical Training Equipment (TTE) consisting of: MPCE tactical processing hardware capable of hosting tactical Mission Package Application Software (MPAS) with scenario generator, visualization and SIM/STIM capable of integrating with ship type Combat Management System trainers and Navy Cooperative Training Environment to perform Joint Synthetic Training; Mission Package Training System (MPTS) Part Task Trainer (PTT) Training Device (TD) consisting of COTS hardware and emulation of tactical environment for training specific watch station tasks (MCM: Remote Minehunting System (RMS) Operator and RMS Sensor Operator; SUW: Gun Console Operator; ASW: TBD) in preparation for training in team environment using CMPT; MK-50 Gun Weapon System (GWS) TTE consisting of elements necessary to make the MK-46 GWS integrate into LCS weapons zones; Post Mission Analysis TD consisting of COTS hardware hosting Post Mission Analysis (PMA), PMA scenario, and Learning Management System (LMS) software capable of initial training and proficiency training for off hull Sailors; and the Mission Bay Trainer, which includes various elements of Mission Package hardware found in Mission Bay and Weapons zones to train in individual skills and team skills with larger LCS team in the LTF Mission Bay Trainer. These elements include Support Container TTE, RMS PTT TD, AQS-20 PTT TD, Airborne Laser Mines Detection System (ALMDS) PTT TD, Airborne Mine Neutralization System (AMNS) AMNS PTT TD, Unmanned Influence Sweep System (UISS) PTT TD, KNIFEFISH PTT TD, MHE TTE, MK50 GWS PTT TTE, MK50 GWS PTT TD, 11M RHIB Cradle, 11M RHIB PTT, EMIO equipment, and ASW EMM PTT. This equipment provides the training platform to train Mission Package sailors in individual and team skills associated with mission planning, execution and post mission analysis necessary to achieve the Train to Certify (T2C) Key Performance Parameter (KPP). [P40A / LM015 - CONTAINERS (SHIPPING & SUPPORT)]: Each MP variant uses a base Support Container (SC) which is an ISO compliant shipping container, and comes in two variants: Type I and Type II. The Type I container is a 20-foot ISO container with nominal dimensions of 20' x 8' x 8'. The Type II container is a 10-foot ISO container with nominal dimensions of 10' x 8' x 8'. In both cases the base SC is constructed of high strength steel to reduce the overall weight and features a number of standard configuration items. Mission systems fit inside standard ten- or twenty-foot ISO SCs, or on ISO compliant flat racks and vehicle cradles. The LCS MP zones inside each seaframe mission bay are configured to accommodate the SCs.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 15: Other Ship Support		P-1 Line Item Number / Title: 1600 / LCS Common Mission Modules Equipment
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements:
Line Item MDAP/MAIS Code: 374	Item MDAP/MAIS Code(s):	
[P40A / MCM SUPPORT CONTAINER]: Unit price for the MCM Containers is an average cost that does not reflect the cost of each container. Individual containers for each of the different MCM mission systems have unique requirements and vary in cost. [P40A / LM016 - MVCS]: The Multiple Vehicle Communications System (MVCS) provides the Littoral Combat Ship (LCS) Mission Modules with the capability to simultaneously communicate with multiple Unmanned Surface Vehicles (USVs) and surfaced Unmanned Underwater Vehicles (UUVs) by providing common data link and network communication services. These services include link establishment, link management, communications fail-safes, Emissions Control (EMCON) handling, data routing and protection, packet shaping, Priority of Service (PoS), and automated communications system configuration. MVCS establishes a common interface for these services in the form of hardware and message definitions to maximize the usefulness of limited radio equipment onboard the LCS seaframe. [P40A / LM900 - CONSULTING SERVICES]: Provides program management support, engineering and technical support, studies, analysis and evaluation on mission package systems.		

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy						Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 15: Other Ship Support					P-1 Line Item Number / Title: 1600 / LCS Common Mission Modules Equipment			
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:			Other Related Program Elements:		
Line Item MDAP/MAIS Code: 374		Item MDAP/MAIS Code(s):						
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
LCS MISSION MODULES	P-40a, P-5a, P-21		- / 314.083	- / 35.966	- / 30.938	- / 23.500	- / -	- / 23.500
Total Gross/Weapon System Cost			- / 314.083	- / 35.966	- / 30.938	- / 23.500	- / -	- / 23.500
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown. Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.								

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 15						P-1 Line Item Number / Title: 1600 / LCS Common Mission Modules Equipment									Aggregated Items Title: LCS MISSION MODULES					
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.																				
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) LM001 - MCM Mission Package																				
1.1) USV	A		-	-	1.675	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.2) USV - SWEEP	A		-	-	2.410	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.4) RMMV	A		-	-	15.571	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.5) RMMV CRADLE ^(†)	A		7,604K	2	15.208	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.7) AMNS	A		7,595K	1	7.595	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.8) ALMDS ^(†)	A		19,867K	1	19.867	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.9) AN/AQS-20A	A		-	-	39.099	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.10) COBRA	A		-	-	7.792	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.12) MCM SUPPORT CONTAINERS ^(†)	A		1,510K	15	22.654	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.13) SUPPORT EQUIPMENT	A		-	-	11.064	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.14) PRODUCTION ENGINEERING SUPPORT	A		-	-	8.360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.15) MCM INCREMENTAL WHOLENESS - AQS-20A	A		-	-	5.773	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 1) LM001 - MCM Mission Package			-	-	157.068	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2) LM002 - ASW MISSION PACKAGE																				
2.1) ASW MISSION PACKAGE	A		-	-	17.498	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 2) LM002 - ASW MISSION PACKAGE			-	-	17.498	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3) LM003 - SUW MISSION PACKAGE																				
3.1) GUN MODULE ^(†)	A		12,618K	2	25.237	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.2) SUW SHIPPING CONTAINER ^(†)	A		144,833.33	6	0.869	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.3) SUW SUPPORT CONTAINER ^(†)	A		980,250.00	4	3.921	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.4) SURFACE-TO-SURFACE MISSILE MODULE	A		-	-	2.400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.5) PRODUCTION ENGINEERING	A		-	-	2.013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 15						P-1 Line Item Number / Title: 1600 / LCS Common Mission Modules Equipment									Aggregated Items Title: LCS MISSION MODULES					
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.																				
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Subtotal: 3) LM003 - SUW MISSION PACKAGE			-	-	34.440	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4) LM005 - OBSOLESCENCE MISSION MODULE ECPs																				
4.1) ENGINEERING CHANGE PROPOSALS	A		-	-	20.407	-	-	1.500	-	-	1.200	-	-	-	-	-	-	-	-	-
Subtotal: 4) LM005 - OBSOLESCENCE MISSION MODULE ECPs			-	-	20.407	-	-	1.500	-	-	1.200	-	-	-	-	-	-	-	-	-
5) LM006 - LCS MISSION MODULES RADIO																				
5.1) LCS MISSION MODULES RADIO ^(†)	A		1,585K	6	9.510	1,403K	2	2.806	-	-	-	-	-	-	-	-	-	-	-	-
5.2) PRODUCTION ENGINEERING	A		-	-	1.095	-	-	0.341	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 5) LM006 - LCS MISSION MODULES RADIO			-	-	10.605	-	-	3.147	-	-	-	-	-	-	-	-	-	-	-	-
6) LM007 - C-HAWKLINK SUPPORT EQUIPMENT																				
6.1) C-HAWKLINK SUPPORT EQUIPMENT	A		-	-	5.885	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 6) LM007 - C-HAWKLINK SUPPORT EQUIPMENT			-	-	5.885	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7) LM008 - MPCE																				
7.1) MPCE ^(†)	A		899,000.00	6	5.394	766,000.00	4	3.064	779,000.00	4	3.116	902,750.00	4	3.611	-	-	-	902,750.00	4	3.611
7.2) MPCE Replacement/Attrition/ Tech Refresh ^(†)	A		-	-	-	-	-	-	726,333.33	3	2.179	-	-	-	-	-	-	-	-	-
7.3) PRODUCTION ENGINEERING	A		-	-	0.453	-	-	0.127	-	-	0.292	-	-	0.228	-	-	-	-	-	0.228
Subtotal: 7) LM008 - MPCE			-	-	5.847	-	-	3.191	-	-	5.587	-	-	3.839	-	-	-	-	-	3.839
8) LM009 - DATA MISSION PAYLOAD																				
8.1) DATA MISSION PAYLOAD ^(†)	A		5,214K	1	5.214	5,568K	1	5.568	-	-	-	-	-	-	-	-	-	-	-	-
8.2) PRODUCTION ENGINEERING	A		-	-	0.951	-	-	0.687	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 8) LM009 - DATA MISSION PAYLOAD			-	-	6.165	-	-	6.255	-	-	-	-	-	-	-	-	-	-	-	-
9) LM010 - MISSION PACKAGE INTEGRATION																				

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Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 15								P-1 Line Item Number / Title: 1600 / LCS Common Mission Modules Equipment							Aggregated Items Title: LCS MISSION MODULES				

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
9.1) MISSION PACKAGE PRODUCTION ENGINEERING & ASSEMBLY	A		-	-	4.523	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: 9) LM010 - MISSION PACKAGE INTEGRATION</i>			-	-	4.523	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10) LM012 - TRAINING EQUIPMENT																				
10.1) COMMON MISSION PACKAGE TRAINER (CMPT) ^(†)	A		-	-	3.490	-	-	-	2,520K	1	2.520	2,571K	1	2.571	-	-	-	2,571K	1	2.571
10.2) Mission Package Training Equipment Replacement/Attrition/ Tech Refresh	A		-	-	-	-	-	-	-	-	0.823	-	-	1.714	-	-	-	-	-	1.714
10.3) MISSION PACKAGE TRAINING SYSTEM (MPTS)	A		-	-	0.450	-	-	-	-	-	0.543	-	-	-	-	-	-	-	-	-
10.4) MK-50 GUN WEAPON SYSTEM TTE ^(†)	A		-	-	2.849	-	-	-	3,510K	1	3.510	3,602K	1	3.602	-	-	-	3,602K	1	3.602
10.5) MISSION BAY TRAINER	A		-	-	4.604	-	-	7.700	-	-	1.673	-	-	-	-	-	-	-	-	-
<i>Subtotal: 10) LM012 - TRAINING EQUIPMENT</i>			-	-	11.393	-	-	7.700	-	-	9.069	-	-	7.887	-	-	-	-	-	7.887
11) LM013 - MARITIME SECURITY MODULE																				
11.1) MARITIME SECURITY MODULE ^(†)	A		3,850K	4	15.402	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11.2) PRODUCTION ENGINEERING	A		-	-	1.279	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: 11) LM013 - MARITIME SECURITY MODULE</i>			-	-	16.681	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12) LM015 - CONTAINERS (SHIPPING & SUPPORT)																				
12.1) MCM SUPPORT CONTAINER ^(†)	A		1,082K	7	7.575	1,455K	7	10.184	1,484K	7	10.385	-	-	-	-	-	-	-	-	-
12.2) SUW SUPPORT CONTAINER ^(†)	A		410,250.00	8	3.282	678,500.00	4	2.714	692,500.00	2	1.385	706,250.00	8	5.650	-	-	-	706,250.00	8	5.650
12.3) SUW SHIPPING CONTAINER ^(†)	A		147,250.00	12	1.767	-	-	-	-	-	-	210,500.00	12	2.526	-	-	-	210,500.00	12	2.526

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 15								P-1 Line Item Number / Title: 1600 / LCS Common Mission Modules Equipment							Aggregated Items Title: LCS MISSION MODULES				

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
12.4) PRODUCTION ENGINEERING	A		-	-	1.091	-	-	0.300	-	-	1.633	-	-	2.324	-	-	-	-	-	2.324
<i>Subtotal: 12) LM015 - CONTAINERS (SHIPPING & SUPPORT)</i>			-	-	13.715	-	-	13.198	-	-	13.403	-	-	10.500	-	-	-	-	-	10.500
13) LM016 - MVCS																				
13.1) MVCS Replacement/Attrition/ Tech Refresh ^(†)	A		-	-	-	-	-	-	272,500.00	4	1.090	280,000.00	2	0.560	-	-	-	280,000.00	2	0.560
13.2) Production Engineering	A		-	-	-	-	-	-	-	-	0.066	-	-	0.027	-	-	-	-	-	0.027
<i>Subtotal: 13) LM016 - MVCS</i>			-	-	0.000	-	-	-	-	-	1.156	-	-	0.587	-	-	-	-	-	0.587
14) LM900 - CONSULTING SERVICES																				
14.1) CONSULTING SERVICES	A		-	-	9.856	-	-	0.975	-	-	0.523	-	-	0.687	-	-	-	-	-	0.687
<i>Subtotal: 14) LM900 - CONSULTING SERVICES</i>			-	-	9.856	-	-	0.975	-	-	0.523	-	-	0.687	-	-	-	-	-	0.687
Total			-	-	314.083	-	-	35.966	-	-	30.938	-	-	23.500	-	-	-	-	-	23.500

(†) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 15				P-1 Line Item Number / Title: 1600 / LCS Common Mission Modules Equipment					Aggregated Items: LCS MISSION MODULES			
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1) LM001 - MCM Mission Package												
1.5) RMMV CRADLE		2012	NORTHROP GRUMMAN / BETHPAGE, NEW YORK	C / CPFF	NAVSEA	Mar 2013	Sep 2014	2	3,891K	Y		
1.8) ALMDS		2011	Northrup Grumman / Melbourne, Florida	SS / FFP	NSWC/PC	Mar 2012	Sep 2013	1	7,100K	Y		
1.12) MCM SUPPORT CONTAINERS		2011	NORTHROP GRUMMAN / BETHPAGE, NEW YORK	C / CPFF	NAVSEA	May 2012	Nov 2013	7	914,571.43	Y		Jun 2011
1.12) MCM SUPPORT CONTAINERS		2012	NORTHROP GRUMMAN / BETHPAGE, NEW YORK	C / CPFF	NAVSEA	Mar 2013	Sep 2014	8	988,875.00	Y		Feb 2012
3) LM003 - SUW MISSION PACKAGE												
3.1) GUN MODULE		2012	VARIOUS / VARIOUS	C / CPFF	NAVSEA	Mar 2013	Sep 2014	2	6,416K	Y		
3.2) SUW SHIPPING CONTAINER		2012	NORTHROP GRUMMAN / BETHPAGE, NEW YORK	C / CPFF	NAVSEA	Mar 2013	Sep 2014	6	144,833.33	Y		
3.3) SUW SUPPORT CONTAINER		2012	NORTHROP GRUMMAN / BETHPAGE, NEW YORK	C / CPFF	NAVSEA	Mar 2013	Sep 2014	4	403,250.00	Y		
5) LM006 - LCS MISSION MODULES RADIO												
5.1) LCS MISSION MODULES RADIO		2012	Harris Corporation / Melbourne, FL	C / CPFF	NSWC/PC	Apr 2014	Jan 2015	2	1,370K	Y		
5.1) LCS MISSION MODULES RADIO		2013	Harris Corporation / Melbourne, FL	C / CPFF	NSWC/PC	Apr 2014	Jan 2015	2	1,386K	Y		
5.1) LCS MISSION MODULES RADIO		2014	TBD / TBD	C / CPFF	SSC PAC	Mar 2015	Mar 2015	2	1,403K	Y		
7) LM008 - MPCE												
7.1) MPCE		2012	Advanced Acoustic Concept / Columbia, MD	SS / CPFF	NAVSEA	Aug 2012	Aug 2013	2	800,500.00	Y		
7.1) MPCE		2013	Advanced Acoustic Concept / Columbia, MD	SS / CPFF	NAVSEA	Mar 2013	Mar 2014	4	779,500.00	Y		
7.1) MPCE		2014	Advanced Acoustic Concept / Columbia, MD	SS / CPFF	NAVSEA	May 2014	May 2015	4	766,000.00	Y		
7.1) MPCE		2015	Advanced Acoustic Concept / Columbia, MD	SS / CPFF	NAVSEA	Mar 2015	Mar 2016	4	779,000.00	Y		
7.1) MPCE		2016	Advanced Acoustic Concept / Columbia, MD	SS / CPFF	NAVSEA	Jan 2016	Jan 2017	4	902,750.00	Y		
7.2) MPCE Replacement/Attrition/ Tech Refresh		2015	Advanced Acoustic Concept / Columbia, MD	SS / CPFF	NAVSEA	Jan 2015	Jan 2016	3	726,333.33	Y		
8) LM009 - DATA MISSION PAYLOAD												
8.1) DATA MISSION PAYLOAD ^(†)		2011	NORTHROP GRUMMAN / BETHPAGE, NEW YORK	C / CPFF	NAVSEA	Aug 2012	Aug 2013	1	5,214K	Y		

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Exhibit P-5a, Procurement History and Planning: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 15			P-1 Line Item Number / Title: 1600 / LCS Common Mission Modules Equipment					Aggregated Items: LCS MISSION MODULES				
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
8.1) DATA MISSION PAYLOAD ^(†)		2014	Redstone Defense / Huntsville, AL	C / FFP	NSWC PC	Aug 2014	Aug 2015	1	5,568K	Y		Mar 2013
10) LM012 - TRAINING EQUIPMENT												
10.1) COMMON MISSION PACKAGE TRAINER (CMPT)		2015	Advanced Acoustic Concept / Columbia, MD	SS / FP	NAVSEA	Mar 2015	Mar 2016	1	2,520K	Y		
10.1) COMMON MISSION PACKAGE TRAINER (CMPT)		2016	Advanced Acoustic Concept / Columbia, MD	SS / FP	NAVSEA	Mar 2016	Mar 2017	1	2,571K	Y		
10.4) MK-50 GUN WEAPON SYSTEM TTE		2015	General Dynamics / Falls Church, VA	C / FP	NAVSEA	Mar 2015	Mar 2016	1	3,510K	Y		
10.4) MK-50 GUN WEAPON SYSTEM TTE		2016	General Dynamics / Falls Church, VA	C / FP	NAVSEA	Mar 2016	Mar 2017	1	3,602K	Y		
11) LM013 - MARITIME SECURITY MODULE												
11.1) MARITIME SECURITY MODULE		2011	VARIOIUS / VARIOUS	C / CPFF	NAVSEA	Jun 2012	Jun 2013	1	2,500K	Y		
11.1) MARITIME SECURITY MODULE		2012	VARIOIUS / VARIOUS	C / CPFF	NAVSEA	May 2013	May 2014	3	2,500K	Y		
12) LM015 - CONTAINERS (SHIPPING & SUPPORT)												
12.1) MCM SUPPORT CONTAINER ^(†)		2013	NORTHROP GRUMMAN / BETHPAGE, NEW YORK	C / CPFF	NAVSEA	Jun 2013	Dec 2014	7	1,082K	Y		
12.1) MCM SUPPORT CONTAINER ^(†)		2014	NORTHROP GRUMMAN / BETHPAGE, NEW YORK	C / CPFF	NAVSEA	Dec 2014	Jun 2016	7	1,455K	Y		Mar 2013
12.1) MCM SUPPORT CONTAINER ^(†)		2015	NORTHROP GRUMMAN / BETHPAGE, NEW YORK	C / CPFF	NAVSEA	Aug 2015	Feb 2017	7	1,484K	Y		
12.2) SUW SUPPORT CONTAINER		2013	NORTHROP GRUMMAN / BETHPAGE, NEW YORK	C / CPFF	NAVSEA	Jun 2013	Dec 2014	8	410,250.00	Y		
12.2) SUW SUPPORT CONTAINER		2014	NORTHROP GRUMMAN / BETHPAGE, NEW YORK	C / CPFF	NAVSEA	Sep 2014	Mar 2016	4	678,500.00	Y		Mar 2013
12.2) SUW SUPPORT CONTAINER		2015	NORTHROP GRUMMAN / BETHPAGE, NEW YORK	C / CPFF	NAVSEA	Aug 2015	Feb 2017	2	692,500.00	Y		
12.2) SUW SUPPORT CONTAINER		2016	NORTHROP GRUMMAN / BETHPAGE, NEW YORK	C / CPFF	NAVSEA	Jun 2016	Dec 2017	8	706,250.00	Y		
12.3) SUW SHIPPING CONTAINER		2013	NORTHROP GRUMMAN / BETHPAGE, NEW YORK	C / CPFF	NAVSEA	Jun 2013	Dec 2014	12	147,250.00	Y		
12.3) SUW SHIPPING CONTAINER		2016	NORTHROP GRUMMAN / BETHPAGE, NEW YORK	C / CPFF	NAVSEA	Jun 2016	Dec 2017	12	210,500.00	Y		
13) LM016 - MVCS												
13.1) MVCS Replacement/Attrition/ Tech Refresh		2015	VARIOIUS / VARIOUS	C / CPFF	NSWC/PC	Mar 2015	Mar 2016	4	272,500.00	Y		

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Exhibit P-5a, Procurement History and Planning: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 15			P-1 Line Item Number / Title: 1600 / LCS Common Mission Modules Equipment						Aggregated Items: LCS MISSION MODULES			
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
13.1) MVCS Replacement/Attrition/ Tech Refresh		2016	VARIOIUS / VARIOUS	C / CPFF	NSWC PC	Oct 2015	Oct 2016	2	280,000.00	N		

(†) indicates the presence of a P-21

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Exhibit P-21, Production Schedule: PB 2016 Navy																					Date: February 2015																	
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 15										P-1 Line Item Number / Title: 1600 / LCS Common Mission Modules Equipment											Aggregated Items: LCS MISSION MODULES																	
Items <i>(Units in Each)</i>							Fiscal Year 2012													Fiscal Year 2013																		
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2011	BAL DUE AS OF 1 OCT	Calendar Year 2012													Calendar Year 2013																		
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L							
8) LM009 - DATA MISSION PAYLOAD																																						
8.1) DATA MISSION PAYLOAD																																						
	21	2011	NAVY	1	-	1											A	-	-	-	-	-	-	-	-	-	-	-	-	-	1		-					
	22	2014	NAVY	1	-	1																											1					
12) LM015 - CONTAINERS (SHIPPING & SUPPORT)																																						
12.1) MCM SUPPORT CONTAINER																																						
	23	2013	NAVY	7	-	7																							A	-	-	-	-	7				
	23	2014	NAVY	7	-	7																											7					
	23	2015	NAVY	7	-	7																											7					
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L							

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Exhibit P-21, Production Schedule: PB 2016 Navy																							Date: February 2015									
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 15											P-1 Line Item Number / Title: 1600 / LCS Common Mission Modules Equipment											Aggregated Items: LCS MISSION MODULES										
Items <i>(Units in Each)</i>							Fiscal Year 2014											Fiscal Year 2015														
O C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2013	BAL DUE AS OF 1 OCT	Calendar Year 2014											Calendar Year 2015											B A L			
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L		A U G	S E P	
8) LM009 - DATA MISSION PAYLOAD																																
8.1) DATA MISSION PAYLOAD																																
	21	2011	NAVY	1	1	-																										-
	22	2014	NAVY	1	-	1										A	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	
12) LM015 - CONTAINERS (SHIPPING & SUPPORT)																																
12.1) MCM SUPPORT CONTAINER																																
	23	2013	NAVY	7	-	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7											-
	23	2014	NAVY	7	-	7															A	-	-	-	-	-	-	-	-	-	7	
	23	2015	NAVY	7	-	7																							A	-	7	
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L	

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Exhibit P-21, Production Schedule: PB 2016 Navy																				Date: February 2015													
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 15										P-1 Line Item Number / Title: 1600 / LCS Common Mission Modules Equipment										Aggregated Items: LCS MISSION MODULES													
Items <i>(Units in Each)</i>							Fiscal Year 2016										Fiscal Year 2017																
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2015	BAL DUE AS OF 1 OCT	Calendar Year 2016										Calendar Year 2017																
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L		
8) LM009 - DATA MISSION PAYLOAD																																	
8.1) DATA MISSION PAYLOAD																																	
	21	2011	NAVY	1	1	-																										-	
	22	2014	NAVY	1	1	-																										-	
12) LM015 - CONTAINERS (SHIPPING & SUPPORT)																																	
12.1) MCM SUPPORT CONTAINER																																	
	23	2013	NAVY	7	7	-																										-	
	23	2014	NAVY	7	-	7	-	-	-	-	-	-	-	-	7																		-
	23	2015	NAVY	7	-	7	-	-	-	-	-	-	-	-	-	-	-	-	-	7													-
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L		

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Exhibit P-21, Production Schedule: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 15					P-1 Line Item Number / Title: 1600 / LCS Common Mission Modules Equipment				Aggregated Items: LCS MISSION MODULES			
		Production Rates (Each / Year)			Procurement Leadtime (Months)							
MFR Ref #	MFR Name - Location	MSR For 2016	1-8-5 For 2016	MAX For 2016	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1
1	NORTHROP GRUMMAN - BETHPAGE, NEW YORK	1	4	8	3	3	12	15	3	3	12	15
2	Redstone Defense - Huntsville, AL	1	4	8	-	-	12	12	3	3	12	15
3	NORTHROP GRUMMAN - BETHPAGE, NEW YORK	1	7	20	3	3	18	21	3	3	18	21

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy										Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 15: Other Ship Support							P-1 Line Item Number / Title: 1601 / LCS MCM Mission Modules					
ID Code (A=Service Ready, B=Not Service Ready) : A				Program Elements for Code B Items:				Other Related Program Elements: 0603596N				
Line Item MDAP/MAIS Code: 000			Item MDAP/MAIS Code(s):									
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	31.829	34.885	15.270	85.151	-	85.151	151.019	139.386	144.697	67.338	1,112.734	1,782.309
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	31.829	34.885	15.270	85.151	-	85.151	151.019	139.386	144.697	67.338	1,112.734	1,782.309
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	31.829	34.885	15.270	85.151	-	85.151	151.019	139.386	144.697	67.338	1,112.734	1,782.309
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	3.106	6.000	0.966	-	0.966	4.844	3.188	0.776	0.790	Continuing	Continuing
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The LCS Mine Countermeasures (MCM) mission package will counter bottom, deep, shallow, surface, near surface, and tethered mines in the littoral without putting Sailors in the minefield. When the MCM mission package is embarked, LCS is capable of conducting detect-to-engage operations (hunting, sweeping, and neutralization) against shallow and deep-water sea mine threats. The MCM mission package provides these capabilities through the use of sensors and weapons deployed from an embarked MH-60S multi-mission helicopter and unmanned off-board vehicles. The embarked MH-60S employs the Organic Airborne Mine Countermeasures Module to provide rapid minehunting and clearing using helicopter deployed systems. Future phases will add the Coastal Mine Reconnaissance Module (CMRM) to allow detection of minefield patterns and obstacles from an embarked Fire Scout Vertical Takeoff and Landing Tactical Unmanned Aerial Vehicle (VTUAV), a surface influence sweep capability for high-speed influence minesweeping, and the Surface Mine Countermeasures Unmanned Undersea Vehicle (SMCM/UUV) to detect buried mines. When complete, the MCM mission package will provide full capability against floating, tethered, bottom, and buried mines. Two MCM mission packages (RDTE prior years) have been delivered and a third (OPN prior year) is in production.

The MCM Mission Package is deployable and capable of meeting its focused mission requirements on an LCS only when it includes the full complement of Common Mission Modules Equipment (Line Item Number 1600) and the full complement of mission systems that comprise the LCS MCM Mission Module (Line Item Number 1601) and Remote Minehunting Systems (RMS) (Line Item Number 1605). If mission systems are removed in any given Fiscal Year, the MCM Mission Package will be non-deployable until the mission systems are replaced in a subsequent Fiscal Year.

LCS deployments are based on a 3:2:1 rule. This means 3 crews will man 2 ships/mission packages with 1 ship and mission package (with crew) deployed continuously. The three crews will rotate on a fixed interval between being deployed on the LCS, training while CONUS based LCS, and conducting basic training and certifications while off-hull at the LCS Squadron and Littoral Training Facility. Mission Module crews will follow a similar rotation on the same interval: 1) Off-hull training at LCSRON and Littoral Training Facility (2) Training on hull aboard the CONUS based LCS preparing for the upcoming crew swap in theater (3) Man their deployed mission package in theater on the deployed LCS. Therefore, if the total number of LCS (including modified LCS) is 52, then 26 mission packages and their crews will be deployed continuously and an additional 26 mission packages will be embarked on the homeport LCS with their crews conducting work-ups for the upcoming interval on a forward deployed LCS.

The number of LCS mission packages must not only keep pace with the number of ships (52), more are required to account for the mission packages that will be unavailable for training on the non-deployed LCSs.

Other Related Budgets: BLIs: OPN 1600, OPN 1602, OPN 1603, OPN 1605, OPN 4248, OPN 2622, OPN 2624, WPN 4221, WPN 4225, RDT&E 0603596N

MCM MP Quantities Procured:

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 15: Other Ship Support		P-1 Line Item Number / Title: 1601 / LCS MCM Mission Modules
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements: 0603596N
Line Item MDAP/MAIS Code: 000	Item MDAP/MAIS Code(s):	
Prior Years: 2 full MCM MPs, 1 training asset (non-deployable) FY 2014: MCM = part of 1 FY 2015: MCM = part of 1* FY 2016: MCM = 2 FY 2017: MCM = 2 FY 2018: MCM = 2 FY 2019: MCM = 2 FY 2020: MCM = 1 Total MCM MPs Delivered/Deployable: Prior Years: 0 FY 2014: MCM = 1 FY 2015: MCM = 2 FY 2016: MCM = 2 FY 2017: MCM = 3* FY 2018: MCM = 5 FY 2019: MCM = 7 FY 2020: MCM = 9 *FY15 MCM MP (delivering in FY17) relies on RMMV mod kits to upgrade 4.0 versions to 6.0, which is funded in Line Item Number 1605. Prior to FY13, MCM mission module systems were funded under OPN BLI 1600. Beginning in FY15, Remote Minehunting System (RMS) is funded under OPN BLI 1605. The MCM package consists of the following systems: Coastal Battlefield Reconnaissance & Analysis (COBRA), Airborne Laser Mine Detection System (ALMDS), Remote Multi-Mission Vehicle (RMMV), AQS-20A Minehunting Sonar, Airborne Mine Neutralization System (AMNS), Unmanned Surface Vehicle (USV) with Unmanned Surface Sweep System (USSS), Surface Mine Countermeasures (SMCM) Unmanned Undersea Vehicle (UUV) with Low Frequency Broad Band (LFBB) and Support Containers. The individual systems are combined into five modules: Influence Mine Sweep Module, Remote Mine Hunting Module (described in BLI OPN 1605), Organic Airborne Mine Countermeasures (OAMCM) Module, Coastal Mine Reconnaissance Module, and Unmanned Undersea Module. [P5 / MC001 - INFLUENCE MINE SWEEP]: The Influence Mine Sweep Module provides an unmanned surface, long endurance bottom sweep capability to clear large areas of mines that may remain after mine-hunting operations are complete. [P5 / MC003 - ORGANIC AIRBORNE MINE COUNTERMEASURES (OAMCM)]: The OAMCM Module provides the long-range, airborne capability to conduct mine hunting and clearing operations in littoral zones, confined straits, choke points, and the Amphibious Objective Area (AOA) quickly. [P5 / MC004 - COASTAL MINE RECONNAISSANCE MODULE]: The Coastal Mine Reconnaissance Module will detect mines in the surface zone and beach zone areas, providing the Joint Force Commander with the information needed to clear mines with non-LCS assets and allow military forces to safely and effectively storm the beaches. [P5 / MC005 - UNMANNED UNDERSEA MODULE]: The Unmanned Undersea Module provides capability to detect and identify buried mines and mines in a cluttered ocean bottom environment. [P5 / MC006 - MCM SUPPORT EQUIPMENT]: Support equipment related to the individual modules.		

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LI 1601 - LCS MCM Mission Modules
Navy

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy						Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 15: Other Ship Support				P-1 Line Item Number / Title: 1601 / LCS MCM Mission Modules				
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:		Other Related Program Elements: 0603596N			
Line Item MDAP/MAIS Code: 000		Item MDAP/MAIS Code(s):						
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
1 / LCS MCM Mission Packages	P-5, P-5a, P-21		- / 31.829	- / 34.885	- / 15.270	- / 85.151	- / -	- / 85.151
Total Gross/Weapon System Cost			- / 31.829	- / 34.885	- / 15.270	- / 85.151	- / -	- / 85.151
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.								
Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.								

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Exhibit P-5, Cost Analysis: PB 2016 Navy												Date: February 2015						
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 15						P-1 Line Item Number / Title: 1601 / LCS MCM Mission Modules						Item Number / Title [DODIC]: 1 / LCS MCM Mission Packages						
ID Code (A=Service Ready, B=Not Service Ready) :									MDAP/MAIS Code:									
Resource Summary				Prior Years		FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total				
Procurement Quantity <i>(Units in Each)</i>				-		-		-		-		-		-				
Gross/Weapon System Cost <i>(\$ in Millions)</i>				31.829		34.885		15.270		85.151		-		85.151				
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Net Procurement (P1) <i>(\$ in Millions)</i>				31.829		34.885		15.270		85.151		-		85.151				
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Total Obligation Authority <i>(\$ in Millions)</i>				31.829		34.885		15.270		85.151		-		85.151				
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																		
Initial Spares <i>(\$ in Millions)</i>				-		3.106		6.000		0.966		-		0.966				
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>				-		-		-		-		-		-				
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.																		
Cost Elements	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Hardware - MC003 - ORGANIC AIRBORNE MINE COUNTERMEASURES (OAMCM) Cost																		
Recurring Cost																		
2.1.1) AMNS ^(†)	2,741K	1	2.741	-	-	-	-	-	-	3,112K	2	6.223	-	-	-	3,112K	2	6.223
2.1.2) ALMDS ^(†) ⁽¹⁾	-	-	-	6,765K	1	6.765	-	-	-	8,836K	2	17.673	-	-	-	8,836K	2	17.673
2.1.3) AN/AQS-20A ^(†) ⁽²⁾	11,612K	1	11.612	7,228K	1	7.228	-	-	-	5,406K	6	32.434	-	-	-	5,406K	6	32.434
Subtotal: Recurring Cost	-	-	14.353	-	-	13.993	-	-	-	-	-	56.330	-	-	-	-	-	56.330
Subtotal: Hardware - MC003 - ORGANIC AIRBORNE MINE COUNTERMEASURES (OAMCM) Cost	-	-	14.353	-	-	13.993	-	-	-	-	-	56.330	-	-	-	-	-	56.330
Hardware - MC004 - COASTAL MINE RECONNAISSANCE MODULE Cost																		
Recurring Cost																		
3.1.1) COBRA ^(†)	-	-	-	-	-	-	-	-	-	8,400K	2	16.800	-	-	-	8,400K	2	16.800
Subtotal: Recurring Cost	-	-	0.000	-	-	-	-	-	-	-	-	16.800	-	-	-	-	-	16.800
Subtotal: Hardware - MC004 - COASTAL MINE RECONNAISSANCE MODULE Cost	-	-	0.000	-	-	-	-	-	-	-	-	16.800	-	-	-	-	-	16.800
Hardware - MC006 - MCM SUPPORT EQUIPMENT Cost																		
Recurring Cost																		
5.1.1) SUPPORT EQUIPMENT	-	-	0.691	-	-	3.682	-	-	3.224	-	-	4.915	-	-	-	-	-	4.915

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Exhibit P-5, Cost Analysis: PB 2016 Navy												Date: February 2015						
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 15						P-1 Line Item Number / Title: 1601 / LCS MCM Mission Modules						Item Number / Title [DODIC]: 1 / LCS MCM Mission Packages						
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:								
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.																		
Cost Elements	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Subtotal: Recurring Cost	-	-	0.691	-	-	3.682	-	-	3.224	-	-	4.915	-	-	-	-	-	4.915
Subtotal: Hardware - MC006 - MCM SUPPORT EQUIPMENT Cost	-	-	0.691	-	-	3.682	-	-	3.224	-	-	4.915	-	-	-	-	-	4.915
Hardware - MC007 - MCM WHOLENESS SYSTEMS Cost																		
Recurring Cost																		
6.1.3) MCM INCREMENTAL WHOLENESS - AQS-20A ^(†) (3)	11,612K	1	11.612	7,228K	2	14.456	8,157K	1	8.157	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	11.612	-	-	14.456	-	-	8.157	-	-	-	-	-	-	-	-	-
Subtotal: Hardware - MC007 - MCM WHOLENESS SYSTEMS Cost	-	-	11.612	-	-	14.456	-	-	8.157	-	-	-	-	-	-	-	-	-
Support - MC900 - CONSULTING SERVICES Cost																		
7.1) CONSULTING SERVICES	-	-	1.105	-	-	-	-	-	0.763	-	-	1.746	-	-	-	-	-	1.746
Subtotal: Support - MC900 - CONSULTING SERVICES Cost	-	-	1.105	-	-	-	-	-	0.763	-	-	1.746	-	-	-	-	-	1.746
Support - PRODUCTION ENGINEERING Cost																		
8.2) MC003 - ORGANIC AIRBORNE MINE COUNTERMEASURES (OAMCM)	-	-	4.068	-	-	2.250	-	-	2.436	-	-	3.789	-	-	-	-	-	3.789
8.3) MC004 - COASTAL MINE RECONNAISSANCE MODULE	-	-	-	-	-	-	-	-	-	-	-	0.898	-	-	-	-	-	0.898
8.5) MC006 - MCM SUPPORT EQUIPMENT	-	-	-	-	-	0.504	-	-	0.690	-	-	0.673	-	-	-	-	-	0.673
Subtotal: Support - PRODUCTION ENGINEERING Cost	-	-	4.068	-	-	2.754	-	-	3.126	-	-	5.360	-	-	-	-	-	5.360
Gross/Weapon System Cost	-	-	31.829	-	-	34.885	-	-	15.270	-	-	85.151	-	-	-	-	-	85.151
(†) indicates the presence of a P-5a																		
Footnotes:																		
(1) ALMDS unit prices are based on economic order quantity / step-ladder pricing in new contract award. FY14 quantity of 1 unit was combined with 4 units from BLI 4248 for unit price based on total quantity of 5 units. FY16 unit cost is based on quantity of 2 units.																		

(†) indicates the presence of a P-5a

Footnotes:

(1) ALMDS unit prices are based on economic order quantity / step-ladder pricing in new contract award. FY14 quantity of 1 unit was combined with 4 units from BLI 4248 for unit price based on total quantity of 5 units. FY16 unit cost is based on quantity of 2 units.

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Exhibit P-5, Cost Analysis: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 15	P-1 Line Item Number / Title: 1601 / LCS MCM Mission Modules	Item Number / Title [DODIC]: 1 / LCS MCM Mission Packages
ID Code (A=Service Ready, B=Not Service Ready) :		MDAP/MAIS Code:
⁽²⁾ AQS-20 unit prices are based on economic order quantity / step-ladder pricing in new contract award. FY14 quantity of 1 unit was combined with FY13 procurement of 2 units and FY14 Incremental Wholeness units for unit price based on total quantity of 5 units. FY16 pricing based on quantity of 6 units. ⁽³⁾ AQS-20 unit prices are based on economic order quantity / step-ladder pricing in new contract award. FY14 quantity of 2 units was combined with FY13 procurement and FY14 Incremental Wholeness units for unit price based on total quantity of 5 units. FY15 pricing for Wholeness based on quantity of 1 unit.		

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Exhibit P-5a, Procurement History and Planning: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 15			P-1 Line Item Number / Title: 1601 / LCS MCM Mission Modules					Item Number / Title [DODIC]: 1 / LCS MCM Mission Packages				
Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
2.1.1) AMNS ^(†)		2013	Raytheon / Portsmouth, RI	SS / FFP	NAVSEA	Mar 2014	Aug 2015	1	2,741K	Y		May 2012
2.1.1) AMNS ^(†)		2016	TBD / TBD	C / FFP	NAVSEA	Mar 2016	Aug 2017	2	3,112K	Y		
2.1.2) ALMDS ^(†)		2014	Northrop Grumman / Melborn, FL	C / FFP	NAVSEA	Feb 2014	Aug 2015	1	6,765K	Y		
2.1.2) ALMDS ^(†)		2016	Northrop Grumman / Melborn, FL	C / FFP	NAVSEA	Jan 2016	Jul 2017	2	8,836K	Y		
2.1.3) AN/AQS-20A ^(†)		2013	Raytheon / Portsmouth, RI	C / FFP	NAVSEA	Feb 2014	Feb 2016	1	11,612K	Y		Jan 2012
2.1.3) AN/AQS-20A ^(†)		2014	Raytheon / Portsmouth, RI	C / FFP	NAVSEA	Feb 2014	Feb 2016	1	7,228K	Y		
2.1.3) AN/AQS-20A ^(†)		2016	Raytheon / Portsmouth, RI	C / FFP	NAVSEA	Jan 2016	Jan 2018	6	5,406K	Y		
3.1.1) COBRA ^(†)		2016	ARETE / TUCSON, AZ	C / FFP	NSWC PC	Mar 2016	Sep 2017	2	8,400K	Y		
6.1.3) MCM INCREMENTAL WHOLENESS - AQS-20A ^(†)		2013	Raytheon / Portsmouth, RI	C / FFP	NAVSEA	Feb 2014	Feb 2016	1	11,612K	Y		Jan 2012
6.1.3) MCM INCREMENTAL WHOLENESS - AQS-20A ^(†)		2014	Raytheon / Portsmouth, RI	C / FFP	NAVSEA	Aug 2014	Aug 2016	2	7,228K	Y		
6.1.3) MCM INCREMENTAL WHOLENESS - AQS-20A ^(†)		2015	Raytheon / Portsmouth, RI	C / FFP	NAVSEA	Nov 2014	Nov 2016	1	8,157K	Y		

^(†) indicates the presence of a P-21

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Exhibit P-21, Production Schedule: PB 2016 Navy																		Date: February 2015														
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 15										P-1 Line Item Number / Title: 1601 / LCS MCM Mission Modules										Item Number / Title [DODIC]: 1 / LCS MCM Mission Packages												
Cost Elements (Units in Each)							Fiscal Year 2014										Fiscal Year 2015															
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2013	BAL DUE AS OF 1 OCT	Calendar Year 2014										Calendar Year 2015										B A L					
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y		J U N	J U L	A U G	S E P	
2.1.1) AMNS																																
	2	2013	NAVY	1	-	1							A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1		-
	1	2016	NAVY	2	-	2																										2
2.1.2) ALMDS ⁽¹⁾																																
	3	2014	NAVY	1	-	1						A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1		-
	3	2016	NAVY	2	-	2																										2
2.1.3) AN/AQS-20A ⁽²⁾																																
	4	2013	NAVY	1	-	1						A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	4	2014	NAVY	1	-	1						A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	4	2016	NAVY	6	-	6																										6
3.1.1) COBRA																																
	5	2016	NAVY	2	-	2																										2
6.1.3) MCM INCREMENTAL WHOLENESS - AQS-20A ⁽³⁾																																
	6	2013	NAVY	1	-	1						A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	6	2014	NAVY	2	-	2											A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	6	2015	NAVY	1	-	1													A -	-	-	-	-	-	-	-	-	-	-	-	-	1
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L	

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Exhibit P-21, Production Schedule: PB 2016 Navy																				Date: February 2015													
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 15										P-1 Line Item Number / Title: 1601 / LCS MCM Mission Modules										Item Number / Title [DODIC]: 1 / LCS MCM Mission Packages													
Cost Elements (Units in Each)							Fiscal Year 2016										Fiscal Year 2017																
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2015	BAL DUE AS OF 1 OCT	Calendar Year 2016										Calendar Year 2017										B A L						
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y		J U N	J U L	A U G	S E P		
2.1.1) AMNS																																	
	2	2013	NAVY	1	1	-																										-	
	1	2016	NAVY	2	-	2						A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	
2.1.2) ALMDS ⁽¹⁾																																	
	3	2014	NAVY	1	1	-																										-	
	3	2016	NAVY	2	-	2				A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	
2.1.3) AN/AQS-20A ⁽²⁾																																	
	4	2013	NAVY	1	-	1	-	-	-	-	1																					-	
	4	2014	NAVY	1	-	1	-	-	-	-	1																					-	
	4	2016	NAVY	6	-	6				A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	
3.1.1) COBRA																																	
	5	2016	NAVY	2	-	2						A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	
6.1.3) MCM INCREMENTAL WHOLENESS - AQS-20A ⁽³⁾																																	
	6	2013	NAVY	1	-	1	-	-	-	-	1																					-	
	6	2014	NAVY	2	-	2	-	-	-	-	-	-	-	-	-	-	1	1															-
	6	2015	NAVY	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1													-
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L		

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Exhibit P-21, Production Schedule: PB 2016 Navy								Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 15					P-1 Line Item Number / Title: 1601 / LCS MCM Mission Modules				Item Number / Title [DODIC]: 1 / LCS MCM Mission Packages		

		Production Rates (Each / Year)			Procurement Leadtime (Months)							
MFR Ref #	MFR Name - Location	MSR For 2016	1-8-5 For 2016	MAX For 2016	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1
1	TBD - TBD	1	4	8	3	3	17	20	3	3	17	20
2	Raytheon - Portsmouth, RI	1	4	8	3	3	17	20	3	3	17	20
3	Northrop Grumman - Melborn, FL	1	4	8	3	3	18	21	3	3	18	21
4	Raytheon - Portsmouth, RI	1	4	8	3	-	24	24	3	-	24	24
5	ARETE - TUCSON, AZ	2	6	12	-	-	18	18	-	-	18	18
6	Raytheon - Portsmouth, RI	1	4	8	3	-	24	24	3	-	24	24

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy										Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 15: Other Ship Support							P-1 Line Item Number / Title: 1603 / LCS SUW Mission Modules					
ID Code (A=Service Ready, B=Not Service Ready) : A				Program Elements for Code B Items:				Other Related Program Elements:				
Line Item MDAP/MAIS Code: 000		Item MDAP/MAIS Code(s):										
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	30.301	19.481	14.750	35.228	-	35.228	35.587	38.040	39.008	40.164	219.847	472.406
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	30.301	19.481	14.750	35.228	-	35.228	35.587	38.040	39.008	40.164	219.847	472.406
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	30.301	19.481	14.750	35.228	-	35.228	35.587	38.040	39.008	40.164	219.847	472.406
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	4.365	3.750	2.242	-	2.242	-	1.450	1.201	-	-	13.008
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:
 Description:
 The Surface Warfare (SUW) mission package increases firepower and offensive/defensive capabilities against large numbers of highly maneuverable, fast, small craft threats, giving LCS the ability to protect the sea lanes and move a force quickly through a choke point or other strategic waterway. With the SUW mission package embarked, LCS has enhanced detection and engagement capability against enemy small craft and similar littoral surface threats. The Phase 2 SUW mission package is comprised of two high velocity 30mm cannons to augment the ship's 57mm gun, and embarked support aircraft (the MH-60R helicopter with Hellfire missile) and the Maritime Security Module to support the embarkation of Visit, Board, Search, and Seizure (VBSS) teams. Four SUW mission packages have been delivered to the fleet and three more are in production. Future SUW mission package phases include the addition of the MQ-8 Fire Scout Vertical Take-off and Landing Tactical Unmanned Aerial Vehicle (VTUAV) for the detection, identification, and classification of surface contacts,; and a Surface-to-Surface Missile Module (SSMM) to provide in-close and eventually an over-the-horizon engagement capability against surface threats.

An SUW Mission Package is deployable and capable of meeting its focused mission requirements on an LCS only when it includes the full complement of Common Mission Modules Equipment (Line Item Number 1600) and the full complement of mission systems that comprise the LCS SUW Mission Module (Line Item Number 1603). If mission systems are removed from the mission module in any given Fiscal Year, the SUW Mission Package will be non-deployable until the mission system is replaced in a subsequent Fiscal Year.

Other Related Budgets: BLIs: OPN 1600, OPN 1601, OPN 1602, OPN 1605, OPN 4248, OPN 2622, OPN 2624, WPN 4221, WPN 4225, RDT&E 0603596N

Prior to FY13, SUW mission module systems were funded under OPN BLI 1600.

SUW MP Quantities Procured:
 Prior Years: 5 SUW MPs, 1 training asset (non-deployable)
 FY 2014: SUW = 1
 FY 2015: SUW = part of 1
 FY 2016: SUW = part of 1, 1 full MP
 FY 2017: SUW = 0
 FY 2018: SUW = 2
 FY 2019: SUW = 0

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy		Date: February 2015	
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 15: Other Ship Support		P-1 Line Item Number / Title: 1603 / LCS SUW Mission Modules	
ID Code (A=Service Ready, B=Not Service Ready) : A		Program Elements for Code B Items:	Other Related Program Elements:
Line Item MDAP/MAIS Code: 000	Item MDAP/MAIS Code(s):		
FY 2020: SUW = 1 Total SUW MPs Delivered/Deployable: Prior Years: 3 FY 2014: SUW = 4 FY 2015: SUW = 6 FY 2016: SUW = 7 FY 2017: SUW = 8 FY 2018: SUW = 8 FY 2019: SUW = 10 FY 2020: SUW = 11 [P40A / SU001 - GUN MODULE]: The Gun mission module is comprised of two high velocity 30mm cannons to augment the ship's 57mm gun, and embarked support aircraft (the MH-60R helicopter with Hellfire missile and the MQ-8B Fire Scout Vertical Take-off and Landing Tactical Unmanned Aerial Vehicle (VTUAV)) for the detection, identification, and classification of surface contacts. [P40A / SU002 - SURFACE-TO-SURFACE MISSILE MODULE (SSMM)]: The Surface-to-Surface Missile Module (SSMM) will provide in-close and eventually an over-the-horizon engagement capability against surface threats. [P40A / SU003 - MARITIME SECURITY MODULE]: The Maritime Security Module (MSM) provides the LCS seaframe with the capability to conduct Level II Visit, Board, Search and Seizure (VBSS) operations and the ability to conduct anti-piracy and maritime interdiction missions. This budget line procures hardware for a full MSM that includes two 11 meter Rigid Hull Inflatable Boats (RHIB), two boat cradles, a VBSS Allowance Equipment List (AEL) for communications and tactical equipment, and habitability and support containers. Includes production, assembly, and installation and checkout of all mission system components. [P40A / SU900 - CONSULTING SERVICES]: Provides program management support, engineering and technical support, studies, analysis and evaluation on mission module systems.			

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy						Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 15: Other Ship Support				P-1 Line Item Number / Title: 1603 / LCS SUW Mission Modules				
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:		Other Related Program Elements:			
Line Item MDAP/MAIS Code: 000		Item MDAP/MAIS Code(s):						
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
LCS SUW Mission Packages	P-40a, P-5a, P-21		- / 30.301	- / 19.481	- / 14.750	- / 35.228	- / -	- / 35.228
Total Gross/Weapon System Cost			- / 30.301	- / 19.481	- / 14.750	- / 35.228	- / -	- / 35.228
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.								
Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.								

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Navy															Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 15								P-1 Line Item Number / Title: 1603 / LCS SUW Mission Modules							Aggregated Items Title: LCS SUW Mission Packages				

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or add, due to rounding.

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) SU001 - GUN MODULE																				
1.1) GUN MODULE ^(†)	A		6,525K	4	26.099	4,360K	2	8.720	-	-	-	4,536K	4	18.144	-	-	-	4,536K	4	18.144
1.2) MK-46 Gun Weapon System ^(†)	A		-	-	-	4,389K	2	8.778	5,267K	2	10.534	4,566K	2	9.133	-	-	-	4,566K	2	9.133
1.3) PRODUCTION ENGINEERING SUPPORT	A		-	-	3.255	-	-	0.981	-	-	0.941	-	-	1.738	-	-	-	-	-	1.738
Subtotal: 1) SU001 - GUN MODULE			-	-	29.354	-	-	18.479	-	-	11.475	-	-	29.015	-	-	-	-	-	29.015
3) SU003 - MARITIME SECURITY MODULE																				
3.1) MARITIME SECURITY MODULE ^(†)	A		-	-	-	-	-	-	2,575K	1	2.575	2,550K	2	5.100	-	-	-	2,550K	2	5.100
3.2) PRODUCTION ENGINEERING	A		-	-	-	-	-	0.296	-	-	0.300	-	-	0.613	-	-	-	-	-	0.613
Subtotal: 3) SU003 - MARITIME SECURITY MODULE			-	-	0.000	-	-	0.296	-	-	2.875	-	-	5.713	-	-	-	-	-	5.713
4) SU900 - CONSULTING SERVICES																				
4.1) CONSULTING SERVICES	A		-	-	0.947	-	-	0.706	-	-	0.400	-	-	0.500	-	-	-	-	-	0.500
Subtotal: 4) SU900 - CONSULTING SERVICES			-	-	0.947	-	-	0.706	-	-	0.400	-	-	0.500	-	-	-	-	-	0.500
Total			-	-	30.301	-	-	19.481	-	-	14.750	-	-	35.228	-	-	-	-	-	35.228

^(†) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 15			P-1 Line Item Number / Title: 1603 / LCS SUW Mission Modules					Aggregated Items: LCS SUW Mission Packages				
Item Number / Title [DODIC]	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1) SU001 - GUN MODULE												
1.1) GUN MODULE ^(†)		2013	NORTHROP GRUMMAN / BETHPAGE, NEW YORK	C / CPFF	NAVSEA	Jun 2013	Dec 2014	4	6,525K	Y		
1.1) GUN MODULE ^(†)		2014	NORTHROP GRUMMAN / BETHPAGE, NEW YORK	C / CPFF	NAVSEA	Dec 2014	Jun 2016	2	4,360K	Y		
1.1) GUN MODULE ^(†)		2016	NORTHROP GRUMMAN / BETHPAGE, NEW YORK	C / CPFF	NAVSEA	Jun 2016	Dec 2017	4	4,536K	Y		
1.2) MK-46 Gun Weapon System ^(†)		2014	General Dynamics Land Systems / Sterling Heights, MI	SS / FFP	NAVSEA	Jan 2015	Jul 2016	2	4,389K	Y		
1.2) MK-46 Gun Weapon System ^(†)		2015	General Dynamics Land Systems / Sterling Heights, MI	SS / FFP	NAVSEA	Jun 2015	Apr 2017	2	5,267K	Y		
1.2) MK-46 Gun Weapon System ^(†)		2016	General Dynamics Land Systems / Sterling Heights, MI	SS / FFP	NAVSEA	Feb 2016	Aug 2017	2	4,566K	Y		
3) SU003 - MARITIME SECURITY MODULE												
3.1) MARITIME SECURITY MODULE ^(†)		2015	Various / Various	C / CPFF	NAVSEA	Mar 2015	Mar 2016	1	2,575K	Y		
3.1) MARITIME SECURITY MODULE ^(†)		2016	Various / Various	C / CPFF	NAVSEA	Mar 2016	Mar 2017	2	2,550K	N		
^(†) indicates the presence of a P-21												

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Exhibit P-21, Production Schedule: PB 2016 Navy																							Date: February 2015										
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 15										P-1 Line Item Number / Title: 1603 / LCS SUW Mission Modules													Aggregated Items: LCS SUW Mission Packages										
Items <i>(Units in Each)</i>							Fiscal Year 2013													Fiscal Year 2014													
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2012	BAL DUE AS OF 1 OCT	Calendar Year 2013													Calendar Year 2014													B A L
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			
1) SU001 - GUN MODULE																																	
1.1) GUN MODULE																																	
	24	2013	NAVY	4	-	4										A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
	24	2014	NAVY	2	-	2																											2
	24	2016	NAVY	4	-	4																											4
1.2) MK-46 Gun Weapon System																																	
	25	2014	NAVY	2	-	2																											2
	25	2015	NAVY	2	-	2																											2
	25	2016	NAVY	2	-	2																											2
3) SU003 - MARITIME SECURITY MODULE																																	
3.1) MARITIME SECURITY MODULE																																	
	26	2015	NAVY	1	-	1																											1
	26	2016	NAVY	2	-	2																											2
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L		

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Exhibit P-21, Production Schedule: PB 2016 Navy																							Date: February 2015										
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 15										P-1 Line Item Number / Title: 1603 / LCS SUW Mission Modules													Aggregated Items: LCS SUW Mission Packages										
Items (Units in Each)							Fiscal Year 2015													Fiscal Year 2016													
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2014	BAL DUE AS OF 1 OCT	Calendar Year 2015													Calendar Year 2016													B A L
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			
1) SU001 - GUN MODULE																																	
1.1) GUN MODULE																																	
	24	2013	NAVY	4	-	4	-	-	2	-	2																					-	
	24	2014	NAVY	2	-	2			A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2				-		
	24	2016	NAVY	4	-	4																				A -	-	-	-	4			
1.2) MK-46 Gun Weapon System																																	
	25	2014	NAVY	2	-	2				A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2				-	
	25	2015	NAVY	2	-	2									A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2		
	25	2016	NAVY	2	-	2																		A -	-	-	-	-	-	-	2		
3) SU003 - MARITIME SECURITY MODULE																																	
3.1) MARITIME SECURITY MODULE																																	
	26	2015	NAVY	1	-	1						A -	-	-	-	-	-	-	-	-	-	-	-	1									-
	26	2016	NAVY	2	-	2																		A -	-	-	-	-	-	-	2		
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L		

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LI 1603 - LCS SUW Mission Modules

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Exhibit P-21, Production Schedule: PB 2016 Navy								Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 15				P-1 Line Item Number / Title: 1603 / LCS SUW Mission Modules				Aggregated Items: LCS SUW Mission Packages			

		Production Rates (Each / Year)			Procurement Leadtime (Months)							
MFR Ref #	MFR Name - Location	MSR For 2016	1-8-5 For 2016	MAX For 2016	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1
1	NORTHROP GRUMMAN - BETHPAGE, NEW YORK	1	2	8	-	3	18	21	3	3	18	21
2	General Dynamics Land Systems - Sterling Heights, MI	2	6	18	3	-	22	22	3	-	18	18
3	Various - Various	1	4	8	2	2	12	14	2	2	12	14

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 15: Other Ship Support							P-1 Line Item Number / Title: 1605 / Remote Minehunting System (RMS)					
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:					Other Related Program Elements: 0603581N, 0603596N, 0603502N				
Line Item MDAP/MAIS Code: 286		Item MDAP/MAIS Code(s):										
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	0.000	-	-	87.627	-	87.627	68.409	58.457	58.003	37.371	355.305	665.172
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	0.000	-	-	87.627	-	87.627	68.409	58.457	58.003	37.371	355.305	665.172
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	0.000	-	-	87.627	-	87.627	68.409	58.457	58.003	37.371	355.305	665.172
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-
Description:												
The AN/WLD-1(V)2 Remote Minehunting System (RMS) is a mine reconnaissance system designed for the detection, classification, identification, and localization of bottom and moored mines in shallow and deep water. The RMS will provide the Navy the capability to keep ships and sailors out of the minefield. The RMS is deployed from the Littoral Combat Ship (LCS) as part of the ships' Mine Countermeasure (MCM) Mission Package (MP). The RMS is a fully integrated system consisting of a semi-submersible Remote Multi-Mission Vehicle (RMMV) towing a variable depth sensor, the AN/AQS-20A. The RMMV is a high-endurance, semi-autonomous, low-observable, unmanned vehicle, operated and maintained from the LCS. Line-of-sight (LOS) and over-the-horizon (OTH) data links provide real time vehicle command and control and mine reconnaissance sensor data transmission to/from LCS. An MCM Mission Package is deployable and capable of meeting its focused mission requirements on an LCS only when it includes the full complement of Common Mission Modules Equipment (Budget Line Item Number 1600) and the full complement of mission systems that comprise the LCS MCM Mission Module (Budget Line Item Number 1601) and Remote Minehunting Systems (RMS) (Line Item Number 1605). If mission systems are removed in any given Fiscal Year, the MCM Mission Package will be non-deployable until the mission systems are replaced in a subsequent Fiscal Year. Two (2) RMMVs are required for every one (1) MCM Mission Package. Any reductions to RMMV procurement funding, will impact the delivery timeline of MCM Mission Packages to the Fleet. The FY15 MCM MP relies on the FY16 RMMV 6.0 mod kits to deliver in FY17. Any reduction delays delivery of the FY15 MCM MP to the Fleet. Other Related Budgets: BLIs: OPN 1600, OPN 1601, OPN 1605 [P5 / Remote Multi-Mission Vehicle (RMMV)]: The RMMV is a high-edurance, semi-autonomous, low-observable, unmanned vehicle, operated and maintained from the LCS. [P5 / RMMV Shipboard Stowage]: The RMMV Shipboard Stowage provides the means to prelaunch and maintain the RMMV when stowed. [P5 / RMMV 6.0 Mod Kits]: Reliability upgrades of Remote Multi-Mission Vehicles (RMMVs) from the v4.0 to the v6.0 baseline configuration. The v6.0 configuration is the latest and only configuration deployable on the host Littoral Combat Ship (LCS) platform. v6.0 includes Reliability Growth Program improvements, Multi-Vehicle Communications System (MVCS), LCS Launch Handling and Recovery enhancements, and suitability improvements to support delivery to the fleet.												

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy			Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 15: Other Ship Support		P-1 Line Item Number / Title: 1605 / Remote Minehunting System (RMS)	
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:		Other Related Program Elements: 0603581N, 0603596N, 0603502N
Line Item MDAP/MAIS Code: 286	Item MDAP/MAIS Code(s):		
[P5 / RM900 - CONSULTING SERVICES]: Provides program management support, engineering and technical support, studies, analysis and evaluation for the RMS program.			

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy **Date:** February 2015

Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 15: Other Ship Support	P-1 Line Item Number / Title: 1605 / Remote Minehunting System (RMS)

ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	Other Related Program Elements: 0603581N, 0603596N, 0603502N

Line Item MDAP/MAIS Code: 286	Item MDAP/MAIS Code(s):

Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
1 / Remote Minehunting System (RMS)	P-5, P-5a, P-21		- / 0.000	- / -	- / -	- / 87.627	- / -	- / 87.627
Total Gross/Weapon System Cost			- / 0.000	- / -	- / -	- / 87.627	- / -	- / 87.627

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

Justification:

FY16 funding is for restart of production to meet the LCS MCM MP inventory requirements and provide Minehunting capability to the fleet, and to upgrade LRIP 1 RMMVs to the v6.0 configuration and restart production of the RMMVs. FY16 funding is also required for production engineering support of newly procured RMMVs. This will include support for all design reviews and test readiness reviews to ensure on time vehicle delivery to the Fleet.

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Exhibit P-5, Cost Analysis: PB 2016 Navy												Date: February 2015							
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 15						P-1 Line Item Number / Title: 1605 / Remote Minehunting System (RMS)						Item Number / Title [DODIC]: 1 / Remote Minehunting System (RMS)							
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:									
Resource Summary				Prior Years		FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total					
Procurement Quantity <i>(Units in Each)</i>				-		-		-		-		-		-					
Gross/Weapon System Cost <i>(\$ in Millions)</i>				0.000		-		-		87.627		-		87.627					
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-					
Net Procurement (P1) <i>(\$ in Millions)</i>				0.000		-		-		87.627		-		87.627					
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-					
Total Obligation Authority <i>(\$ in Millions)</i>				0.000		-		-		87.627		-		87.627					
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																			
Initial Spares <i>(\$ in Millions)</i>				-		-		-		-		-		-					
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>				-		-		-		-		-		-					
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.																			
Cost Elements		Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
		Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Hardware - RM001 - REMOTE MINEHUNTING Cost																			
Recurring Cost																			
1.1.1) Remote Multi-Mission Vehicle (RMMV) ^(†)		-	-	-	-	-	-	-	-	31,602K	2	63.204	-	-	-	31,602K	2	63.204	
1.1.2) RMMV Shipboard Stowage ^(†)		-	-	-	-	-	-	-	-	1,180K	2	2.359	-	-	-	1,180K	2	2.359	
1.1.3) RMMV 6.0 Mod Kits ^(†)		-	-	-	-	-	-	-	-	9,000K	2	18.000	-	-	-	9,000K	2	18.000	
Subtotal: Recurring Cost		-	-	-	-	-	-	-	-	-	-	83.563	-	-	-	-	-	83.563	
Subtotal: Hardware - RM001 - REMOTE MINEHUNTING Cost		-	-	-	-	-	-	-	-	-	-	83.563	-	-	-	-	-	83.563	
Support - RM002 - PRODUCTION ENGINEERING Cost																			
2.1) Production Engineering		-	-	-	-	-	-	-	-	-	-	3.564	-	-	-	-	-	3.564	
Subtotal: Support - RM002 - PRODUCTION ENGINEERING Cost		-	-	-	-	-	-	-	-	-	-	3.564	-	-	-	-	-	3.564	
Support - RM900 - CONSULTING SERVICES Cost																			
3.1) CONSULTING SERVICES		-	-	-	-	-	-	-	-	-	-	0.500	-	-	-	-	-	0.500	
Subtotal: Support - RM900 - CONSULTING SERVICES Cost		-	-	-	-	-	-	-	-	-	-	0.500	-	-	-	-	-	0.500	

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Exhibit P-5, Cost Analysis: PB 2016 Navy													Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 15						P-1 Line Item Number / Title: 1605 / Remote Minehunting System (RMS)						Item Number / Title [DODIC]: 1 / Remote Minehunting System (RMS)						
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:								
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.																		
Cost Elements	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Gross/Weapon System Cost	-	-	0.000	-	-	-	-	-	-	-	-	87.627	-	-	-	-	-	87.627
Remarks: [Hardware] The first Low Rate Initial Production (LRIP) units (LRIP 1) were used during the RMS Reliability Growth Program (RGP) and will be upgraded to the RMMV version v6.0 to support LCS integration and RMS IOC. Additionally, the development of RMMV version v6.0 will support integration of the RMMV into LCS MCM MP and testing in FY15. (†) indicates the presence of a P-5a																		

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Exhibit P-5a, Procurement History and Planning: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 15			P-1 Line Item Number / Title: 1605 / Remote Minehunting System (RMS)					Item Number / Title [DODIC]: 1 / Remote Minehunting System (RMS)				
Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) Remote Multi-Mission Vehicle (RMMV) ^(†)		2016	UNKNOWN / TBD	C / FPIF	NAVSEA	Feb 2016	Dec 2018	2	31,602K	Y		
1.1.2) RMMV Shipboard Stowage		2016	UNKNOWN / TBD	C / FPIF	NAVSEA	Feb 2016	Dec 2018	2	1,180K	Y		
1.1.3) RMMV 6.0 Mod Kits ^(†)		2016	Lockhed Martin / Riviera Beach, FL	SS / FFP	NAVSEA	Jan 2016	Mar 2017	2	9,000K	Y		

^(†) indicates the presence of a P-21

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Exhibit P-21, Production Schedule: PB 2016 Navy																							Date: February 2015										
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 15										P-1 Line Item Number / Title: 1605 / Remote Minehunting System (RMS)													Item Number / Title [DODIC]: 1 / Remote Minehunting System (RMS)										
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2016													Fiscal Year 2017													
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2015	BAL DUE AS OF 1 OCT	Calendar Year 2016													Calendar Year 2017													B A L
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			
1.1.1) Remote Multi-Mission Vehicle (RMMV)																																	
	1	2016	NAVY	2	-	2					A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	
1.1.3) RMMV 6.0 Mod Kits																																	
	2	2016	NAVY	2	-	2				A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2								-
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L		

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Exhibit P-21, Production Schedule: PB 2016 Navy																							Date: February 2015										
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 15										P-1 Line Item Number / Title: 1605 / Remote Minehunting System (RMS)													Item Number / Title [DODIC]: 1 / Remote Minehunting System (RMS)										
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2018													Fiscal Year 2019													
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2017	BAL DUE AS OF 1 OCT	Calendar Year 2018													Calendar Year 2019													B A L
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			
1.1.1) Remote Multi-Mission Vehicle (RMMV)																																	
	1	2016	NAVY	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2											-
1.1.3) RMMV 6.0 Mod Kits																																	
	2	2016	NAVY	2	2	-																										-	
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L		

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Exhibit P-21, Production Schedule: PB 2016 Navy							Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 15				P-1 Line Item Number / Title: 1605 / Remote Minehunting System (RMS)				Item Number / Title [DODIC]: 1 / Remote Minehunting System (RMS)	

MFR Ref #		Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2016	1-8-5 For 2016	MAX For 2016	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1
1	UNKNOWN - TBD	1	4	6	-	-	34	34	-	-	-	-
2	Lockhed Martin - Riviera Beach, FL	1	2	4	3	-	14	14	-	-	18	18

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy	Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 16: Logistic Support	P-1 Line Item Number / Title: 1610 / LSD Midlife

ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:					Other Related Program Elements:				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	533.524	73.420	-	2.774	-	2.774	11.288	21.719	26.524	27.077	14.102	710.428
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	533.524	73.420	-	2.774	-	2.774	11.288	21.719	26.524	27.077	14.102	710.428
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	533.524	73.420	-	2.774	-	2.774	11.288	21.719	26.524	27.077	14.102	710.428
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

LSD 46 Midlife being installed as phased modernization. This budget provides funding for the LSD Mid-life Program. The LSD Mid-life Program replaces obsolete/unsupported HM&E systems and implements Total Operating Cost (TOC) savings upgrades to maintain amphibious warfare capabilities through DECOM (2038). Primary objectives are to maintain or improve readiness, safety, reliability, lower maintenance costs, improve sailor quality of life, and/or sustain the LSD ship class through their notional service life or beyond. The budget purchases equipment including generators, Low Pressure Air Compressors (LPAC), Canned Lube Oil Pumps, A/C Plants and 60T deck crane control systems.

ST001 - The LSD Mid-life Program replaces obsolete/unsupported HM&E systems, and implements TOC savings upgrades to maintain amphibious warfare capabilities through DECOM (2038). These include items such as LPAC, Steering Control Systems (SCS), A/C-plants, Generators, Propulsion Load Management Units (PLMU), and Reverse Osmosis (RO) Desalinators.

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Exhibit P-40, Budget Line Item Justification: PB 2016 Navy						Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 01: Ships Support Equipment / BSA 16: Logistic Support					P-1 Line Item Number / Title: 1610 / LSD Midlife				
ID Code (A=Service Ready, B=Not Service Ready) : A			Program Elements for Code B Items:			Other Related Program Elements:			
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	
1 / ST001 - Propeller Blades & PLMU ()	P-3a		- / 17.467	- / 0.270	- / -	- / -	- / -	- / -	
2 / ST001 - Steering Control System ()	P-3a		- / 47.854	- / 2.854	- / -	- / -	- / -	- / -	
3 / ST001 - A/C Plant (LSD 44 -52) ()	P-3a		- / 40.954	- / 5.979	- / -	- / -	- / -	- / -	
4 / ST001 - 30T Deck Crane Control Sys ()	P-3a		- / 8.500	- / 4.664	- / -	- / -	- / -	- / -	
5 / ST001 - Low Pressure Air Compressor ()	P-3a		- / 16.430	- / -	- / -	- / 0.850	- / -	- / 0.850	
6 / ST001 - RO & Generators ()	P-3a		- / 387.709	- / 56.532	- / -	- / -	- / -	- / -	
7 / ST001 - Canned Lube Oil Pump ()	P-3a		- / 14.610	- / 1.144	- / -	- / -	- / -	- / -	
8 / ST001 - Tech Refresh ()	P-3a		- / 0.000	- / 1.977	- / -	- / -	- / -	- / -	
9 / ST001 - Generators & Elect Distribution ()	P-3a		- / 0.000	- / -	- / -	- / 1.924	- / -	- / 1.924	
10 / ST001 - Reverse Osmosis & Elect Water Heaters ()	P-3a		- / 0.000	- / -	- / -	- / -	- / -	- / -	
11 / ST001 - 60T Deck Crane Control Sys ()	P-3a		- / 0.000	- / -	- / -	- / -	- / -	- / -	
Total Gross/Weapon System Cost			- / 533.524	- / 73.420	- / -	- / 2.774	- / -	- / 2.774	
Exhibits Schedule			FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	
1 / ST001 - Propeller Blades & PLMU ()	P-3a		- / 2.058	- / 1.362	- / -	- / -	- / 2.300	- / 23.457	
2 / ST001 - Steering Control System ()	P-3a		- / -	- / -	- / 2.020	- / 1.828	- / -	- / 54.556	
3 / ST001 - A/C Plant (LSD 44 -52) ()	P-3a		- / 0.650	- / 1.100	- / 8.770	- / -	- / 7.802	- / 65.255	
4 / ST001 - 30T Deck Crane Control Sys ()	P-3a		- / -	- / -	- / -	- / -	- / 4.000	- / 17.164	
5 / ST001 - Low Pressure Air Compressor ()	P-3a		- / 0.320	- / 1.438	- / -	- / -	- / -	- / 19.038	
6 / ST001 - RO & Generators ()	P-3a		- / -	- / -	- / -	- / -	- / -	- / 444.241	
7 / ST001 - Canned Lube Oil Pump ()	P-3a		- / -	- / -	- / 1.181	- / 1.781	- / -	- / 18.716	
8 / ST001 - Tech Refresh ()	P-3a		- / -	- / -	- / -	- / -	- / -	- / 1.977	
9 / ST001 - Generators & Elect Distribution ()	P-3a		- / 5.251	- / 16.807	- / -	- / -	- / -	- / 23.982	
10 / ST001 - Reverse Osmosis & Elect Water Heaters ()	P-3a		- / -	- / -	- / 9.597	- / 23.468	- / -	- / 33.065	
11 / ST001 - 60T Deck Crane Control Sys ()	P-3a		- / 3.009	- / 1.012	- / 4.956	- / -	- / -	- / 8.977	
Total Gross/Weapon System Cost			- / 11.288	- / 21.719	- / 26.524	- / 27.077	- / 14.102	- / 710.428	
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.									
Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.									

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16				P-1 Line Item Number / Title: 1610 / LSD Midlife				Modification Number / Title: 1 / ST001 - Propeller Blades & PLMU			

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	17.467	0.270	-	-	-	-	2.058	1.362	-	-	2.300	23.457
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	17.467	0.270	-	-	-	-	2.058	1.362	-	-	2.300	23.457
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	17.467	0.270	-	-	-	-	2.058	1.362	-	-	2.300	23.457
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

This SHIPALT replaces the existing Propeller Blades with higher efficiency blades and installs Propulsion Load Management Units (PLMU) that result in fuel savings and engine maintenance reduction as well as operational benefits. The prototype for this SHIPALT was installed and proven aboard the LSD 44 under the DOD sponsored Commercial Operations and Support Savings Initiative (COSSI). Return On Investment (ROI) for the class is estimated at over \$40M (after payback) and operational benefits include increased top speed, quicker response/deceleration, and elimination of existing system performance problems (i.e., low lube-oil pressure trip of main engines). Only 9 LSDs will require this SHIPALT as part of the Midlife Program.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16				P-1 Line Item Number / Title: 1610 / LSD Midlife				Modification Number / Title: 1 / ST001 - Propeller Blades & PLMU				
Models of Systems Affected: Propeller Blades & PLMU			Modification Type:					Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Procurement												
Modification Item 1 of 1: ST001 - Propeller Blades & PLMU												
B Kits												
Recurring												
1.1.1) FMP Ship Units - NonOrganic	7 / 7.121	- / -	- / -	- / -	- / -	- / -	1 / 1.693	- / -	- / -	- / -	1 / 1.700	9 / 10.514
1.1.2) End Item Spares - Organic	2 / 1.938	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 1.938
Subtotal: Recurring	- / 9.059	- / -	- / -	- / -	- / -	- / -	- / 1.693	- / -	- / -	- / -	- / 1.700	- / 12.452
Subtotal: ST001 - Propeller Blades & PLMU	9 / 9.059	- / -	- / -	- / -	- / -	- / -	1 / 1.693	- / -	- / -	- / -	1 / 1.700	11 / 12.452
Subtotal: Procurement, All Modification Items	- / 9.059	- / -	- / -	- / -	- / -	- / -	- / 1.693	- / -	- / -	- / -	- / 1.700	- / 12.452
Installation												
Modification Item 1 of 1: ST001 - Propeller Blades & PLMU	- / 8.408	- / 0.270	- / -	- / -	- / -	- / -	- / 0.365	- / 1.362	- / -	- / -	- / 0.600	- / 11.005
Subtotal: Installation	- / 8.408	- / 0.270	- / -	- / -	- / -	- / -	- / 0.365	- / 1.362	- / -	- / -	- / 0.600	- / 11.005
Total												
Total Cost (Procurement + Support + Installation)	17.467	0.270	-	-	-	-	2.058	1.362	-	-	2.300	23.457

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015																					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16										P-1 Line Item Number / Title: 1610 / LSD Midlife										Modification Number / Title: 1 / ST001 - Propeller Blades & PLMU											
Modification Item 1 of 1: ST001 - Propeller Blades & PLMU																															
Manufacturer Information																															
Manufacturer Name: Rolls Royce															Manufacturer Location: Walpole, MA																
Administrative Leadtime (in Months): 2															Production Leadtime (in Months): 12																
Dates		FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020					
Contract Dates														Dec 2016																	
Delivery Dates														Dec 2017																	
Installation Information																															
Method of Implementation: SHIPYARD/AIT:: Installation Name: FMP Ship Units																															
Installation Cost		Prior Years		FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total		FY 2017		FY 2018		FY 2019		FY 2020		To Complete		Total							
		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)							
Prior Years		6 / 8.408		1 / 0.270		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		7 / 8.678					
FY 2014		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2015		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2016		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2017		- / -		- / -		- / -		- / -		- / -		- / -		- / 0.365		1 / 1.362		- / -		- / -		- / -		- / -		1 / 1.727					
FY 2018		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2019		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2020		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
To Complete		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		1 / 0.600		1 / 0.600					
Total		6 / 8.408		1 / 0.270		- / -		- / -		- / -		- / -		- / 0.365		1 / 1.362		- / -		- / -		- / -		1 / 0.600		9 / 11.005					
Installation Schedule																															
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	6	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	9
Out	6	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	9
Method of Implementation (Organic): Not Installed - End Item Spares																															
															Installation Quantity: 2																

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16	P-1 Line Item Number / Title: 1610 / LSD Midlife	Modification Number / Title: 2 / ST001 - Steering Control System

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	47.854	2.854	-	-	-	-	-	-	2.020	1.828	-	54.556
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	47.854	2.854	-	-	-	-	-	-	2.020	1.828	-	54.556
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	47.854	2.854	-	-	-	-	-	-	2.020	1.828	-	54.556
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

This SHIPALT replaces the analog Helm and Lee Helm Steering Consoles and equipment with an electronic, computerized Steering Control System (SCS) that integrates various navigation parameters, such as location (latitude, longitude) from GPS as well as pitch, roll, speed, heading, and wind. SCS will be designed to integrate with Electronic Chart Display and Information Systems-Navy (ECDIS-N) digital nautical charts. The existing Bridge control system was designed in the late 1970s and is near the end of its useful service life. Parts obsolescence is a rapidly growing and more costly problem on this maintenance intensive control system. The IBS also provides significantly enhanced operational and monitoring capabilities as well as real-time Navigation data. This system will reduce workload, provide significant readiness improvement, improve safety and provide cost avoidance.

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16				P-1 Line Item Number / Title: 1610 / LSD Midlife				Modification Number / Title: 2 / ST001 - Steering Control System					
Models of Systems Affected: Steering Control System				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: ST001 - Steering Control System													
B Kits													
Recurring													
1.1.1) Non-FMP Shore Site Units - NonOrganic	2 / 1.433	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 1.433	
1.1.2) FMP Ship Units - NonOrganic	11 / 9.582	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.820	- / -	- / -	12 / 10.402	
Subtotal: Recurring	- / 11.015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.820	- / -	- / -	- / 11.835	
Subtotal: ST001 - Steering Control System	13 / 11.015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.820	- / -	- / -	14 / 11.835	
Subtotal: Procurement, All Modification Items	- / 11.015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.820	- / -	- / -	- / 11.835	
Installation													
Modification Item 1 of 1: ST001 - Steering Control System	- / 36.839	- / 2.854	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.200	- / 1.828	- / -	- / 42.721	
Subtotal: Installation	- / 36.839	- / 2.854	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.200	- / 1.828	- / -	- / 42.721	
Total													
Total Cost (Procurement + Support + Installation)	47.854	2.854	-	-	-	-	-	-	2.020	1.828	-	54.556	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16	P-1 Line Item Number / Title: 1610 / LSD Midlife	Modification Number / Title: 2 / ST001 - Steering Control System

Modification Item 1 of 1: ST001 - Steering Control System

Manufacturer Information

Manufacturer Name: Henschel	Manufacturer Location: Newburyport, MA
Administrative Leadtime (in Months): 2	Production Leadtime (in Months): 12

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates						Dec 2018	
Delivery Dates						Dec 2019	

Installation Information

Method of Implementation: [none specified]:: Installation Name: Non-FMP Shore Site Units

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	2 / 7.102	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 7.102
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	2 / 7.102	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 7.102

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Out	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2

Method of Implementation: SHIPYARD/AIT:: Installation Name: FMP Ship Units

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	9 / 29.737	2 / 2.854	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	11 / 32.591
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16	P-1 Line Item Number / Title: 1610 / LSD Midlife	Modification Number / Title: 2 / ST001 - Steering Control System

Modification Item 1 of 1: ST001 - Steering Control System

Installation Information

Method of Implementation: SHIPYARD/AIT:: Installation Name: FMP Ship Units

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.200	1 / 1.828	- / -	1 / 3.028
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	9 / 29.737	2 / 2.854	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.200	1 / 1.828	- / -	12 / 35.619

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	9	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	12
Out	7	2	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	12

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16				P-1 Line Item Number / Title: 1610 / LSD Midlife				Modification Number / Title: 3 / ST001 - A/C Plant (LSD 44 -52)			

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	40.954	5.979	-	-	-	-	0.650	1.100	8.770	-	7.802	65.255
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	40.954	5.979	-	-	-	-	0.650	1.100	8.770	-	7.802	65.255
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	40.954	5.979	-	-	-	-	0.650	1.100	8.770	-	7.802	65.255
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

This Ship Change installs an additional ruggedized Coast Guard developed 130 Ton Air-Conditioning (A/C) Plant installed in a new auxiliary machinery room. Increased heat loads from additional/new equipment and increased chilled-water requirements from C4I upgrades have surpassed the A/C systems ability to meet HVAC Design Criteria for air conditioning and chilled-water.

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16				P-1 Line Item Number / Title: 1610 / LSD Midlife				Modification Number / Title: 3 / ST001 - A/C Plant (LSD 44 -52)					
Models of Systems Affected: A/C Plant (LSD44-52)			Modification Type:					Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: ST001 - A/C Plant (LSD 44 -52)													
B Kits													
Recurring													
1.1.1) FMP Ship Units - NonOrganic	7 / 4.412	- / -	- / -	- / -	- / -	- / -	1 / 0.550	- / -	- / -	- / -	1 / 0.500	9 / 5.462	
Subtotal: Recurring	- / 4.412	- / -	- / -	- / -	- / -	- / -	- / 0.550	- / -	- / -	- / -	- / 0.500	- / 5.462	
Subtotal: ST001 - A/C Plant (LSD 44 -52)	7 / 4.412	- / -	- / -	- / -	- / -	- / -	1 / 0.550	- / -	- / -	- / -	1 / 0.500	9 / 5.462	
Subtotal: Procurement, All Modification Items	- / 4.412	- / -	- / -	- / -	- / -	- / -	- / 0.550	- / -	- / -	- / -	- / 0.500	- / 5.462	
Installation													
Modification Item 1 of 1: ST001 - A/C Plant (LSD 44 -52)	- / 36.542	- / 5.979	- / -	- / -	- / -	- / -	- / 0.100	- / 1.100	- / 8.770	- / -	- / 7.302	- / 59.793	
Subtotal: Installation	- / 36.542	- / 5.979	- / -	- / -	- / -	- / -	- / 0.100	- / 1.100	- / 8.770	- / -	- / 7.302	- / 59.793	
Total													
Total Cost (Procurement + Support + Installation)	40.954	5.979	-	-	-	-	0.650	1.100	8.770	-	7.802	65.255	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015																					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16										P-1 Line Item Number / Title: 1610 / LSD Midlife										Modification Number / Title: 3 / ST001 - A/C Plant (LSD 44 -52)											
Modification Item 1 of 1: ST001 - A/C Plant (LSD 44 -52)																															
Manufacturer Information																															
Manufacturer Name: York Marine															Manufacturer Location: York, PA																
Administrative Leadtime (in Months): 2															Production Leadtime (in Months): 18																
Dates		FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020					
Contract Dates														Jun 2017																	
Delivery Dates														Dec 2018																	
Installation Information																															
Method of Implementation: SHIPYARD/AIT:: Installation Name: FMP Ship Units																															
Installation Cost		Prior Years		FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total		FY 2017		FY 2018		FY 2019		FY 2020		To Complete		Total							
		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)							
Prior Years		6 / 36.542		1 / 5.979		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		7 / 42.521					
FY 2014		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2015		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2016		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2017		- / -		- / -		- / -		- / -		- / -		- / -		- / 0.100		- / 1.100		1 / 8.770		- / -		- / -		- / -		1 / 9.970					
FY 2018		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2019		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2020		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
To Complete		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		1 / 7.302		1 / 7.302					
Total		6 / 36.542		1 / 5.979		- / -		- / -		- / -		- / -		- / 0.100		- / 1.100		1 / 8.770		- / -		1 / 7.302		9 / 59.793							
Installation Schedule																															
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	6	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	9
Out	4	2	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	9

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16	P-1 Line Item Number / Title: 1610 / LSD Midlife	Modification Number / Title: 4 / ST001 - 30T Deck Crane Control Sys

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	8.500	4.664	-	-	-	-	-	-	-	-	4.000	17.164
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	8.500	4.664	-	-	-	-	-	-	-	-	4.000	17.164
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	8.500	4.664	-	-	-	-	-	-	-	-	4.000	17.164
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

This ship change replaces the control system for the 30 Ton Crane with a modern, electronic, computerized control system. The existing 30 Ton Crane control system was designed in the late 1970s and is no longer logistically supported. Maintenance costs continue to be high due to the difficulty in obtaining repair parts and frequent failure of components. In addition, mission capability has been frequently degraded because the Deck Crane is required to support USMC amphibious assault landings and boat ops. New 30 Ton Crane Controls are expected to reduce Total Ownership Costs of the Crane. A five year payback period is expected.

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015						
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16				P-1 Line Item Number / Title: 1610 / LSD Midlife				Modification Number / Title: 4 / ST001 - 30T Deck Crane Control Sys						
Models of Systems Affected: 30T Deck Crane			Modification Type:						Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total		
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)		
Procurement														
Modification Item 1 of 1: ST001 - 30T Deck Crane Control Sys														
B Kits														
Recurring														
1.1.1) FMP Ship Units - NonOrganic ⁽¹⁾	3 / 5.400	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 1.600	4 / 7.000		
Subtotal: Recurring	- / 5.400	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.600	- / 7.000		
Subtotal: ST001 - 30T Deck Crane Control Sys	3 / 5.400	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 1.600	4 / 7.000		
Subtotal: Procurement, All Modification Items	- / 5.400	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.600	- / 7.000		
Installation														
Modification Item 1 of 1: ST001 - 30T Deck Crane Control Sys	- / 3.100	- / 4.664	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.400	- / 10.164		
Subtotal: Installation	- / 3.100	- / 4.664	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.400	- / 10.164		
Total														
Total Cost (Procurement + Support + Installation)	8.500	4.664	-	-	-	-	-	-	-	-	4.000	17.164		

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16	P-1 Line Item Number / Title: 1610 / LSD Midlife	Modification Number / Title: 4 / ST001 - 30T Deck Crane Control Sys

Modification Item 1 of 1: ST001 - 30T Deck Crane Control Sys

Manufacturer Information

Manufacturer Name: Rockwell	Manufacturer Location: Milwaukee, WI
Administrative Leadtime (in Months): 6	Production Leadtime (in Months): 12

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: SHIPYARD/AIT:: Installation Name: FMP Ship Units

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	1 / 3.100	2 / 4.664	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 7.764
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 2.400	1 / 2.400
Total	1 / 3.100	2 / 4.664	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 2.400	4 / 10.164

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	1	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4	
Out	1	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4	

Footnotes:

(1) Total Requirement is 4 for the Program. Congressional Add Funds procured 1 in PY.

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16	P-1 Line Item Number / Title: 1610 / LSD Midlife	Modification Number / Title: 5 / ST001 - Low Pressure Air Compressor

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	16.430	-	-	0.850	-	0.850	0.320	1.438	-	-	-	19.038
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	16.430	-	-	0.850	-	0.850	0.320	1.438	-	-	-	19.038
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	16.430	-	-	0.850	-	0.850	0.320	1.438	-	-	-	19.038
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

This Ship Change replaces the Low-Pressure Air Compressors (LPAC) with modern, oil-free compressors. Parts obsolescence is a rapidly growing and more costly problem on these maintenance intensive compressors. This Ship Change provides Return On Investment (ROI) through improved reliability and maintainability of LPACs and reduced maintenance by elimination of oil contamination of pneumatic controls components (new compressors are oil-free). In addition, the new compressors will provide significant readiness improvement through increased reliability of Vital, low-pressure air supply to Vital combat systems and the main propulsion controls.

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16					P-1 Line Item Number / Title: 1610 / LSD Midlife					Modification Number / Title: 5 / ST001 - Low Pressure Air Compressor			
Models of Systems Affected: LPAC				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
<i>Modification Item 1 of 1:</i> ST001 - Low Pressure Air Compressor													
B Kits													
Recurring													
1.1.1) FMP Ship Units - NonOrganic ⁽²⁾	7 / 5.730	- / -	- / -	1 / 0.750	- / -	1 / 0.750	- / -	- / -	- / -	- / -	- / -	8 / 6.480	
<i>Subtotal: Recurring</i>	- / 5.730	- / -	- / -	- / 0.750	- / -	- / 0.750	- / -	- / -	- / -	- / -	- / -	- / 6.480	
<i>Subtotal: ST001 - Low Pressure Air Compressor</i>	7 / 5.730	- / -	- / -	1 / 0.750	- / -	1 / 0.750	- / -	- / -	- / -	- / -	- / -	8 / 6.480	
<i>Subtotal: Procurement, All Modification Items</i>	- / 5.730	- / -	- / -	- / 0.750	- / -	- / 0.750	- / -	- / -	- / -	- / -	- / -	- / 6.480	
Installation													
<i>Modification Item 1 of 1:</i> ST001 - Low Pressure Air Compressor	- / 10.700	- / -	- / -	- / 0.100	- / -	- / 0.100	- / 0.320	- / 1.438	- / -	- / -	- / -	- / 12.558	
<i>Subtotal: Installation</i>	- / 10.700	- / -	- / -	- / 0.100	- / -	- / 0.100	- / 0.320	- / 1.438	- / -	- / -	- / -	- / 12.558	
Total													
Total Cost (Procurement + Support + Installation)	16.430	-	-	0.850	-	0.850	0.320	1.438	-	-	-	19.038	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16	P-1 Line Item Number / Title: 1610 / LSD Midlife	Modification Number / Title: 5 / ST001 - Low Pressure Air Compressor

Modification Item 1 of 1: ST001 - Low Pressure Air Compressor

Manufacturer Information

Manufacturer Name: RIX	Manufacturer Location: Benecia, CA
Administrative Leadtime (in Months): 2	Production Leadtime (in Months): 16

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates			Aug 2016				
Delivery Dates			Dec 2017				

Installation Information

Method of Implementation: SHIPYARD/AIT:: Installation Name: FMP Ship Units

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	7 / 10.700	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	7 / 10.700
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / 0.100	- / -	- / 0.100	- / 0.320	1 / 1.438	- / -	- / -	- / -	1 / 1.858
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	7 / 10.700	- / -	- / -	- / 0.100	- / -	- / 0.100	- / 0.320	1 / 1.438	- / -	- / -	- / -	8 / 12.558

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	8
Out	6	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	8

Footnotes:

⁽²⁾ Shipset equals 3 LPAC to be installed on LSD 46. FY16 DSA efforts are required in order to re-compete the procurement and award contract for LSD 46 LPACs.

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16				P-1 Line Item Number / Title: 1610 / LSD Midlife						Modification Number / Title: 6 / ST001 - RO & Generators		
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	387.709	56.532	-	-	-	-	-	-	-	-	-	444.241
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	387.709	56.532	-	-	-	-	-	-	-	-	-	444.241
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	387.709	56.532	-	-	-	-	-	-	-	-	-	444.241
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

This SHIPALT removes the auxiliary boilers and steam system equipment and replaces them with electrical equipment including Reverse Osmosis (RO) desalineators which replace the steam evaporators, and numerous electric heaters and galley equipment replacing their steam counterparts. This SHIPALT provides significant Return On Investment (ROI) through improved reliability and maintainability of electrical ship systems/equipment versus the obsolete and maintenance intensive steam systems/equipment. Also, additional electrical plant loads will improve efficient operation of the currently under-loaded SSDGs and contribute to the ROI through reduced maintenance costs for the SSDGs. These ship systems will also increase ships force safety and eliminate personnel hazards from steam.

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015						
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16				P-1 Line Item Number / Title: 1610 / LSD Midlife				Modification Number / Title: 6 / ST001 - RO & Generators						
Models of Systems Affected: RO Generator			Modification Type:						Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total		
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)		
Procurement														
Modification Item 1 of 1: ST001 - RO & Generators														
B Kits														
Recurring														
1.1.1) FMP Ship Units - NonOrganic	11 / 110.599	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	11 / 110.599		
Subtotal: Recurring	- / 110.599	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 110.599		
Subtotal: ST001 - RO & Generators	11 / 110.599	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	11 / 110.599		
Subtotal: Procurement, All Modification Items	- / 110.599	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 110.599		
Installation														
Modification Item 1 of 1: ST001 - RO & Generators	- / 277.110	- / 56.532	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 333.642		
Subtotal: Installation	- / 277.110	- / 56.532	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 333.642		
Total														
Total Cost (Procurement + Support + Installation)	387.709	56.532	-	-	-	-	-	-	-	-	-	444.241		

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16	P-1 Line Item Number / Title: 1610 / LSD Midlife	Modification Number / Title: 6 / ST001 - RO & Generators

Modification Item 1 of 1: ST001 - RO & Generators

Manufacturer Information

Manufacturer Name: Aqua-Chem	Manufacturer Location: Knoxville, TN
Administrative Leadtime (in Months): 2	Production Leadtime (in Months): 21

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: SHIPYARD/AIT:: Installation Name: FMP Ship Units

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	9 / 277.110	2 / 56.532	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	11 / 333.642
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	9 / 277.110	2 / 56.532	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	11 / 333.642

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	9	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11
Out	7	2	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16				P-1 Line Item Number / Title: 1610 / LSD Midlife						Modification Number / Title: 7 / ST001 - Canned Lube Oil Pump		
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	14.610	1.144	-	-	-	-	-	-	1.181	1.781	-	18.716
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	14.610	1.144	-	-	-	-	-	-	1.181	1.781	-	18.716
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	14.610	1.144	-	-	-	-	-	-	1.181	1.781	-	18.716
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: Procures and installs a lube oil pump and controllers for the main four (4) propulsion diesel engines, including piping and sensor modifications.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16				P-1 Line Item Number / Title: 1610 / LSD Midlife				Modification Number / Title: 7 / ST001 - Canned Lube Oil Pump					
Models of Systems Affected: Canned Lube Oil Pump				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: ST001 - Canned Lube Oil Pump													
B Kits													
Recurring													
1.1.1) FMP Ship Units - NonOrganic ⁽³⁾	11 / 7.695	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.766	- / -	- / -	12 / 8.461	
Subtotal: Recurring	- / 7.695	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.766	- / -	- / -	- / 8.461	
Subtotal: ST001 - Canned Lube Oil Pump	11 / 7.695	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.766	- / -	- / -	12 / 8.461	
Subtotal: Procurement, All Modification Items	- / 7.695	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.766	- / -	- / -	- / 8.461	
Installation													
Modification Item 1 of 1: ST001 - Canned Lube Oil Pump	- / 6.915	- / 1.144	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.415	- / 1.781	- / -	- / 10.255	
Subtotal: Installation	- / 6.915	- / 1.144	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.415	- / 1.781	- / -	- / 10.255	
Total													
Total Cost (Procurement + Support + Installation)	14.610	1.144	-	-	-	-	-	-	1.181	1.781	-	18.716	

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Exhibit P-3a, Individual Modification: PB 2016 Navy							Date: February 2015																									
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16				P-1 Line Item Number / Title: 1610 / LSD Midlife				Modification Number / Title: 7 / ST001 - Canned Lube Oil Pump																								
Modification Item 1 of 1: ST001 - Canned Lube Oil Pump																																
Manufacturer Information																																
Manufacturer Name: IMO Pumps							Manufacturer Location: Monroe, NC																									
Administrative Leadtime (in Months): 2							Production Leadtime (in Months): 10																									
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020																									
Contract Dates						Jan 2019																										
Delivery Dates						Dec 2019																										
Installation Information																																
Method of Implementation: SHIPYARD/AIT:: Installation Name: FMP Ship Units																																
Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total																				
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)																				
Prior Years	9 / 6.915	2 / 1.144	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	11 / 8.059																				
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																				
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																				
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																				
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																				
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																				
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.415	1 / 1.781	- / -	1 / 2.196																				
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																				
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -																				
Total	9 / 6.915	2 / 1.144	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.415	1 / 1.781	- / -	12 / 10.255																				
Installation Schedule																																
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
In	9	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	12	
Out	7	2	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	12	
Footnotes:																																
⁽³⁾ Total requirement is 11. Congressional Add Funds procured 5 and installed 3 in PY.																																

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Exhibit P-3a, Individual Modification: PB 2016 Navy									Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16				P-1 Line Item Number / Title: 1610 / LSD Midlife					Modification Number / Title: 8 / ST001 - Tech Refresh			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	0.000	1.977	-	-	-	-	-	-	-	-	-	1.977
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	0.000	1.977	-	-	-	-	-	-	-	-	-	1.977
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	0.000	1.977	-	-	-	-	-	-	-	-	-	1.977
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: Upgrades to internal computer hardware and software on the Mid-Life Installed control systems for the Propulsion Load Management Unit (PLMU), Steering Control System and RO & Generators on the earlier installations of these systems in accordance with standard Navy Computer Control System Tech Refresh requirements.												

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015						
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16				P-1 Line Item Number / Title: 1610 / LSD Midlife				Modification Number / Title: 8 / ST001 - Tech Refresh						
Models of Systems Affected: Tech Refresh			Modification Type:						Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total		
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)		
Procurement														
Modification Item 1 of 1: ST001 - Tech Refresh														
B Kits														
Recurring														
1.1.1) Tech Refresh - NonOrganic	- / -	4 / 1.467	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 1.467		
Subtotal: Recurring	- / 0.000	- / 1.467	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.467		
Subtotal: ST001 - Tech Refresh	- / -	4 / 1.467	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 1.467		
Subtotal: Procurement, All Modification Items	- / 0.000	- / 1.467	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.467		
Installation														
Modification Item 1 of 1: ST001 - Tech Refresh	- / 0.000	- / 0.510	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.510		
Subtotal: Installation	- / 0.000	- / 0.510	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.510		
Total														
Total Cost (Procurement + Support + Installation)	0.000	1.977	-	-	-	-	-	-	-	-	-	1.977		

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015																					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16										P-1 Line Item Number / Title: 1610 / LSD Midlife										Modification Number / Title: 8 / ST001 - Tech Refresh											
Modification Item 1 of 1: ST001 - Tech Refresh																															
Manufacturer Information																															
Manufacturer Name: Various															Manufacturer Location: Various																
Administrative Leadtime (in Months): 1															Production Leadtime (in Months): 3																
Dates		FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020					
Contract Dates		Jan 2014																													
Delivery Dates		Apr 2014																													
Installation Information																															
Method of Implementation: AIT:: Installation Name: Tech Refresh																															
Installation Cost		Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total		FY 2017		FY 2018		FY 2019		FY 2020		To Complete		Total								
		Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)								
Prior Years		- / -	- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -						
FY 2014		- / -	4 / 0.510		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		4 / 0.510						
FY 2015		- / -	- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -						
FY 2016		- / -	- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -						
FY 2017		- / -	- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -						
FY 2018		- / -	- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -						
FY 2019		- / -	- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -						
FY 2020		- / -	- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -						
To Complete		- / -	- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -						
Total		- / -	4 / 0.510		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		4 / 0.510						
Installation Schedule																															
	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
Out	-	-	-	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16	P-1 Line Item Number / Title: 1610 / LSD Midlife	Modification Number / Title: 9 / ST001 - Generators & Elect Distribution

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	0.000	-	-	1.924	-	1.924	5.251	16.807	-	-	-	23.982
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	0.000	-	-	1.924	-	1.924	5.251	16.807	-	-	-	23.982
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	0.000	-	-	1.924	-	1.924	5.251	16.807	-	-	-	23.982
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

This SHIPALT replaces the generator on the Ship Service Diesel Generators (SSDG) with a higher wattage version and increased electric distribution capability for shore power, switchboard and load centers. This SHIPALT provides significant Return on Investment (ROI) through improved reliability and maintainability of electrical ship systems/equipment versus the obsolete and maintenance intensive equipment. Also, additional electrical plant loads will improve efficient operation of the currently under-loaded SSDGs and contribute to the ROI through reduced maintenance costs for the SSDGs.

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16				P-1 Line Item Number / Title: 1610 / LSD Midlife						Modification Number / Title: 9 / ST001 - Generators & Elect Distribution			
Models of Systems Affected: Generators & Elect Distribution				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
<i>Modification Item 1 of 1:</i> ST001 - Generators & Elect Distribution													
B Kits													
Recurring													
2.1.1) FMP Ship Units - NonOrganic ⁽⁴⁾	- / -	- / -	- / -	1 / 1.738	- / -	1 / 1.738	- / 2.503	- / 0.650	- / -	- / -	- / -	1 / 4.891	
<i>Subtotal: Recurring</i>	- / 0.000	- / -	- / -	- / 1.738	- / -	- / 1.738	- / 2.503	- / 0.650	- / -	- / -	- / -	- / 4.891	
<i>Subtotal: ST001 - Generators & Elect Distribution</i>	- / -	- / -	- / -	1 / 1.738	- / -	1 / 1.738	- / 2.503	- / 0.650	- / -	- / -	- / -	1 / 4.891	
<i>Subtotal: Procurement, All Modification Items</i>	- / 0.000	- / -	- / -	- / 1.738	- / -	- / 1.738	- / 2.503	- / 0.650	- / -	- / -	- / -	- / 4.891	
Support (All Modification Items)													
3.1) New Cost Element.	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
<i>Subtotal: Support</i>	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Installation													
<i>Modification Item 1 of 1:</i> ST001 - Generators & Elect Distribution	- / 0.000	- / -	- / -	- / 0.186	- / -	- / 0.186	- / 2.748	- / 16.157	- / -	- / -	- / -	- / 19.091	
<i>Subtotal: Installation</i>	- / 0.000	- / -	- / -	- / 0.186	- / -	- / 0.186	- / 2.748	- / 16.157	- / -	- / -	- / -	- / 19.091	
Total													
Total Cost (Procurement + Support + Installation)	0.000	-	-	1.924	-	1.924	5.251	16.807	-	-	-	23.982	

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Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16	P-1 Line Item Number / Title: 1610 / LSD Midlife	Modification Number / Title: 9 / ST001 - Generators & Elect Distribution

Modification Item 1 of 1: ST001 - Generators & Elect Distribution

Manufacturer Information

Manufacturer Name: Awua-Chem	Manufacturer Location: Knoxville, TN
Administrative Leadtime (in Months): 2	Production Leadtime (in Months): 21

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates			Mar 2016	Jan 2017			
Delivery Dates			Dec 2017	Dec 2017			

Installation Information

Method of Implementation: SHIPYARD/AIT:: Installation Name: FMP Ship Units

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / 0.186	- / -	- / 0.186	- / 2.748	1 / 16.157	- / -	- / -	- / -	1 / 19.091
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	- / 0.186	- / -	- / 0.186	- / 2.748	1 / 16.157	- / -	- / -	- / -	1 / 19.091

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1

Footnotes:

⁽⁴⁾ The replacement generator to be installed in FY18 for LSD-46 is procured in components and is budgeted in FY16, FY17, and FY18 based on the production lead-times of individual components. FY16 funding is required to procure generator couplings, load centers, shore power receptacles, and shore power switchboard with lead-times ranging from 16 to 21 months.

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Exhibit P-3a, Individual Modification: PB 2016 Navy								Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16				P-1 Line Item Number / Title: 1610 / LSD Midlife					Modification Number / Title: 10 / ST001 - Reverse Osmosis & Elect Water Heaters			

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	0.000	-	-	-	-	-	-	-	9.597	23.468	-	33.065
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	0.000	-	-	-	-	-	-	-	9.597	23.468	-	33.065
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	0.000	-	-	-	-	-	-	-	9.597	23.468	-	33.065
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

This SHIPALT removes the auxiliary boilers and steam system equipment and replaces them with electrical equipment including Reverse Osmosis (RO) desalinators which replace the steam evaporators, a centralized hot water heating system, high purity RO units and numerous electric heaters and galley equipment replacing their steam counterparts. This SHIPALT provides significant Return On Investment (ROI) through improved reliability and maintainability of electrical ship systems/equipment versus the obsolete and maintenance intensive steam systems/equipment. Also, additional electrical plant loads will improve efficient operation of the currently under-loaded SSDGs and contribute to the ROI through reduced maintenance costs for the SSDGs. These ship systems will also increase ships force safety and eliminate personnel hazards from steam.

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16				P-1 Line Item Number / Title: 1610 / LSD Midlife						Modification Number / Title: 10 / ST001 - Reverse Osmosis & Elect Water Heaters			
Models of Systems Affected: Reverse Osmosis & Elect Water Heaters				Modification Type:						Related RDT&E PEs:			
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
<i>Modification Item 1 of 1:</i> ST001 - Reverse Osmosis & Elect Water Heaters													
B Kits													
Recurring													
2.1.1) FMP Ship Units - NonOrganic	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 6.607	- / 1.232	- / -	1 / 7.839	
<i>Subtotal: Recurring</i>	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 6.607	- / 1.232	- / -	- / 7.839	
<i>Subtotal: ST001 - Reverse Osmosis & Elect Water Heaters</i>	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 6.607	- / 1.232	- / -	1 / 7.839	
<i>Subtotal: Procurement, All Modification Items</i>	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 6.607	- / 1.232	- / -	- / 7.839	
Support (All Modification Items)													
3.1) New Cost Element.	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
<i>Subtotal: Support</i>	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Installation													
<i>Modification Item 1 of 1:</i> ST001 - Reverse Osmosis & Elect Water Heaters	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.990	- / 22.236	- / -	- / 25.226	
<i>Subtotal: Installation</i>	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.990	- / 22.236	- / -	- / 25.226	
Total													
Total Cost (Procurement + Support + Installation)	0.000	-	-	-	-	-	-	-	9.597	23.468	-	33.065	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy				Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16		P-1 Line Item Number / Title: 1610 / LSD Midlife			Modification Number / Title: 10 / ST001 - Reverse Osmosis & Elect Water Heaters		

Modification Item 1 of 1: ST001 - Reverse Osmosis & Elect Water Heaters

Manufacturer Information

Manufacturer Name: Aqua-Chem				Manufacturer Location: Knoxville, TN			
Administrative Leadtime (in Months): 2				Production Leadtime (in Months): 11			

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates						Jan 2019	
Delivery Dates						Dec 2019	

Installation Information

Method of Implementation: SHIPYARD/AIT:: Installation Name: FMP Ship Units

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.990	1 / 22.236	- / -	1 / 25.226
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.990	1 / 22.236	- / -	1 / 25.226

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16	P-1 Line Item Number / Title: 1610 / LSD Midlife	Modification Number / Title: 11 / ST001 - 60T Deck Crane Control Sys

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	0.000	-	-	-	-	-	3.009	1.012	4.956	-	-	8.977
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	0.000	-	-	-	-	-	3.009	1.012	4.956	-	-	8.977
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	0.000	-	-	-	-	-	3.009	1.012	4.956	-	-	8.977
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

This ship change replaces the control system, motors, drives and other equipment for the 60 Ton Crane with a modern, electronic, computerized control system motors; and drives for slew, luff and hoist are all replaced and additional cooling ventilation added. The existing 60 Ton Crane control system was designed in the late 1970s and is no longer logistically supported. Maintenance costs continue to be high due to the difficulty in obtaining repair parts and frequent failure of components. In addition, mission capability has been frequently degraded because the Deck Crane is required to support USMC amphibious assault landings and boat ops. New 60 Ton Crane Controls are expected to reduce Total Ownership Costs of the Crane. A five year payback period is expected.

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Exhibit P-3a, Individual Modification: PB 2016 Navy										Date: February 2015			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16					P-1 Line Item Number / Title: 1610 / LSD Midlife					Modification Number / Title: 11 / ST001 - 60T Deck Crane Control Sys			
Models of Systems Affected: 60T Deck Crane				Modification Type:				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
<i>Modification Item 1 of 1:</i> ST001 - 60T Deck Crane Control Sys													
B Kits													
Recurring													
2.1.1) FMP Ship Units - NonOrganic	- / -	- / -	- / -	- / -	- / -	- / -	1 / 2.909	- / -	- / -	- / -	- / -	1 / 2.909	
<i>Subtotal: Recurring</i>	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / 2.909	- / -	- / -	- / -	- / -	- / 2.909	
<i>Subtotal: ST001 - 60T Deck Crane Control Sys</i>	- / -	- / -	- / -	- / -	- / -	- / -	1 / 2.909	- / -	- / -	- / -	- / -	1 / 2.909	
<i>Subtotal: Procurement, All Modification Items</i>	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / 2.909	- / -	- / -	- / -	- / -	- / 2.909	
Support (All Modification Items)													
3.1) New Cost Element.	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
<i>Subtotal: Support</i>	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Installation													
<i>Modification Item 1 of 1:</i> ST001 - 60T Deck Crane Control Sys	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / 0.100	- / 1.012	- / 4.956	- / -	- / -	- / 6.068	
<i>Subtotal: Installation</i>	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / 0.100	- / 1.012	- / 4.956	- / -	- / -	- / 6.068	
Total													
Total Cost (Procurement + Support + Installation)	0.000	-	-	-	-	-	3.009	1.012	4.956	-	-	8.977	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Navy		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 01 / 16	P-1 Line Item Number / Title: 1610 / LSD Midlife	Modification Number / Title: 11 / ST001 - 60T Deck Crane Control Sys

Modification Item 1 of 1: ST001 - 60T Deck Crane Control Sys

Manufacturer Information

Manufacturer Name: Rockwell	Manufacturer Location: Milwaukee, WI
Administrative Leadtime (in Months): 6	Production Leadtime (in Months): 17

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates				Jul 2017			
Delivery Dates				Dec 2018			

Installation Information

Method of Implementation: SHIPYARD/AIT:: Installation Name: FMP Ship Units

Installation Cost	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.100	- / 1.012	1 / 4.956	- / -	- / -	1 / 6.068
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.100	- / 1.012	1 / 4.956	- / -	- / -	1 / 6.068

Installation Schedule

	PYS	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1