Department of Defense
Fiscal Year (FY) 2018 Budget Estimates

May 2017

Navy

Justification Book Volume 5 of 5

Other Procurement, Navy

BA 5−8

The estimated cost for this report for the Department of Navy (DON) is $12,364.

The estimated total cost for supporting the DON budget justification material is approximately $1,142,960 for the 2017 fiscal year. This includes $76,659 in supplies and $1,066,301 in labor.

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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, $8,497,848,000, to remain available for obligation until September 30, 2020.

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Department of the Navy
FY 2018 President's Budget Request
Exhibit P-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

Appropriation	FY 2016 Base + OCO	FY 2017 PB Request with CR Adj Base	FY 2017 Total PB Requests* with CR Adj Base
Other Procurement, Navy	6,585,466	6,471,930	6,689,919
Total Department of the Navy	6,585,466	6,471,930	6,689,919

Department of the Navy
FY 2018 President's Budget Request
Exhibit P-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

Appropriation	FY 2017 PB Request with CR Adj OCO	FY 2017 Total PB Requests* with CR Adj OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj OCO
Other Procurement, Navy	12,186	22,686		22,686
Total Department of the Navy	12,186	22,686		22,686

Department of the Navy
FY 2018 President's Budget Request
Exhibit P-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

Appropriation	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA	FY 2017 Total PB Requests* with CR Adj Base + OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj Base + OCO
Other Procurement, Navy	6,484,116	6,712,605		6,712,605
Total Department of the Navy	6,484,116	6,712,605		6,712,605

Department of the Navy
FY 2018 President's Budget Request
Exhibit P-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

Appropriation	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Other Procurement, Navy	8,277,789	220,059	8,497,848
Total Department of the Navy	8,277,789	220,059	8,497,848

Department of the Navy
FY 2018 President's Budget Request
Exhibit P-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

Appropriation: Other Procurement, Navy

Budget Activity	FY 2016 Base + OCO	FY 2017 PB Request with CR Adj Base	FY 2017 Total PB Requests* with CR Adj Base
01. Ships Support Equipment	1,942,753	1,878,390	1,948,076
02. Communications & Electronics Equip	2,347,567	2,122,908	2,184,808
03. Aviation Support Equipment	419,644	439,109	439,109
04. Ordnance Support Equipment	852,190	933,565	982,065
05. Civil Engineering Support Equip	55,671	84,345	84,345
06. Supply Support Equipment	247,302	316,609	316,609
07. Personnel & Command Support Equip	444,006	364,275	402,178
08. Spares and Repair Parts	276,333	199,660	199,660
20. Undistributed		133,069	133,069
Total Other Procurement, Navy	6,585,466	6,471,930	6,689,919

Department of the Navy
FY 2018 President's Budget Request
Exhibit P-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

Appropriation: Other Procurement, Navy

Budget Activity	FY 2017 PB Request with CR Adj OCO	FY 2017 Total PB Requests* with CR Adj OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj OCO
01. Ships Support Equipment				
02. Communications & Electronics Equip	12,000	12,000		12,000
03. Aviation Support Equipment				
04. Ordnance Support Equipment	99,329	104,829		104,829
05. Civil Engineering Support Equip	630	630		630
06. Supply Support Equipment	25	25		25
07. Personnel & Command Support Equip	12,222	17,222		17,222
08. Spares and Repair Parts				
20. Undistributed	-112,020	-112,020		-112,020
Total Other Procurement, Navy	12,186	22,686		22,686

Department of the Navy
FY 2018 President's Budget Request
Exhibit P-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

Appropriation: Other Procurement, Navy

Budget Activity	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA	FY 2017 Total PB Requests* with CR Adj Base + OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj Base + OCO
01. Ships Support Equipment	1,878,390	1,948,076		1,948,076
02. Communications & Electronics Equip	2,134,908	2,196,808		2,196,808
03. Aviation Support Equipment	439,109	439,109		439,109
04. Ordnance Support Equipment	1,032,894	1,086,894		1,086,894
05. Civil Engineering Support Equip	84,975	84,975		84,975
06. Supply Support Equipment	316,634	316,634		316,634
07. Personnel & Command Support Equip	376,497	419,400		419,400
08. Spares and Repair Parts	199,660	199,660		199,660
20. Undistributed	21,049	21,049		21,049
Total Other Procurement, Navy	6,484,116	6,712,605		6,712,605

Department of the Navy
FY 2018 President's Budget Request
Exhibit P-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

Appropriation: Other Procurement, Navy

Budget Activity	FY 2018 Base	FY 2018 OCO	FY 2018 Total
01. Ships Support Equipment	3,076,818	30,348	3,107,166
02. Communications & Electronics Equip	2,565,260	62,622	2,627,882
03. Aviation Support Equipment	441,542	29,245	470,787
04. Ordnance Support Equipment	929,371	34,406	963,777
05. Civil Engineering Support Equip	99,619	5,136	104,755
06. Supply Support Equipment	510,285	584	510,869
07. Personnel & Command Support Equip	376,329	56,540	432,869
08. Spares and Repair Parts	278,565	1,178	279,743
20. Undistributed			
Total Other Procurement, Navy	8,277,789	220,059	8,497,848

Department of the Navy
FY 2018 President's Budget Request
Exhibit P-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2016 Base + OCO Quantity	FY 2016 Base + OCO Cost	FY 2017 PB Request with CR Adj Base Quantity	FY 2017 PB Request with CR Adj Base Cost	FY 2017 Total PB Requests* with CR Adj Base Quantity	FY 2017 Total PB Requests* with CR Adj Base Cost	Sec
	Budget Activity 01: Ships Support Equipment								
	Ship Propulsion Equipment								
1	LM-2500 Gas Turbine	A		4,881					U
2	Allison 501k Gas Turbine	A		5,814					U
3	Surface Power Equipment	A				15,514		15,514	U
4	Hybrid Electric Drive (HED)			29,106		40,132		15,132	U
	Generators								
5	Surface Combatant HM&E	A		36,860		29,974		29,974	U
	Navigation Equipment								
6	Other Navigation Equipment	A		63,481		63,942		63,942	U
	Periscopes								
7	Sub Periscopes & Imaging Equip	A		63,109					U
	Other Shipboard Equipment								
8	Sub Periscope, Imaging and Supt Equip Prog	A				136,421		154,421	U
9	DDG Mod	A		421,195		367,766		432,766	U
10	Firefighting Equipment	A		13,983		14,743		14,743	U
11	Command and Control Switchboard	A		2,255		2,140		2,140	U
12	LHA/LHD Midlife	A		11,017		24,939		24,939	U
13	LCC 19/20 Extended Service Life Program	A		8,631					U

Department of the Navy
FY 2018 President's Budget Request
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Total Obligational Authority
(Dollars in Thousands)

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2017 PB Request with CR Adj OCO Quantity	FY 2017 PB Request with CR Adj OCO Cost	FY 2017 Total PB Requests* with CR Adj OCO Quantity	FY 2017 Total PB Requests* with CR Adj OCO Cost	FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity	FY 2017 Less Enacted Div B P.L.114-254** OCO Cost	FY 2017 Remaining Req with CR Adj OCO Quantity	FY 2017 Remaining Req with CR Adj OCO Cost	Sec
	Budget Activity 01: Ships Support Equipment										
	Ship Propulsion Equipment										
1	LM-2500 Gas Turbine	A									U
2	Allison 501k Gas Turbine	A									U
3	Surface Power Equipment	A									U
4	Hybrid Electric Drive (HED)										U
	Generators										
5	Surface Combatant HM&E	A									U
	Navigation Equipment										
6	Other Navigation Equipment	A									U
	Periscopes										
7	Sub Periscopes & Imaging Equip	A									U
	Other Shipboard Equipment										
8	Sub Periscope, Imaging and Supt Equip Prog	A									U
9	DDG Mod	A									U
10	Firefighting Equipment	A									U
11	Command and Control Switchboard	A									U
12	LHA/LHD Midlife	A									U
13	LCC 19/20 Extended Service Life Program	A									U

Department of the Navy
FY 2018 President's Budget Request
Exhibit P-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA Quantity	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA Cost	FY 2017 Total PB Requests* with CR Adj Base + OCO Quantity	FY 2017 Total PB Requests* with CR Adj Base + OCO Cost	FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity	FY 2017 Less Enacted Div B P.L.114-254** OCO Cost	FY 2017 Remaining Req with CR Adj Base + OCO Quantity	FY 2017 Remaining Req with CR Adj Base + OCO Cost	Sec
	Budget Activity 01: Ships Support Equipment										
	Ship Propulsion Equipment										
1	LM-2500 Gas Turbine	A									U
2	Allison 501k Gas Turbine	A									U
3	Surface Power Equipment	A		15,514		15,514				15,514	U
4	Hybrid Electric Drive (HED)			40,132		15,132				15,132	U
	Generators										
5	Surface Combatant HM&E	A		29,974		29,974				29,974	U
	Navigation Equipment										
6	Other Navigation Equipment	A		63,942		63,942				63,942	U
	Periscopes										
7	Sub Periscopes & Imaging Equip	A									U
	Other Shipboard Equipment										
8	Sub Periscope, Imaging and Supt Equip Prog	A		136,421		154,421				154,421	U
9	DDG Mod	A		367,766		432,766				432,766	U
10	Firefighting Equipment	A		14,743		14,743				14,743	U
11	Command and Control Switchboard	A		2,140		2,140				2,140	U
12	LHA/LHD Midlife	A		24,939		24,939				24,939	U
13	LCC 19/20 Extended Service Life Program	A									U

Department of the Navy
FY 2018 President's Budget Request
Exhibit P-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2018 Base Quantity	FY 2018 Base Cost	FY 2018 OCO Quantity	FY 2018 OCO Cost	FY 2018 Total Quantity	FY 2018 Total Cost	Sec
	Budget Activity 01: Ships Support Equipment								
	Ship Propulsion Equipment								
1	LM-2500 Gas Turbine	A							U
2	Allison 501k Gas Turbine	A							U
3	Surface Power Equipment	A		41,910				41,910	U
4	Hybrid Electric Drive (HED)			6,331				6,331	U
	Generators								
5	Surface Combatant HM&E	A		27,392				27,392	U
	Navigation Equipment								
6	Other Navigation Equipment	A		65,943				65,943	U
	Periscopes								
7	Sub Periscopes & Imaging Equip	A							U
	Other Shipboard Equipment								
8	Sub Periscope, Imaging and Supt Equip Prog	A		151,240				151,240	U
9	DDG Mod	A		603,355				603,355	U
10	Firefighting Equipment	A		15,887				15,887	U
11	Command and Control Switchboard	A		2,240				2,240	U
12	LHA/LHD Midlife	A		30,287				30,287	U
13	LCC 19/20 Extended Service Life Program	A							U

Department of the Navy
FY 2018 President's Budget Request
Exhibit P-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2016 Base + OCO Quantity	FY 2016 Base + OCO Cost	FY 2017 PB Request with CR Adj Base Quantity	FY 2017 PB Request with CR Adj Base Cost	FY 2017 Total PB Requests* with CR Adj Base Quantity	FY 2017 Total PB Requests* with CR Adj Base Cost	Sec
14	Pollution Control Equipment	B		16,609		20,191		20,191	U
15	Submarine Support Equipment	A		10,498		8,995		8,995	U
16	Virginia Class Support Equipment	A		35,747		66,838		66,838	U
17	LCS Class Support Equipment			39,349		54,823		54,823	U
18	Submarine Batteries			23,072		23,359		23,359	U
19	LPD Class Support Equipment			37,929		40,321		40,321	U
20	DDG 1000 Class Support Equipment	A				33,404		33,404	U
21	Strategic Platform Support Equip	A		18,563		15,836		15,836	U
22	DSSP Equipment	A		8,851		806		806	U
23	CG Modernization	A		99,500					U
24	LCAC	A		15,125		3,090		3,090	U
25	Underwater EOD Programs			51,652		24,350		24,350	U
26	Items Less Than $5 Million	A		89,349		88,719		88,719	U
27	Chemical Warfare Detectors	A		3,027		2,873		2,873	U
28	Submarine Life Support System	A		7,399		6,043		6,043	U
	Reactor Plant Equipment								
29	Reactor Power Units	A							U
30	Reactor Components	A		296,095		342,158		342,158	U
	Ocean Engineering								
31	Diving and Salvage Equipment	A		15,982		8,973		8,973	U

Department of the Navy
FY 2018 President's Budget Request
Exhibit P-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2017 PB Request with CR Adj OCO Quantity	FY 2017 PB Request with CR Adj OCO Cost	FY 2017 Total PB Requests* with CR Adj OCO Quantity	FY 2017 Total PB Requests* with CR Adj OCO Cost	FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity	FY 2017 Less Enacted Div B P.L.114-254** OCO Cost	FY 2017 Remaining Req with CR Adj OCO Quantity	FY 2017 Remaining Req with CR Adj OCO Cost	Sec
14	Pollution Control Equipment	B									U
15	Submarine Support Equipment	A									U
16	Virginia Class Support Equipment	A									U
17	LCS Class Support Equipment										U
18	Submarine Batteries										U
19	LPD Class Support Equipment										U
20	DDG 1000 Class Support Equipment	A									U
21	Strategic Platform Support Equip	A									U
22	DSSP Equipment	A									U
23	CG Modernization	A									U
24	LCAC	A									U
25	Underwater EOD Programs										U
26	Items Less Than $5 Million	A									U
27	Chemical Warfare Detectors	A									U
28	Submarine Life Support System	A									U
	Reactor Plant Equipment										
29	Reactor Power Units	A									U
30	Reactor Components	A									U
	Ocean Engineering										
31	Diving and Salvage Equipment	A									U

Department of the Navy
FY 2018 President's Budget Request
Exhibit P-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA Quantity	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA Cost	FY 2017 Total PB Requests* with CR Adj Base + OCO Quantity	FY 2017 Total PB Requests* with CR Adj Base + OCO Cost	FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity	FY 2017 Less Enacted Div B P.L.114-254** OCO Cost	FY 2017 Remaining Req with CR Adj Base + OCO Quantity	FY 2017 Remaining Req with CR Adj Base + OCO Cost	Sec
14	Pollution Control Equipment	B		20,191		20,191				20,191	U
15	Submarine Support Equipment	A		8,995		8,995				8,995	U
16	Virginia Class Support Equipment	A		66,838		66,838				66,838	U
17	LCS Class Support Equipment			54,823		54,823				54,823	U
18	Submarine Batteries			23,359		23,359				23,359	U
19	LPD Class Support Equipment			40,321		40,321				40,321	U
20	DDG 1000 Class Support Equipment	A		33,404		33,404				33,404	U
21	Strategic Platform Support Equip	A		15,836		15,836				15,836	U
22	DSSP Equipment	A		806		806				806	U
23	CG Modernization	A									U
24	LCAC	A		3,090		3,090				3,090	U
25	Underwater EOD Programs			24,350		24,350				24,350	U
26	Items Less Than $5 Million	A		88,719		88,719				88,719	U
27	Chemical Warfare Detectors	A		2,873		2,873				2,873	U
28	Submarine Life Support System	A		6,043		6,043				6,043	U
	Reactor Plant Equipment										
29	Reactor Power Units	A									U
30	Reactor Components	A		342,158		342,158				342,158	U
	Ocean Engineering										
31	Diving and Salvage Equipment	A		8,973		8,973				8,973	U

Department of the Navy
FY 2018 President's Budget Request
Exhibit P-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2018 Base Quantity	FY 2018 Base Cost	FY 2018 OCO Quantity	FY 2018 OCO Cost	FY 2018 Total Quantity	FY 2018 Total Cost	Sec
14	Pollution Control Equipment	B		17,293				17,293	U
15	Submarine Support Equipment	A		27,990				27,990	U
16	Virginia Class Support Equipment	A		46,610				46,610	U
17	LCS Class Support Equipment			47,955				47,955	U
18	Submarine Batteries			17,594				17,594	U
19	LPD Class Support Equipment			61,908				61,908	U
20	DDG 1000 Class Support Equipment	A							U
21	Strategic Platform Support Equip	A		15,812				15,812	U
22	DSSP Equipment	A		4,178				4,178	U
23	CG Modernization	A		306,050				306,050	U
24	LCAC	A		5,507				5,507	U
25	Underwater EOD Programs			55,922		12,348		68,270	U
26	Items Less Than $5 Million	A		96,909				96,909	U
27	Chemical Warfare Detectors	A		3,036				3,036	U
28	Submarine Life Support System	A		10,364				10,364	U
	Reactor Plant Equipment								
29	Reactor Power Units	A		324,925				324,925	U
30	Reactor Components	A		534,468				534,468	U
	Ocean Engineering								
31	Diving and Salvage Equipment	A		10,619				10,619	U

Department of the Navy
FY 2018 President's Budget Request
Exhibit P-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2016 Base + OCO Quantity	FY 2016 Base + OCO Cost	FY 2017 PB Request with CR Adj Base Quantity	FY 2017 PB Request with CR Adj Base Cost	FY 2017 Total PB Requests* with CR Adj Base Quantity	FY 2017 Total PB Requests* with CR Adj Base Cost	Sec
	Small Boats								
32	Standard Boats	A		29,982		43,684		55,370	U
	Training Equipment								
33	Other Ships Training Equipment	A		62,358					U
	Production Facilities Equipment								
34	Operating Forces Ipe	A		61,718		75,421		75,421	U
	Other Ship Support								
35	Nuclear Alterations	A		132,625		172,718		172,718	U
36	LCS Common Mission Modules Equipment			23,061		27,840		27,840	U
37	LCS MCM Mission Modules			67,451		57,146		57,146	U
38	LCS ASW Mission Modules					31,952		31,952	U
39	LCS SUW Mission Modules			35,228		22,466		22,466	U
40	LCS In-Service Modernization	A							U
41	Remote Minehunting System (RMS)	A		53,077					U
	Logistic Support								
42	LSD Midlife & Modernization			48,174		10,813		10,813	U
Total Ships Support Equipment				1,942,753		1,878,390		1,948,076	

Department of the Navy
FY 2018 President's Budget Request
Exhibit P-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2017 PB Request with CR Adj OCO Quantity	FY 2017 PB Request with CR Adj OCO Cost	FY 2017 Total PB Requests* with CR Adj OCO Quantity	FY 2017 Total PB Requests* with CR Adj OCO Cost	FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity	FY 2017 Less Enacted Div B P.L.114-254** OCO Cost	FY 2017 Remaining Req with CR Adj OCO Quantity	FY 2017 Remaining Req with CR Adj OCO Cost	Sec
	Small Boats										
32	Standard Boats	A									U
	Training Equipment										
33	Other Ships Training Equipment	A									U
	Production Facilities Equipment										
34	Operating Forces Ipe	A									U
	Other Ship Support										
35	Nuclear Alterations	A									U
36	LCS Common Mission Modules Equipment										U
37	LCS MCM Mission Modules										U
38	LCS ASW Mission Modules										U
39	LCS SUW Mission Modules										U
40	LCS In-Service Modernization	A									U
41	Remote Minehunting System (RMS)	A									U
	Logistic Support										
42	LSD Midlife & Modernization										U
Total Ships Support Equipment				----------		----------		----------		----------	

Department of the Navy
FY 2018 President's Budget Request
Exhibit P-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA Quantity	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA Cost	FY 2017 Total PB Requests* with CR Adj Base + OCO Quantity	FY 2017 Total PB Requests* with CR Adj Base + OCO Cost	FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity	FY 2017 Less Enacted Div B P.L.114-254** OCO Cost	FY 2017 Remaining Req with CR Adj Base + OCO Quantity	FY 2017 Remaining Req with CR Adj Base + OCO Cost	Sec
	Small Boats										
32	Standard Boats	A		43,684		55,370				55,370	U
	Training Equipment										
33	Other Ships Training Equipment	A									U
	Production Facilities Equipment										
34	Operating Forces Ipe	A		75,421		75,421				75,421	U
	Other Ship Support										
35	Nuclear Alterations	A		172,718		172,718				172,718	U
36	LCS Common Mission Modules Equipment			27,840		27,840				27,840	U
37	LCS MCM Mission Modules			57,146		57,146				57,146	U
38	LCS ASW Mission Modules			31,952		31,952				31,952	U
39	LCS SUW Mission Modules			22,466		22,466				22,466	U
40	LCS In-Service Modernization	A									U
41	Remote Minehunting System (RMS)	A									U
	Logistic Support										
42	LSD Midlife & Modernization			10,813		10,813				10,813	U
Total Ships Support Equipment				1,878,390		1,948,076				1,948,076	

Department of the Navy
FY 2018 President's Budget Request
Exhibit P-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2018 Base Quantity	FY 2018 Base Cost	FY 2018 OCO Quantity	FY 2018 OCO Cost	FY 2018 Total Quantity	FY 2018 Total Cost	Sec
	Small Boats								
32	Standard Boats	A		46,094		18,000		64,094	U
	Training Equipment								
33	Other Ships Training Equipment	A							U
	Production Facilities Equipment								
34	Operating Forces Ipe	A		191,541				191,541	U
	Other Ship Support								
35	Nuclear Alterations	A							U
36	LCS Common Mission Modules Equipment			34,666				34,666	U
37	LCS MCM Mission Modules			55,870				55,870	U
38	LCS ASW Mission Modules								U
39	LCS SUW Mission Modules			52,960				52,960	U
40	LCS In-Service Modernization	A		74,426				74,426	U
41	Remote Minehunting System (RMS)	A							U
	Logistic Support								
42	LSD Midlife & Modernization			89,536				89,536	U
Total Ships Support Equipment				3,076,818		30,348		3,107,166	

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Line No	Item Nomenclature	Ident Code	FY 2016 Base + OCO Quantity	FY 2016 Base + OCO Cost	FY 2017 PB Request with CR Adj Base Quantity	FY 2017 PB Request with CR Adj Base Cost	FY 2017 Total PB Requests* with CR Adj Base Quantity	FY 2017 Total PB Requests* with CR Adj Base Cost	Sec
	Budget Activity 02: Communications & Electronics Equip								
	Ship Sonars								
43	SPQ-9B Radar	A		19,841		14,363		14,363	U
44	AN/SQQ-89 Surf ASW Combat System	A		103,241		90,029		90,029	U
45	SSN Acoustics	A		232,134					U
46	SSN Acoustic Equipment	A				248,765		288,265	U
47	Undersea Warfare Support Equipment	A		7,331		7,163		7,163	U
48	Sonar Switches and Transducers	A		11,781					U
	ASW Electronic Equipment								
49	Submarine Acoustic Warfare System	A		19,718		21,291		21,291	U
50	SSTD	A		8,396		6,893		6,893	U
51	Fixed Surveillance System	A		146,968		145,701		145,701	U
52	SURTASS	A		26,153		36,136		46,136	U
53	Maritime Patrol and Reconnsaisance Force	A		13,725					U
	Electronic Warfare Equipment								
54	AN/SLQ-32	A		259,271		274,892		274,892	U
	Reconnaissance Equipment								
55	Shipboard IW Exploit	A		138,002		170,733		170,733	U
56	Automated Identification System (AIS)			152		958		958	U

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Line No	Item Nomenclature	Ident Code	FY 2017 PB Request with CR Adj OCO Quantity	FY 2017 PB Request with CR Adj OCO Cost	FY 2017 Total PB Requests* with CR Adj OCO Quantity	FY 2017 Total PB Requests* with CR Adj OCO Cost	FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity	FY 2017 Less Enacted Div B P.L.114-254** OCO Cost	FY 2017 Remaining Req with CR Adj OCO Quantity	FY 2017 Remaining Req with CR Adj OCO Cost	Sec
	Budget Activity 02: Communications & Electronics Equip										
	Ship Sonars										
43	SPQ-9B Radar	A									U
44	AN/SQQ-89 Surf ASW Combat System	A									U
45	SSN Acoustics	A									U
46	SSN Acoustic Equipment	A									U
47	Undersea Warfare Support Equipment	A									U
48	Sonar Switches and Transducers	A									U
	ASW Electronic Equipment										
49	Submarine Acoustic Warfare System	A									U
50	SSTD	A									U
51	Fixed Surveillance System	A									U
52	SURTASS	A									U
53	Maritime Patrol and Reconnsaisance Force	A									U
	Electronic Warfare Equipment										
54	AN/SLQ-32	A									U
	Reconnaissance Equipment										
55	Shipboard IW Exploit	A									U
56	Automated Identification System (AIS)										U

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Line No	Item Nomenclature	Ident Code	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA Quantity	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA Cost	FY 2017 Total PB Requests* with CR Adj Base + OCO Quantity	FY 2017 Total PB Requests* with CR Adj Base + OCO Cost	FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity	FY 2017 Less Enacted Div B P.L.114-254** OCO Cost	FY 2017 Remaining Req with CR Adj Base + OCO Quantity	FY 2017 Remaining Req with CR Adj Base + OCO Cost	Sec
Budget Activity 02: Communications & Electronics Equip											
	Ship Sonars										
43	SPQ-9B Radar	A		14,363		14,363				14,363	U
44	AN/SQQ-89 Surf ASW Combat System	A		90,029		90,029				90,029	U
45	SSN Acoustics	A									U
46	SSN Acoustic Equipment	A		248,765		288,265				288,265	U
47	Undersea Warfare Support Equipment	A		7,163		7,163				7,163	U
48	Sonar Switches and Transducers	A									U
	ASW Electronic Equipment										
49	Submarine Acoustic Warfare System	A		21,291		21,291				21,291	U
50	SSTD	A		6,893		6,893				6,893	U
51	Fixed Surveillance System	A		145,701		145,701				145,701	U
52	SURTASS	A		36,136		46,136				46,136	U
53	Maritime Patrol and Reconnsaisance Force	A									U
	Electronic Warfare Equipment										
54	AN/SLQ-32	A		274,892		274,892				274,892	U
	Reconnaissance Equipment										
55	Shipboard IW Exploit	A		170,733		170,733				170,733	U
56	Automated Identification System (AIS)			958		958				958	U

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Line No	Item Nomenclature	Ident Code	FY 2018 Base Quantity	FY 2018 Base Cost	FY 2018 OCO Quantity	FY 2018 OCO Cost	FY 2018 Total Quantity	FY 2018 Total Cost	Sec
	Budget Activity 02: Communications & Electronics Equip								
	Ship Sonars								
43	SPQ-9B Radar	A		30,086				30,086	U
44	AN/SQQ-89 Surf ASW Combat System	A		102,222				102,222	U
45	SSN Acoustics	A							U
46	SSN Acoustic Equipment	A		287,553		43,500		331,053	U
47	Undersea Warfare Support Equipment	A		13,653				13,653	U
48	Sonar Switches and Transducers	A							U
	ASW Electronic Equipment								
49	Submarine Acoustic Warfare System	A		21,449				21,449	U
50	SSTD	A		12,867				12,867	U
51	Fixed Surveillance System	A		300,102				300,102	U
52	SURTASS	A		30,180				30,180	U
53	Maritime Patrol and Reconnsaisance Force	A							U
	Electronic Warfare Equipment								
54	AN/SLQ-32	A		240,433				240,433	U
	Reconnaissance Equipment								
55	Shipboard IW Exploit	A		187,007				187,007	U
56	Automated Identification System (AIS)			510				510	U

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	Submarine Surveillance Equipment								
57	Submarine Support Equipment Prog	A		83,472					U
	Other Ship Electronic Equipment								
58	Cooperative Engagement Capability	B		25,695		22,034		22,034	U
59	Trusted Information System (TIS)			284					U
60	Naval Tactical Command Support System (NTCSS)	A		14,416		12,336		12,336	U
61	ATDLS	A		22,169		30,105		30,105	U
62	Navy Command and Control System (NCCS)			4,054		4,556		4,556	U
63	Minesweeping System Replacement	A		21,014		56,675		56,675	U
64	Shallow Water MCM	B				8,875		8,875	U
65	Navstar GPS Receivers (SPACE)	A		11,129		12,752		12,752	U
66	American Forces Radio and TV Service	A		4,240		4,577		4,577	U
67	Strategic Platform Support Equip	A		17,440		8,972		8,972	U
	Training Equipment								
68	Other Training Equipment	A		41,314					U
	Aviation Electronic Equipment								
69	Matcals	A		10,011					U
70	Ashore ATC Equipment	A				75,068		75,068	U
71	Afloat ATC Equipment	A				33,484		33,484	U
72	Shipboard Air Traffic Control	B		9,346					U

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	Submarine Surveillance Equipment										
57	Submarine Support Equipment Prog	A									U
	Other Ship Electronic Equipment										
58	Cooperative Engagement Capability	B									U
59	Trusted Information System (TIS)										U
60	Naval Tactical Command Support System (NTCSS)	A									U
61	ATDLS	A									U
62	Navy Command and Control System (NCCS)										U
63	Minesweeping System Replacement	A									U
64	Shallow Water MCM	B									U
65	Navstar GPS Receivers (SPACE)	A									U
66	American Forces Radio and TV Service	A									U
67	Strategic Platform Support Equip	A									U
	Training Equipment										
68	Other Training Equipment	A									U
	Aviation Electronic Equipment										
69	Matcals	A									U
70	Ashore ATC Equipment	A									U
71	Afloat ATC Equipment	A									U
72	Shipboard Air Traffic Control	B									U

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	Submarine Surveillance Equipment										
57	Submarine Support Equipment Prog	A									U
	Other Ship Electronic Equipment										
58	Cooperative Engagement Capability	B		22,034		22,034				22,034	U
59	Trusted Information System (TIS)										U
60	Naval Tactical Command Support System (NTCSS)	A		12,336		12,336				12,336	U
61	ATDLS	A		30,105		30,105				30,105	U
62	Navy Command and Control System (NCCS)			4,556		4,556				4,556	U
63	Minesweeping System Replacement	A		56,675		56,675				56,675	U
64	Shallow Water MCM	B		8,875		8,875				8,875	U
65	Navstar GPS Receivers (SPACE)	A		12,752		12,752				12,752	U
66	American Forces Radio and TV Service	A		4,577		4,577				4,577	U
67	Strategic Platform Support Equip	A		8,972		8,972				8,972	U
	Training Equipment										
68	Other Training Equipment	A									U
	Aviation Electronic Equipment										
69	Matcals	A									U
70	Ashore ATC Equipment	A		75,068		75,068				75,068	U
71	Afloat ATC Equipment	A		33,484		33,484				33,484	U
72	Shipboard Air Traffic Control	B									U

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Line No	Item Nomenclature	Ident Code	FY 2018 Base Quantity	FY 2018 Base Cost	FY 2018 OCO Quantity	FY 2018 OCO Cost	FY 2018 Total Quantity	FY 2018 Total Cost	Sec
	Submarine Surveillance Equipment								
57	Submarine Support Equipment Prog	A							U
	Other Ship Electronic Equipment								
58	Cooperative Engagement Capability	B		23,892				23,892	U
59	Trusted Information System (TIS)								U
60	Naval Tactical Command Support System (NTCSS)	A		10,741				10,741	U
61	ATDLS	A		38,016				38,016	U
62	Navy Command and Control System (NCCS)			4,512				4,512	U
63	Minesweeping System Replacement	A		31,531				31,531	U
64	Shallow Water MCM	B		8,796				8,796	U
65	Navstar GPS Receivers (SPACE)	A		15,923				15,923	U
66	American Forces Radio and TV Service	A		2,730				2,730	U
67	Strategic Platform Support Equip	A		6,889				6,889	U
	Training Equipment								
68	Other Training Equipment	A							U
	Aviation Electronic Equipment								
69	Matcals	A							U
70	Ashore ATC Equipment	A		71,882				71,882	U
71	Afloat ATC Equipment	A		44,611				44,611	U
72	Shipboard Air Traffic Control	B							U

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Line No	Item Nomenclature	Ident Code	FY 2016 Base + OCO Quantity	FY 2016 Base + OCO Cost	FY 2017 PB Request with CR Adj Base Quantity	FY 2017 PB Request with CR Adj Base Cost	FY 2017 Total PB Requests* with CR Adj Base Quantity	FY 2017 Total PB Requests* with CR Adj Base Cost	Sec
73	Automatic Carrier Landing System	A		21,281					U
74	National Air Space System	B		25,621					U
75	Fleet Air Traffic Control Systems	A		8,249					U
76	Landing Systems	A		11,910					U
77	ID Systems	A		29,676		22,177		22,177	U
78	Naval Mission Planning Systems	A		13,737		14,273		14,273	U
	Other Shore Electronic Equipment								
79	Deployable Joint Command & Control	A		1,314					U
80	Tactical/Mobile C4I Systems	A		13,600		27,927		27,927	U
81	DCGS-N	A		31,809		12,676		12,676	U
82	CANES			274,641		212,030		212,030	U
83	RADIAC	A		6,768		8,092		8,092	U
84	CANES-Intell			28,695		36,013		36,013	U
85	GPETE	A		6,962		6,428		6,428	U
86	MASF			290					U
87	Integ Combat System Test Facility	A		13,614		8,376		8,376	U
88	EMI Control Instrumentation	A		4,175		3,971		3,971	U
89	Items Less Than $5 Million	A		66,176		58,721		58,721	U
	Shipboard Communications								
90	Shipboard Tactical Communications	A		8,277		17,366		17,366	U

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73	Automatic Carrier Landing System	A									U
74	National Air Space System	B									U
75	Fleet Air Traffic Control Systems	A									U
76	Landing Systems	A									U
77	ID Systems	A									U
78	Naval Mission Planning Systems	A									U
	Other Shore Electronic Equipment										
79	Deployable Joint Command & Control	A									U
80	Tactical/Mobile C4I Systems	A									U
81	DCGS-N	A		12,000		12,000				12,000	U
82	CANES										U
83	RADIAC	A									U
84	CANES-Intell										U
85	GPETE	A									U
86	MASF										U
87	Integ Combat System Test Facility	A									U
88	EMI Control Instrumentation	A									U
89	Items Less Than $5 Million	A									U
	Shipboard Communications										
90	Shipboard Tactical Communications	A									U

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73	Automatic Carrier Landing System	A									U
74	National Air Space System	B									U
75	Fleet Air Traffic Control Systems	A									U
76	Landing Systems	A									U
77	ID Systems	A		22,177		22,177				22,177	U
78	Naval Mission Planning Systems	A		14,273		14,273				14,273	U
	Other Shore Electronic Equipment										
79	Deployable Joint Command & Control	A									U
80	Tactical/Mobile C4I Systems	A		27,927		27,927				27,927	U
81	DCGS-N	A		24,676		24,676				24,676	U
82	CANES			212,030		212,030				212,030	U
83	RADIAC	A		8,092		8,092				8,092	U
84	CANES-Intell			36,013		36,013				36,013	U
85	GPETE	A		6,428		6,428				6,428	U
86	MASF										U
87	Integ Combat System Test Facility	A		8,376		8,376				8,376	U
88	EMI Control Instrumentation	A		3,971		3,971				3,971	U
89	Items Less Than $5 Million	A		58,721		58,721				58,721	U
	Shipboard Communications										
90	Shipboard Tactical Communications	A		17,366		17,366				17,366	U

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Line No	Item Nomenclature	Ident Code	FY 2018 Base Quantity	FY 2018 Base Cost	FY 2018 OCO Quantity	FY 2018 OCO Cost	FY 2018 Total Quantity	FY 2018 Total Cost	Sec
73	Automatic Carrier Landing System	A							U
74	National Air Space System	B							U
75	Fleet Air Traffic Control Systems	A							U
76	Landing Systems	A							U
77	ID Systems	A		21,239				21,239	U
78	Naval Mission Planning Systems	A		11,976		2,550		14,526	U
	Other Shore Electronic Equipment								
79	Deployable Joint Command & Control	A							U
80	Tactical/Mobile C4I Systems	A		32,425		7,900		40,325	U
81	DCGS-N	A		13,790		6,392		20,182	U
82	CANES			322,754				322,754	U
83	RADIAC	A		10,718				10,718	U
84	CANES-Intell			48,028				48,028	U
85	GPETE	A		6,861				6,861	U
86	MASF			8,081				8,081	U
87	Integ Combat System Test Facility	A		5,019				5,019	U
88	EMI Control Instrumentation	A		4,188				4,188	U
89	Items Less Than $5 Million	A		105,292				105,292	U
	Shipboard Communications								
90	Shipboard Tactical Communications	A		23,695				23,695	U

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91	Ship Communications Automation	A		121,817		102,479		114,879	U
92	Communications Items Under $5M	A		17,025		10,403		10,403	U
	Submarine Communications								
93	Submarine Broadcast Support	A		15,485		34,151		34,151	U
94	Submarine Communication Equipment	A		58,037		64,529		64,529	U
	Satellite Communications								
95	Satellite Communications Systems	A		30,892		14,414		14,414	U
96	Navy Multiband Terminal (NMT)			118,142		38,365		38,365	U
	Shore Communications								
97	Joint Communications Support Element (JCSE)	A		4,591		4,156		4,156	U
98	Electrical Power Systems	A		1,246					U
	Cryptographic Equipment								
99	Info Systems Security Program (ISSP)	A		126,237		85,694		85,694	U
100	MIO Intel Exploitation Team	A		970		920		920	U
	Cryptologic Equipment								
101	Cryptologic Communications Equip	A		11,433		21,098		21,098	U
	Other Electronic Support								
102	Navy METOC-2***	A		1,483					U
103	Navy METOC-3***	A		483					U
104	USMC METOC-2***	A		323					U

***Funding in this line item was transferred during the year of execution from the Spectrum Relocation Fund (SRF) in support of the Advanced Wireless Services 3 (AWS-3) auction and is associated with the reallocation or sharing of the 1755-1780 MHz and 1695-1710 MHz bands. The SRF is administered by the Office of Management and Budget (OMB), which approves SRF transfers to federal agencies on an annual basis in consultation with the National Telecommunications and Information Administration (NTIA).

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91	Ship Communications Automation	A									U
92	Communications Items Under $5M	A									U
	Submarine Communications										
93	Submarine Broadcast Support	A									U
94	Submarine Communication Equipment	A									U
	Satellite Communications										
95	Satellite Communications Systems	A									U
96	Navy Multiband Terminal (NMT)										U
	Shore Communications										
97	Joint Communications Support Element (JCSE)	A									U
98	Electrical Power Systems	A									U
	Cryptographic Equipment										
99	Info Systems Security Program (ISSP)	A									U
100	MIO Intel Exploitation Team	A									U
	Cryptologic Equipment										
101	Cryptologic Communications Equip	A									U
	Other Electronic Support										
102	Navy METOC-2***	A									U
103	Navy METOC-3***	A									U
104	USMC METOC-2***	A									U

***Funding in this line item was transferred during the year of execution from the Spectrum Relocation Fund (SRF) in support of the Advanced Wireless Services 3 (AWS-3) auction and is associated with the reallocation or sharing of the 1755-1780 MHz and 1695-1710 MHz bands. The SRF is administered by the Office of Management and Budget (OMB), which approves SRF transfers to federal agencies on an annual basis in consultation with the National Telecommunications and Information Administration (NTIA).

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Total Obligational Authority
(Dollars in Thousands)

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA Quantity	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA Cost	FY 2017 Total PB Requests* with CR Adj Base + OCO Quantity	FY 2017 Total PB Requests* with CR Adj Base + OCO Cost	FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity	FY 2017 Less Enacted Div B P.L.114-254** OCO Cost	FY 2017 Remaining Req with CR Adj Base + OCO Quantity	FY 2017 Remaining Req with CR Adj Base + OCO Cost	Sec
91	Ship Communications Automation	A		102,479		114,879				114,879	U
92	Communications Items Under $5M	A		10,403		10,403				10,403	U
	Submarine Communications										
93	Submarine Broadcast Support	A		34,151		34,151				34,151	U
94	Submarine Communication Equipment	A		64,529		64,529				64,529	U
	Satellite Communications										
95	Satellite Communications Systems	A		14,414		14,414				14,414	U
96	Navy Multiband Terminal (NMT)			38,365		38,365				38,365	U
	Shore Communications										
97	Joint Communications Support Element (JCSE)	A		4,156		4,156				4,156	U
98	Electrical Power Systems	A									U
	Cryptographic Equipment										
99	Info Systems Security Program (ISSP)	A		85,694		85,694				85,694	U
100	MIO Intel Exploitation Team	A		920		920				920	U
	Cryptologic Equipment										
101	Cryptologic Communications Equip	A		21,098		21,098				21,098	U
	Other Electronic Support										
102	Navy METOC-2***	A									U
103	Navy METOC-3***	A									U
104	USMC METOC-2***	A									U

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Total Obligational Authority
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Line No	Item Nomenclature	Ident Code	FY 2018 Base Quantity	FY 2018 Base Cost	FY 2018 OCO Quantity	FY 2018 OCO Cost	FY 2018 Total Quantity	FY 2018 Total Cost	Sec
91	Ship Communications Automation	A		103,990				103,990	U
92	Communications Items Under $5M	A		18,577				18,577	U
	Submarine Communications								
93	Submarine Broadcast Support	A		29,669				29,669	U
94	Submarine Communication Equipment	A		86,204				86,204	U
	Satellite Communications								
95	Satellite Communications Systems	A		14,654				14,654	U
96	Navy Multiband Terminal (NMT)			69,764				69,764	U
	Shore Communications								
97	Joint Communications Support Element (JCSE)	A		4,256				4,256	U
98	Electrical Power Systems	A							U
	Cryptographic Equipment								
99	Info Systems Security Program (ISSP)	A		89,663				89,663	U
100	MIO Intel Exploitation Team	A		961				961	U
	Cryptologic Equipment								
101	Cryptologic Communications Equip	A		11,287		2,280		13,567	U
	Other Electronic Support								
102	Navy METOC-2***	A							U
103	Navy METOC-3***	A							U
104	USMC METOC-2***	A							U

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Total Obligational Authority
(Dollars in Thousands)

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Line No	Item Nomenclature	Ident Code	FY 2016 Base + OCO Quantity	FY 2016 Base + OCO Cost	FY 2017 PB Request with CR Adj Base Quantity	FY 2017 PB Request with CR Adj Base Cost	FY 2017 Total PB Requests* with CR Adj Base Quantity	FY 2017 Total PB Requests* with CR Adj Base Cost	Sec
105	USMC METOC-1***	A		323					U
106	Monitoring – Hub***	A		308					U
107	DON UAS Video 5***	A		3,000					U
108	DON Robotics***	A		9,100					U
109	DON ACTS***	A		1,544					U
110	Coast Guard Equipment	A		2,529		32,291		32,291	U
	Drug Interdiction Support								
111	Other Drug Interdiction Support	A		4,507					U
	Total Communications & Electronics Equip			2,347,567		2,122,908		2,184,808	
	Budget Activity 03: Aviation Support Equipment								
	Sonobuoys								
112	Sonobuoys - All Types	A		166,385		162,588		162,588	U
	Aircraft Support Equipment								
113	Weapons Range Support Equipment	A		46,979		58,116		58,116	U
114	Aircraft Support Equipment	A		127,774		120,324		120,324	U
115	Advanced Arresting Gear (AAG)	A							U
116	Meteorological Equipment	A		14,997		29,253		29,253	U
117	DCRS/DPL	A		638		632		632	U
118	Airborne Mine Countermeasures	A		14,098		29,097		29,097	U

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(Dollars in Thousands)

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2017 PB Request with CR Adj OCO Quantity	FY 2017 PB Request with CR Adj OCO Cost	FY 2017 Total PB Requests* with CR Adj OCO Quantity	FY 2017 Total PB Requests* with CR Adj OCO Cost	FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity	FY 2017 Less Enacted Div B P.L.114-254** OCO Cost	FY 2017 Remaining Req with CR Adj OCO Quantity	FY 2017 Remaining Req with CR Adj OCO Cost	Sec
105	USMC METOC-1***	A									U
106	Monitoring – Hub***	A									U
107	DON UAS Video 5***	A									U
108	DON Robotics***	A									U
109	DON ACTS***	A									U
110	Coast Guard Equipment	A									U
	Drug Interdiction Support										
111	Other Drug Interdiction Support	A									U
	Total Communications & Electronics Equip			12,000		12,000				12,000	
	Budget Activity 03: Aviation Support Equipment										
	Sonobuoys										
112	Sonobuoys - All Types	A									U
	Aircraft Support Equipment										
113	Weapons Range Support Equipment	A									U
114	Aircraft Support Equipment	A									U
115	Advanced Arresting Gear (AAG)	A									U
116	Meteorological Equipment	A									U
117	DCRS/DPL	A									U
118	Airborne Mine Countermeasures	A									U

***Funding in this line item was transferred during the year of execution from the Spectrum Relocation Fund (SRF) in support of the Advanced Wireless Services 3 (AWS-3) auction and is associated with the reallocation or sharing of the 1755-1780 MHz and 1695-1710 MHz bands. The SRF is administered by the Office of Management and Budget (OMB), which approves SRF transfers to federal agencies on an annual basis in consultation with the National Telecommunications and Information Administration (NTIA).

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Line No	Item Nomenclature	Ident Code	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA Quantity	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA Cost	FY 2017 Total PB Requests* with CR Adj Base + OCO Quantity	FY 2017 Total PB Requests* with CR Adj Base + OCO Cost	FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity	FY 2017 Less Enacted Div B P.L.114-254** OCO Cost	FY 2017 Remaining Req with CR Adj Base + OCO Quantity	FY 2017 Remaining Req with CR Adj Base + OCO Cost	Sec
105	USMC METOC-1***	A									U
106	Monitoring – Hub***	A									U
107	DON UAS Video 5***	A									U
108	DON Robotics***	A									U
109	DON ACTS***	A									U
110	Coast Guard Equipment	A		32,291		32,291				32,291	U
	Drug Interdiction Support										
111	Other Drug Interdiction Support	A									U
	Total Communications & Electronics Equip			2,134,908		2,196,808				2,196,808	
	Budget Activity 03: Aviation Support Equipment										
	Sonobuoys										
112	Sonobuoys - All Types	A		162,588		162,588				162,588	U
	Aircraft Support Equipment										
113	Weapons Range Support Equipment	A		58,116		58,116				58,116	U
114	Aircraft Support Equipment	A		120,324		120,324				120,324	U
115	Advanced Arresting Gear (AAG)	A									U
116	Meteorological Equipment	A		29,253		29,253				29,253	U
117	DCRS/DPL	A		632		632				632	U
118	Airborne Mine Countermeasures	A		29,097		29,097				29,097	U

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Line No	Item Nomenclature	Ident Code	FY 2018 Base Quantity	FY 2018 Base Cost	FY 2018 OCO Quantity	FY 2018 OCO Cost	FY 2018 Total Quantity	FY 2018 Total Cost	Sec
105	USMC METOC-1***	A							U
106	Monitoring – Hub***	A							U
107	DON UAS Video 5***	A							U
108	DON Robotics***	A							U
109	DON ACTS***	A							U
110	Coast Guard Equipment	A		36,584				36,584	U
	Drug Interdiction Support								
111	Other Drug Interdiction Support	A							U
	Total Communications & Electronics Equip			2,565,260		62,622		2,627,882	
	Budget Activity 03: Aviation Support Equipment								
	Sonobuoys								
112	Sonobuoys - All Types	A		173,616				173,616	U
	Aircraft Support Equipment								
113	Weapons Range Support Equipment	A		72,110				72,110	U
114	Aircraft Support Equipment	A		108,482				108,482	U
115	Advanced Arresting Gear (AAG)	A		10,900				10,900	U
116	Meteorological Equipment	A		21,137				21,137	U
117	DCRS/DPL	A		660				660	U
118	Airborne Mine Countermeasures	A		20,605				20,605	U

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Line No	Item Nomenclature	Ident Code	FY 2016 Base + OCO Quantity	FY 2016 Base + OCO Cost	FY 2017 PB Request with CR Adj Base Quantity	FY 2017 PB Request with CR Adj Base Cost	FY 2017 Total PB Requests* with CR Adj Base Quantity	FY 2017 Total PB Requests* with CR Adj Base Cost	Sec
119	Aviation Support Equipment	A		48,773		39,099		39,099	U
	Total Aviation Support Equipment			419,644		439,109		439,109	
	Budget Activity 04: Ordnance Support Equipment								
	Ship Gun System Equipment								
120	Ship Gun Systems Equipment	A		5,300		6,191		6,191	U
	Ship Missile Systems Equipment								
121	Ship Missile Support Equipment	A		276,503		320,446		320,446	U
122	Tomahawk Support Equipment	A		71,245		71,046		95,546	U
	FBM Support Equipment								
123	Strategic Missile Systems Equip	A		240,677		215,138		215,138	U
	ASW Support Equipment								
124	SSN Combat Control Systems	A		96,040		130,715		144,715	U
125	ASW Support Equipment	A		30,189		26,431		36,431	U
	Other Ordnance Support Equipment								
126	Explosive Ordnance Disposal Equip	B		22,623		11,821		11,821	U
127	Items Less Than $5 Million	A		9,906		6,243		6,243	U
	Other Expendable Ordnance								
128	Submarine Training Device Mods	A				48,020		48,020	U
129	Training Device Mods	A		99,707					U

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Line No	Item Nomenclature	Ident Code	FY 2017 PB Request with CR Adj OCO Quantity	FY 2017 PB Request with CR Adj OCO Cost	FY 2017 Total PB Requests* with CR Adj OCO Quantity	FY 2017 Total PB Requests* with CR Adj OCO Cost	FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity	FY 2017 Less Enacted Div B P.L.114-254** OCO Cost	FY 2017 Remaining Req with CR Adj OCO Quantity	FY 2017 Remaining Req with CR Adj OCO Cost	Sec
119	Aviation Support Equipment	A									U
	Total Aviation Support Equipment										
	Budget Activity 04: Ordnance Support Equipment										
	Ship Gun System Equipment										
120	Ship Gun Systems Equipment	A									U
	Ship Missile Systems Equipment										
121	Ship Missile Support Equipment	A									U
122	Tomahawk Support Equipment	A									U
	FBM Support Equipment										
123	Strategic Missile Systems Equip	A									U
	ASW Support Equipment										
124	SSN Combat Control Systems	A									U
125	ASW Support Equipment	A									U
	Other Ordnance Support Equipment										
126	Explosive Ordnance Disposal Equip	B		99,329		104,829				104,829	U
127	Items Less Than $5 Million	A									U
	Other Expendable Ordnance										
128	Submarine Training Device Mods	A									U
129	Training Device Mods	A									U

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Line No	Item Nomenclature	Ident Code	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA Quantity	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA Cost	FY 2017 Total PB Requests* with CR Adj Base + OCO Quantity	FY 2017 Total PB Requests* with CR Adj Base + OCO Cost	FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity	FY 2017 Less Enacted Div B P.L.114-254** OCO Cost	FY 2017 Remaining Req with CR Adj Base + OCO Quantity	FY 2017 Remaining Req with CR Adj Base + OCO Cost	Sec
119	Aviation Support Equipment	A		39,099		39,099				39,099	U
	Total Aviation Support Equipment			439,109		439,109				439,109	
	Budget Activity 04: Ordnance Support Equipment										
	Ship Gun System Equipment										
120	Ship Gun Systems Equipment	A		6,191		6,191				6,191	U
	Ship Missile Systems Equipment										
121	Ship Missile Support Equipment	A		320,446		320,446				320,446	U
122	Tomahawk Support Equipment	A		71,046		95,546				95,546	U
	FBM Support Equipment										
123	Strategic Missile Systems Equip	A		215,138		215,138				215,138	U
	ASW Support Equipment										
124	SSN Combat Control Systems	A		130,715		144,715				144,715	U
125	ASW Support Equipment	A		26,431		36,431				36,431	U
	Other Ordnance Support Equipment										
126	Explosive Ordnance Disposal Equip	B		111,150		116,650				116,650	U
127	Items Less Than $5 Million	A		6,243		6,243				6,243	U
	Other Expendable Ordnance										
128	Submarine Training Device Mods	A		48,020		48,020				48,020	U
129	Training Device Mods	A									U

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Line No	Item Nomenclature	Ident Code	FY 2018 Base Quantity	FY 2018 Base Cost	FY 2018 OCO Quantity	FY 2018 OCO Cost	FY 2018 Total Quantity	FY 2018 Total Cost	Sec
119	Aviation Support Equipment	A		34,032		29,245		63,277	U
	Total Aviation Support Equipment			441,542		29,245		470,787	
	Budget Activity 04: Ordnance Support Equipment								
	Ship Gun System Equipment								
120	Ship Gun Systems Equipment	A		5,277				5,277	U
	Ship Missile Systems Equipment								
121	Ship Missile Support Equipment	A		272,359		2,436		274,795	U
122	Tomahawk Support Equipment	A		73,184				73,184	U
	FBM Support Equipment								
123	Strategic Missile Systems Equip	A		246,221				246,221	U
	ASW Support Equipment								
124	SSN Combat Control Systems	A		129,972				129,972	U
125	ASW Support Equipment	A		23,209				23,209	U
	Other Ordnance Support Equipment								
126	Explosive Ordnance Disposal Equip	B		15,596		31,970		47,566	U
127	Items Less Than $5 Million	A		5,981				5,981	U
	Other Expendable Ordnance								
128	Submarine Training Device Mods	A		74,550				74,550	U
129	Training Device Mods	A							U

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Line No	Item Nomenclature	Ident Code	FY 2016 Base + OCO Quantity	FY 2016 Base + OCO Cost	FY 2017 PB Request with CR Adj Base Quantity	FY 2017 PB Request with CR Adj Base Cost	FY 2017 Total PB Requests* with CR Adj Base Quantity	FY 2017 Total PB Requests* with CR Adj Base Cost	Sec
130	Surface Training Equipment	A				97,514		97,514	U
	Total Ordnance Support Equipment			852,190		933,565		982,065	
	Budget Activity 05: Civil Engineering Support Equip								
	Civil Engineering Support Equipment								
131	Passenger Carrying Vehicles	A		2,438		8,853		8,853	U
132	General Purpose Trucks	A		2,493		4,928		4,928	U
133	Construction & Maintenance Equip	A		2,578		18,527		18,527	U
134	Fire Fighting Equipment	A		14,705		13,569		13,569	U
135	Tactical Vehicles	B		2,898		14,917		14,917	U
136	Amphibious Equipment	A		12,517		7,676		7,676	U
137	Pollution Control Equipment	A		3,018		2,321		2,321	U
138	Items Under $5 Million	A		13,838		12,459		12,459	U
139	Physical Security Vehicles	A		1,186		1,095		1,095	U
	Total Civil Engineering Support Equip			55,671		84,345		84,345	
	Budget Activity 06: Supply Support Equipment								
	Supply Support Equipment								
140	Materials Handling Equipment	A		19,211					U
141	Supply Equipment	A				16,023		16,023	U
142	Other Supply Support Equipment	A		10,469					U

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Line No	Item Nomenclature	Ident Code	FY 2017 PB Request with CR Adj OCO Quantity	FY 2017 PB Request with CR Adj OCO Cost	FY 2017 Total PB Requests* with CR Adj OCO Quantity	FY 2017 Total PB Requests* with CR Adj OCO Cost	FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity	FY 2017 Less Enacted Div B P.L.114-254** OCO Cost	FY 2017 Remaining Req with CR Adj OCO Quantity	FY 2017 Remaining Req with CR Adj OCO Cost	Sec
130	Surface Training Equipment	A									U
	Total Ordnance Support Equipment			99,329		104,829				104,829	
	Budget Activity 05: Civil Engineering Support Equip										
	Civil Engineering Support Equipment										
131	Passenger Carrying Vehicles	A									U
132	General Purpose Trucks	A									U
133	Construction & Maintenance Equip	A									U
134	Fire Fighting Equipment	A		630		630				630	U
135	Tactical Vehicles	B									U
136	Amphibious Equipment	A									U
137	Pollution Control Equipment	A									U
138	Items Under $5 Million	A									U
139	Physical Security Vehicles	A									U
	Total Civil Engineering Support Equip			630		630				630	
	Budget Activity 06: Supply Support Equipment										
	Supply Support Equipment										
140	Materials Handling Equipment	A									U
141	Supply Equipment	A									U
142	Other Supply Support Equipment	A									U

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Line No	Item Nomenclature	Ident Code	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA Quantity	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA Cost	FY 2017 Total PB Requests* with CR Adj Base + OCO Quantity	FY 2017 Total PB Requests* with CR Adj Base + OCO Cost	FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity	FY 2017 Less Enacted Div B P.L.114-254** OCO Cost	FY 2017 Remaining Req with CR Adj Base + OCO Quantity	FY 2017 Remaining Req with CR Adj Base + OCO Cost	Sec
130	Surface Training Equipment	A		97,514		97,514				97,514	U
	Total Ordnance Support Equipment			1,032,894		1,086,894				1,086,894	
	Budget Activity 05: Civil Engineering Support Equip										
	Civil Engineering Support Equipment										
131	Passenger Carrying Vehicles	A		8,853		8,853				8,853	U
132	General Purpose Trucks	A		4,928		4,928				4,928	U
133	Construction & Maintenance Equip	A		18,527		18,527				18,527	U
134	Fire Fighting Equipment	A		14,199		14,199				14,199	U
135	Tactical Vehicles	B		14,917		14,917				14,917	U
136	Amphibious Equipment	A		7,676		7,676				7,676	U
137	Pollution Control Equipment	A		2,321		2,321				2,321	U
138	Items Under $5 Million	A		12,459		12,459				12,459	U
139	Physical Security Vehicles	A		1,095		1,095				1,095	U
	Total Civil Engineering Support Equip			84,975		84,975				84,975	
	Budget Activity 06: Supply Support Equipment										
	Supply Support Equipment										
140	Materials Handling Equipment	A									U
141	Supply Equipment	A		16,023		16,023				16,023	U
142	Other Supply Support Equipment	A									U

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Line No	Item Nomenclature	Ident Code	FY 2018 Base Quantity	FY 2018 Base Cost	FY 2018 OCO Quantity	FY 2018 OCO Cost	FY 2018 Total Quantity	FY 2018 Total Cost	Sec
130	Surface Training Equipment	A		83,022				83,022	U
	Total Ordnance Support Equipment			929,371		34,406		963,777	
	Budget Activity 05: Civil Engineering Support Equip								
	Civil Engineering Support Equipment								
131	Passenger Carrying Vehicles	A		5,299				5,299	U
132	General Purpose Trucks	A		2,946		496		3,442	U
133	Construction & Maintenance Equip	A		34,970				34,970	U
134	Fire Fighting Equipment	A		2,541		2,304		4,845	U
135	Tactical Vehicles	B		19,699		2,336		22,035	U
136	Amphibious Equipment	A		12,162				12,162	U
137	Pollution Control Equipment	A		2,748				2,748	U
138	Items Under $5 Million	A		18,084				18,084	U
139	Physical Security Vehicles	A		1,170				1,170	U
	Total Civil Engineering Support Equip			99,619		5,136		104,755	
	Budget Activity 06: Supply Support Equipment								
	Supply Support Equipment								
140	Materials Handling Equipment	A							U
141	Supply Equipment	A		21,797		164		21,961	U
142	Other Supply Support Equipment	A							U

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FY 2018 President's Budget Request
Exhibit P-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2016 Base + OCO Quantity	FY 2016 Base + OCO Cost	FY 2017 PB Request with CR Adj Base Quantity	FY 2017 PB Request with CR Adj Base Cost	FY 2017 Total PB Requests* with CR Adj Base Quantity	FY 2017 Total PB Requests* with CR Adj Base Cost	Sec
143	First Destination Transportation	A		5,908		5,115		5,115	U
144	Special Purpose Supply Systems	A		211,714		295,471		295,471	U
	Total Supply Support Equipment			247,302		316,609		316,609	
	Budget Activity 07: Personnel & Command Support Equip								
	Training Devices								
145	Training Support Equipment	A		7,468					U
146	Training and Education Equipment	A				9,504		9,504	U
	Command Support Equipment								
147	Command Support Equipment	A		29,745		37,180		44,680	U
148	Education Support Equipment	A		3,180					U
149	Medical Support Equipment	A		32,790		4,128		4,128	U
151	Naval MIP Support Equipment	A		4,608		1,925		1,925	U
152	Operating Forces Support Equipment	A		6,607		4,777		21,033	U
153	C4ISR Equipment	A		9,929		9,073		9,073	U
154	Environmental Support Equipment	A		23,009		21,107		21,107	U
155	Physical Security Equipment	A		93,478		100,906		110,203	U
156	Enterprise Information Technology	A		95,094		67,544		67,544	U
	Other								
159	Cancelled Account Adjustments	A		17					U

Department of the Navy
FY 2018 President's Budget Request
Exhibit P-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2017 PB Request with CR Adj OCO Quantity	FY 2017 PB Request with CR Adj OCO Cost	FY 2017 Total PB Requests* with CR Adj OCO Quantity	FY 2017 Total PB Requests* with CR Adj OCO Cost	FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity	FY 2017 Less Enacted Div B P.L.114-254** OCO Cost	FY 2017 Remaining Req with CR Adj OCO Quantity	FY 2017 Remaining Req with CR Adj OCO Cost	Sec
143	First Destination Transportation	A		25		25				25	U
144	Special Purpose Supply Systems	A									U
	Total Supply Support Equipment			25		25				25	
	Budget Activity 07: Personnel & Command Support Equip										
	Training Devices										
145	Training Support Equipment	A									U
146	Training and Education Equipment	A									U
	Command Support Equipment										
147	Command Support Equipment	A		10,562		10,562				10,562	U
148	Education Support Equipment	A									U
149	Medical Support Equipment	A				5,000				5,000	U
151	Naval MIP Support Equipment	A									U
152	Operating Forces Support Equipment	A									U
153	C4ISR Equipment	A									U
154	Environmental Support Equipment	A									U
155	Physical Security Equipment	A									U
156	Enterprise Information Technology	A									U
	Other										
159	Cancelled Account Adjustments	A									U

Department of the Navy
FY 2018 President's Budget Request
Exhibit P-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA Quantity	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA Cost	FY 2017 Total PB Requests* with CR Adj Base + OCO Quantity	FY 2017 Total PB Requests* with CR Adj Base + OCO Cost	FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity	FY 2017 Less Enacted Div B P.L.114-254** OCO Cost	FY 2017 Remaining Req with CR Adj Base + OCO Quantity	FY 2017 Remaining Req with CR Adj Base + OCO Cost	Sec
143	First Destination Transportation	A		5,140		5,140				5,140	U
144	Special Purpose Supply Systems	A		295,471		295,471				295,471	U
	Total Supply Support Equipment			316,634		316,634				316,634	
	Budget Activity 07: Personnel & Command Support Equip										
	Training Devices										
145	Training Support Equipment	A									U
146	Training and Education Equipment	A		9,504		9,504				9,504	U
	Command Support Equipment										
147	Command Support Equipment	A		47,742		55,242				55,242	U
148	Education Support Equipment	A									U
149	Medical Support Equipment	A		4,128		9,128				9,128	U
151	Naval MIP Support Equipment	A		1,925		1,925				1,925	U
152	Operating Forces Support Equipment	A		4,777		21,033				21,033	U
153	C4ISR Equipment	A		9,073		9,073				9,073	U
154	Environmental Support Equipment	A		21,107		21,107				21,107	U
155	Physical Security Equipment	A		100,906		110,203				110,203	U
156	Enterprise Information Technology	A		67,544		67,544				67,544	U
	Other										
159	Cancelled Account Adjustments	A									U

Department of the Navy
FY 2018 President's Budget Request
Exhibit P-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2018 Base Quantity	FY 2018 Base Cost	FY 2018 OCO Quantity	FY 2018 OCO Cost	FY 2018 Total Quantity	FY 2018 Total Cost	Sec
143	First Destination Transportation	A		5,572		420		5,992	U
144	Special Purpose Supply Systems	A		482,916				482,916	U
	Total Supply Support Equipment			510,285		584		510,869	
	Budget Activity 07: Personnel & Command Support Equip								
	Training Devices								
145	Training Support Equipment	A							U
146	Training and Education Equipment	A		25,624				25,624	U
	Command Support Equipment								
147	Command Support Equipment	A		59,076		21,650		80,726	U
148	Education Support Equipment	A							U
149	Medical Support Equipment	A		4,383				4,383	U
151	Naval MIP Support Equipment	A		2,030				2,030	U
152	Operating Forces Support Equipment	A		7,500		15,800		23,300	U
153	C4ISR Equipment	A		4,010				4,010	U
154	Environmental Support Equipment	A		23,644		1,000		24,644	U
155	Physical Security Equipment	A		101,982		15,890		117,872	U
156	Enterprise Information Technology	A		19,789				19,789	U
	Other								
159	Cancelled Account Adjustments	A							U

Department of the Navy
FY 2018 President's Budget Request
Exhibit P-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2016 Base + OCO Quantity	FY 2016 Base + OCO Cost	FY 2017 PB Request with CR Adj Base Quantity	FY 2017 PB Request with CR Adj Base Cost	FY 2017 Total PB Requests* with CR Adj Base Quantity	FY 2017 Total PB Requests* with CR Adj Base Cost	Sec
160	Next Generation Enterprise Service	A		104,642		98,216		98,216	U
999	Classified Programs			33,439		9,915		14,765	U
	Total Personnel & Command Support Equip			444,006		364,275		402,178	
	Budget Activity 08: Spares and Repair Parts								
	Spares and Repair Parts								
161	Spares and Repair Parts	A		276,333		199,660		199,660	U
	Total Spares and Repair Parts			276,333		199,660		199,660	
	Budget Activity 20: Undistributed								
	Undistributed								
162	Adj to Match Continuing Resolution	A				133,069		133,069	U
	Total Undistributed					133,069		133,069	
	Total Other Procurement, Navy			6,585,466		6,471,930		6,689,919	

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Exhibit P-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

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Line No	Item Nomenclature	Ident Code	FY 2017 PB Request with CR Adj OCO Quantity	FY 2017 PB Request with CR Adj OCO Cost	FY 2017 Total PB Requests* with CR Adj OCO Quantity	FY 2017 Total PB Requests* with CR Adj OCO Cost	FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity	FY 2017 Less Enacted Div B P.L.114-254** OCO Cost	FY 2017 Remaining Req with CR Adj OCO Quantity	FY 2017 Remaining Req with CR Adj OCO Cost	Sec
160	Next Generation Enterprise Service	A									U
999	Classified Programs			1,660		1,660				1,660	U
	Total Personnel & Command Support Equip			12,222		17,222				17,222	
	Budget Activity 08: Spares and Repair Parts										
	Spares and Repair Parts										
161	Spares and Repair Parts	A									U
	Total Spares and Repair Parts										
	Budget Activity 20: Undistributed										
	Undistributed										
162	Adj to Match Continuing Resolution	A		-112,020		-112,020				-112,020	U
	Total Undistributed			-112,020		-112,020				-112,020	
	Total Other Procurement, Navy			12,186		22,686				22,686	

Department of the Navy
FY 2018 President's Budget Request
Exhibit P-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

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Line No	Item Nomenclature	Ident Code	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA Quantity	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA Cost	FY 2017 Total PB Requests* with CR Adj Base + OCO Quantity	FY 2017 Total PB Requests* with CR Adj Base + OCO Cost	FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity	FY 2017 Less Enacted Div B P.L.114-254** OCO Cost	FY 2017 Remaining Req with CR Adj Base + OCO Quantity	FY 2017 Remaining Req with CR Adj Base + OCO Cost	Sec
160	Next Generation Enterprise Service	A		98,216		98,216				98,216	U
999	Classified Programs			11,575		16,425				16,425	U
	Total Personnel & Command Support Equip			376,497		419,400				419,400	
	Budget Activity 08: Spares and Repair Parts										
	Spares and Repair Parts										
161	Spares and Repair Parts	A		199,660		199,660				199,660	U
	Total Spares and Repair Parts			199,660		199,660				199,660	
	Budget Activity 20: Undistributed										
	Undistributed										
162	Adj to Match Continuing Resolution	A		21,049		21,049				21,049	U
	Total Undistributed			21,049		21,049				21,049	
	Total Other Procurement, Navy			6,484,116		6,712,605				6,712,605	

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FY 2018 President's Budget Request
Exhibit P-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

Appropriation: 1810N Other Procurement, Navy

Line No	Item Nomenclature	Ident Code	FY 2018 Base Quantity	FY 2018 Base Cost	FY 2018 OCO Quantity	FY 2018 OCO Cost	FY 2018 Total Quantity	FY 2018 Total Cost	Sec
160	Next Generation Enterprise Service	A		104,584				104,584	U
999	Classified Programs			23,707		2,200		25,907	U
	Total Personnel & Command Support Equip			376,329		56,540		432,869	
	Budget Activity 08: Spares and Repair Parts								
	Spares and Repair Parts								
161	Spares and Repair Parts	A		278,565		1,178		279,743	U
	Total Spares and Repair Parts			278,565		1,178		279,743	
	Budget Activity 20: Undistributed								
	Undistributed								
162	Adj to Match Continuing Resolution	A							U
	Total Undistributed								
	Total Other Procurement, Navy			8,277,789		220,059		8,497,848	

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2	01	01	0120	Allison 501K Gas Turbine	Volume 1 - 5
3	01	01	0131	Surface Power Equipment	Volume 1 - 7
4	01	01	0140	Hybrid Electric Drive (HED)	Volume 1 - 17
5	01	02	0200	Surface Combatant HM&E	Volume 1 - 19
6	01	06	0670	Other Navigation Equipment	Volume 1 - 29
7	01	08	0831	Sub Periscopes & Imaging Equip	Volume 1 - 55
8	01	09	0840	Sub Periscope, Imaging and Supt Equip Prog	Volume 1 - 57
9	01	09	0900	DDG Mod	Volume 1 - 83
10	01	09	0910	Firefighting Equipment	Volume 1 - 133
11	01	09	0925	Command and Control Switchboard	Volume 1 - 135
12	01	09	0933	LHA/LHD Midlife	Volume 1 - 137
13	01	09	0934	LCC 19/20 Extended Service Life Program	Volume 1 - 151
14	01	09	0935	Pollution Control Equipment	Volume 1 - 153
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18	01	09	0945	Submarine Batteries	Volume 1 - 187
19	01	09	0946	LPD Class Support Equipment	Volume 1 - 189
20	01	09	0947	DDG 1000 Class Support Equipment	Volume 1 - 207
21	01	09	0950	Strategic Platform Support Equip	Volume 1 - 209
22	01	09	0955	Deep Subm Sys Proj (DSSP) Equip	Volume 1 - 211
23	01	09	0960	CG Modernization	Volume 1 - 213
24	01	09	0970	LCAC	Volume 1 - 237
25	01	09	0977	Underwater EOD Programs	Volume 1 - 239
26	01	09	0981	Items less than $5 Million	Volume 1 - 253
27	01	09	0989	Chemical Warfare Detectors	Volume 1 - 279
28	01	09	0990	Submarine Life Support System	Volume 1 - 281
29	01	10	1010	Reactor Power Units	Volume 1 - 283
30	01	10	1020	Reactor Components	Volume 1 - 287
31	01	11	1130	Diving and Salvage Equipment	Volume 1 - 291
32	01	12	1210	Standard Boats	Volume 1 - 297
33	01	13	1320	Other Ships Training Equipment	Volume 1 - 307
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36	01	15	1600	LCS Common Mission Modules Equipment	Volume 1 - 333
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38	01	15	1602	LCS ASW Mission Modules	Volume 1 - 353
39	01	15	1603	LCS SUW Mission Modules	Volume 1 - 355
40	01	15	1604	LCS In-Service Modernization	Volume 1 - 359
41	01	15	1605	Remote Minehunting System (RMS)	Volume 1 - 363
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44	02	02	2136	AN/SQQ-89 Surf ASW Cmbt Sys	Volume 2 - 9
45	02	02	2147	SSN Acoustics	Volume 2 - 35
46	02	02	2150	SSN Acoustic Equipment	Volume 2 - 37
47	02	02	2176	Undersea Warfare Support Equipment	Volume 2 - 63

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49	02	03	2210	Submarine Acoustic Warfare System	Volume 2 - 69
50	02	03	2213	Surface Ship Torpedo Def (SSTD)	Volume 2 - 83
51	02	03	2225	Fixed Surveillance System	Volume 2 - 85
52	02	03	2237	SURTASS	Volume 2 - 89
53	02	03	2246	Maritime Patrol and Reconnaisance Force	Volume 2 - 103
54	02	04	2312	AN/SLQ-32	Volume 2 - 105
55	02	05	2360	Shipboard IW Exploit	Volume 2 - 127
56	02	05	2361	Automatic Identification System (AIS)	Volume 2 - 151
57	02	06	2560	Submarine Supt Equip Prog	Volume 2 - 153
58	02	07	2606	Cooperative Engagement Capability	Volume 2 - 157
59	02	07	2608	Trusted Information System (TIS)	Volume 2 - 169
60	02	07	2611	Naval Tact Cmd Supt Sys (NTCSS)	Volume 2 - 171
61	02	07	2614	Adv Tact Data Link Sys (ATDLS)	Volume 2 - 173
62	02	07	2618	Navy Command and Control System (NCCS)	Volume 2 - 187
63	02	07	2622	Minesweeping System Replacement	Volume 2 - 189
64	02	07	2624	Shallow Water Mine CM Ship	Volume 2 - 201
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67	02	07	2676	Strategic Platform Support Equip	Volume 2 - 207
68	02	08	2762	Other Training Equipment	Volume 2 - 209
69	02	09	2815	MATCALS	Volume 2 - 211
70	02	09	2820	Ashore ATC Equipment	Volume 2 - 213
71	02	09	2830	Afloat ATC Equipment	Volume 2 - 237
72	02	09	2831	Shipboard Air Traffic Control	Volume 2 - 253
73	02	09	2832	Automatic Carrier Landing System	Volume 2 - 255
74	02	09	2840	National Air Space System	Volume 2 - 257
75	02	09	2845	Fleet Air Traffic Control Systems	Volume 2 - 259
76	02	09	2846	Landing Systems	Volume 2 - 261
77	02	09	2851	ID Systems	Volume 2 - 263
78	02	09	2876	Naval Mission Planning Systems	Volume 2 - 275
79	02	10	2804	Depl JT Cmd & Control (DJC2)	Volume 2 - 277
80	02	10	2906	Tactical/Mobile C4I Systems	Volume 2 - 279
81	02	10	2914	Distributed Common Ground System-Navy (DCGS-N)	Volume 2 - 289
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85	02	10	2940	Gen Purp Elec Test Equip (GPETE)	Volume 2 - 323
86	02	10	2950	Network Tactical Common Data Link (CDL)	Volume 2 - 325
87	02	10	2960	Integ Combat System Test Facility	Volume 2 - 327
88	02	10	2970	EMI Control Instrumentation	Volume 2 - 329
89	02	10	2980	Items less than $5 Million	Volume 2 - 331
90	02	11	3010	Shipboard Tactical Comms	Volume 2 - 351
91	02	11	3050	Ship Communications Automation	Volume 2 - 359
92	02	11	3057	Communications Items under $5M	Volume 2 - 379
93	02	12	3107	Submarine Broadcast Support	Volume 2 - 381
94	02	12	3130	Submarine Communication Equipment	Volume 2 - 395
95	02	13	3215	Satellite Communications Systems	Volume 2 - 419
96	02	13	3216	Navy Multiband Terminal (NMT)	Volume 2 - 421
97	02	14	3302	Joint Communications Support Element (JCSE)	Volume 2 - 437
98	02	14	3303	Electrical Power Systems	Volume 2 - 439
99	02	15	3415	Info Systems Security Program (ISSP)	Volume 2 - 441
100	02	15	3417	MIO Intel Exploitation Team	Volume 2 - 467
101	02	16	3501	Cryptologic Communications Equip	Volume 2 - 469

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114	03	03	4213	Aircraft Support Equipment	Volume 3 - 23
115	03	03	4217	Advanced Arresting Gear (AAG)	Volume 3 - 53
116	03	03	4226	Meteorological Equipment	Volume 3 - 55
117	03	03	4242	DCRS/DPL	Volume 3 - 61
118	03	03	4248	Aviation Mine Countermeasures	Volume 3 - 63
119	03	03	4268	Aviation Support Equipment	Volume 3 - 73

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121	04	03	5231	Ship Missile Support Equipment	Volume 4 - 3
122	04	03	5253	Tomahawk Support Equipment	Volume 4 - 31
123	04	04	5358	Strategic Missile Systems Equip	Volume 4 - 37
124	04	05	5420	SSN Combat Control Systems	Volume 4 - 51
125	04	05	5429	ASW Support Equipment	Volume 4 - 69
126	04	06	5509	Explosive Ordnance Disposal Equip	Volume 4 - 79
127	04	06	5543	Items Less Than $5 Million	Volume 4 - 91
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129	04	07	5662	Training Device Mods	Volume 4 - 103
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135	05	01	6028	Tactical Vehicles	Volume 5 - 15
136	05	01	6033	Amphibious Equipment	Volume 5 - 19
137	05	01	6058	Pollution Control Equipment	Volume 5 - 21
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149	07	02	8109	Medical Support Equipment	Volume 5 - 77
151	07	02	8114	Naval MIP Support Equipment	Volume 5 - 81
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153	07	02	8120	C4ISR Equipment	Volume 5 - 89
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ASW Support Equipment	5429	125	04	05	Volume 4 - 69
Adv Tact Data Link Sys (ATDLS)	2614	61	02	07	Volume 2 - 173
Advanced Arresting Gear (AAG)	4217	115	03	03	Volume 3 - 53
Afloat ATC Equipment	2830	71	02	09	Volume 2 - 237
Aircraft Support Equipment	4213	114	03	03	Volume 3 - 23
Allison 501K Gas Turbine	0120	2	01	01	Volume 1 - 5
American Forces Radio and TV Service (AFRTS)	2666	66	02	07	Volume 2 - 205
Amphibious Equipment	6033	136	05	01	Volume 5 - 19
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Automatic Identification System (AIS)	2361	56	02	05	Volume 2 - 151
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Aviation Support Equipment	4268	119	03	03	Volume 3 - 73
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Coast Guard Equipment	3620	110	02	17	Volume 2 - 473
Command Support Equipment	8106	147	07	02	Volume 5 - 59
Command and Control Switchboard	0925	11	01	09	Volume 1 - 135
Communications Items under $5M	3057	92	02	11	Volume 2 - 379
Construction & Maint Equip	6024	133	05	01	Volume 5 - 5
Cooperative Engagement Capability	2606	58	02	07	Volume 2 - 157
Cryptologic Communications Equip	3501	101	02	16	Volume 2 - 469
DCRS/DPL	4242	117	03	03	Volume 3 - 61
DDG 1000 Class Support Equipment	0947	20	01	09	Volume 1 - 207
DDG Mod	0900	9	01	09	Volume 1 - 83
Deep Subm Sys Proj (DSSP) Equip	0955	22	01	09	Volume 1 - 211
Depl JT Cmd & Control (DJC2)	2804	79	02	10	Volume 2 - 277
Distributed Common Ground System-Navy (DCGS-N)	2914	81	02	10	Volume 2 - 289
Diving and Salvage Equipment	1130	31	01	11	Volume 1 - 291
EMI Control Instrumentation	2970	88	02	10	Volume 2 - 329
Education Support Equipment	8108	148	07	02	Volume 5 - 75

Line Item Title	Line Item Number	Line #	BA	BSA	Page
Electrical Power Systems	3303	98	02	14	Volume 2 - 439
Enterprise Information Technology	8161	156	07	02	Volume 5 - 111
Environmental Support Equipment	8126	154	07	02	Volume 5 - 91
Explosive Ordnance Disposal Equip	5509	126	04	06	Volume 4 - 79
Fire Fighting Equipment	6027	134	05	01	Volume 5 - 13
Firefighting Equipment	0910	10	01	09	Volume 1 - 133
First Destination Transportation	7066	143	06	01	Volume 5 - 39
Fixed Surveillance System	2225	51	02	03	Volume 2 - 85
Fleet Air Traffic Control Systems	2845	75	02	09	Volume 2 - 259
Gen Purp Elec Test Equip (GPETE)	2940	85	02	10	Volume 2 - 323
General Purpose Trucks	6007	132	05	01	Volume 5 - 3
Hybrid Electric Drive (HED)	0140	4	01	01	Volume 1 - 17
ID Systems	2851	77	02	09	Volume 2 - 263
Info Systems Security Program (ISSP)	3415	99	02	15	Volume 2 - 441
Integ Combat System Test Facility	2960	87	02	10	Volume 2 - 327
Items Less Than $5 Million	5543	127	04	06	Volume 4 - 91
Items less than $5 Million	0981	26	01	09	Volume 1 - 253
Items less than $5 Million	2980	89	02	10	Volume 2 - 331
Items under $5 million	6060	138	05	01	Volume 5 - 23
Joint Communications Support Element (JCSE)	3302	97	02	14	Volume 2 - 437

Line Item Title	Line Item Number	Line #	BA	BSA	Page
LCAC	0970	24	01	09	Volume 1 - 237
LCC 19/20 Extended Service Life Program	0934	13	01	09	Volume 1 - 151
LCS ASW Mission Modules	1602	38	01	15	Volume 1 - 353
LCS Class Support Equipment	0944	17	01	09	Volume 1 - 181
LCS Common Mission Modules Equipment	1600	36	01	15	Volume 1 - 333
LCS In-Service Modernization	1604	40	01	15	Volume 1 - 359
LCS MCM Mission Modules	1601	37	01	15	Volume 1 - 341
LCS SUW Mission Modules	1603	39	01	15	Volume 1 - 355
LHA/LHD Midlife	0933	12	01	09	Volume 1 - 137
LM-2500 Gas Turbine	0110	1	01	01	Volume 1 - 1
LPD Class Support Equipment	0946	19	01	09	Volume 1 - 189
LSD Midlife & Modernization	1610	42	01	16	Volume 1 - 365
Landing Systems	2846	76	02	09	Volume 2 - 261
MATCALS	2815	69	02	09	Volume 2 - 211
MIO Intel Exploitation Team	3417	100	02	15	Volume 2 - 467
Maritime Patrol and Reconnaisance Force	2246	53	02	03	Volume 2 - 103
Materials Handling Equipment	7015	140	06	01	Volume 5 - 27
Medical Support Equipment	8109	149	07	02	Volume 5 - 77
Meteorological Equipment	4226	116	03	03	Volume 3 - 55
Minesweeping System Replacement	2622	63	02	07	Volume 2 - 189

Line Item Title	Line Item Number	Line #	BA	BSA	Page
NAVSTAR GPS Receivers (Space)	2657	65	02	07	Volume 2 - 203
National Air Space System	2840	74	02	09	Volume 2 - 257
Naval MIP Support Equipment	8114	151	07	02	Volume 5 - 81
Naval Mission Planning Systems	2876	78	02	09	Volume 2 - 275
Naval Tact Cmd Supt Sys (NTCSS)	2611	60	02	07	Volume 2 - 171
Navy Command and Control System (NCCS)	2618	62	02	07	Volume 2 - 187
Navy Multiband Terminal (NMT)	3216	96	02	13	Volume 2 - 421
Network Tactical Common Data Link (CDL)	2950	86	02	10	Volume 2 - 325
Next Generation Enterprise Service	8164	160	07	05	Volume 5 - 115
Nuclear Alterations	1480	35	01	15	Volume 1 - 331
Operating Forces IPE	1445	34	01	14	Volume 1 - 309
Operating Forces Supt Equip	8118	152	07	02	Volume 5 - 83
Other Navigation Equipment	0670	6	01	06	Volume 1 - 29
Other Ships Training Equipment	1320	33	01	13	Volume 1 - 307
Other Supply Support Equipment	7050	142	06	01	Volume 5 - 37
Other Training Equipment	2762	68	02	08	Volume 2 - 209
Passenger Carrying Vehicles	6003	131	05	01	Volume 5 - 1
Physical Security Equipment	8128	155	07	02	Volume 5 - 103
Physical Security Vehicles	6075	139	05	01	Volume 5 - 25
Pollution Control Equipment	0935	14	01	09	Volume 1 - 153

Line Item Title	Line Item Number	Line #	BA	BSA	Page
Pollution Control Equipment	6058	137	05	01	Volume 5 - 21
RADIAC	2920	83	02	10	Volume 2 - 309
Reactor Components	1020	30	01	10	Volume 1 - 287
Reactor Power Units	1010	29	01	10	Volume 1 - 283
Remote Minehunting System (RMS)	1605	41	01	15	Volume 1 - 363
SPQ-9B Radar	2026	43	02	02	Volume 2 - 1
SSN Acoustic Equipment	2150	46	02	02	Volume 2 - 37
SSN Acoustics	2147	45	02	02	Volume 2 - 35
SSN Combat Control Systems	5420	124	04	05	Volume 4 - 51
SURTASS	2237	52	02	03	Volume 2 - 89
Satellite Communications Systems	3215	95	02	13	Volume 2 - 419
Shallow Water Mine CM Ship	2624	64	02	07	Volume 2 - 201
Ship Communications Automation	3050	91	02	11	Volume 2 - 359
Ship Gun Systems Equipment	5111	120	04	02	Volume 4 - 1
Ship Missile Support Equipment	5231	121	04	03	Volume 4 - 3
Shipboard Air Traffic Control	2831	72	02	09	Volume 2 - 253
Shipboard IW Exploit	2360	55	02	05	Volume 2 - 127
Shipboard Tactical Comms	3010	90	02	11	Volume 2 - 351
Sonar Switches and Transducers	2181	48	02	02	Volume 2 - 67
Sonobuoys - All Types	4048	112	03	01	Volume 3 - 1

Line Item Title	Line Item Number	Line #	BA	BSA	Page
Spares and Repair Parts	9020	161	08	01	Volume 5 - 121
Special Purpose Supply Systems	7069	144	06	01	Volume 5 - 41
Standard Boats	1210	32	01	12	Volume 1 - 297
Strategic Missile Systems Equip	5358	123	04	04	Volume 4 - 37
Strategic Platform Support Equip	0950	21	01	09	Volume 1 - 209
Strategic Platform Support Equip	2676	67	02	07	Volume 2 - 207
Sub Periscope, Imaging and Supt Equip Prog	0840	8	01	09	Volume 1 - 57
Sub Periscopes & Imaging Equip	0831	7	01	08	Volume 1 - 55
Submarine Acoustic Warfare System	2210	49	02	03	Volume 2 - 69
Submarine Batteries	0945	18	01	09	Volume 1 - 187
Submarine Broadcast Support	3107	93	02	12	Volume 2 - 381
Submarine Communication Equipment	3130	94	02	12	Volume 2 - 395
Submarine Life Support System	0990	28	01	09	Volume 1 - 281
Submarine Support Equipment	0941	15	01	09	Volume 1 - 157
Submarine Supt Equip Prog	2560	57	02	06	Volume 2 - 153
Submarine Training Device Mods	5661	128	04	07	Volume 4 - 93
Supply Equipment	7025	141	06	01	Volume 5 - 29
Surface Combatant HM&E	0200	5	01	02	Volume 1 - 19
Surface Power Equipment	0131	3	01	01	Volume 1 - 7
Surface Ship Torpedo Def (SSTD)	2213	50	02	03	Volume 2 - 83

Line Item Title	Line Item Number	Line #	BA	BSA	Page
Surface Training Equipment	5664	130	04	07	Volume 4 - 107
Tactical Vehicles	6028	135	05	01	Volume 5 - 15
Tactical/Mobile C4I Systems	2906	80	02	10	Volume 2 - 279
Tomahawk Support Equipment	5253	122	04	03	Volume 4 - 31
Training Device Mods	5662	129	04	07	Volume 4 - 103
Training Support Equipment	8081	145	07	01	Volume 5 - 45
Training and Education Equipment	8101	146	07	01	Volume 5 - 49
Trusted Information System (TIS)	2608	59	02	07	Volume 2 - 169
Undersea Warfare Support Equipment	2176	47	02	02	Volume 2 - 63
Underwater EOD Programs	0977	25	01	09	Volume 1 - 239
Virginia Class Support Equipment	0942	16	01	09	Volume 1 - 171
Weapons Range Support Equipment	4204	113	03	03	Volume 3 - 13

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 05: Civil Engineering Support Equip / BSA 1: Civil Engineering Support Equipment	**P-1 Line Item Number / Title:** 6003 / Passenger Carrying Vehicles

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

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	2.438	8.853	5.299	0.000	5.299	4.251	3.979	4.037	4.073	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	2.438	8.853	5.299	0.000	5.299	4.251	3.979	4.037	4.073	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**2.438**	**8.853**	**5.299**	**0.000**	**5.299**	**4.251**	**3.979**	**4.037**	**4.073**	**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:

This budget line item funds procurement of passenger-carrying vehicles consisting of buses, automobiles, ambulances, and various utility and carryall trucks up to 9200 lbs. Gross Vehicle Weight Rating (GVWR). These vehicles are utilized by Naval operating forces and shore activities for essential transportation of personnel in the execution of official Navy business. Funding in this line also supports the Joint POW/MIA Accounting Command (JPAC).

Buses procured are 20 to 60 passenger school buses, shuttle buses, intercity buses, and ambulance buses, which provide the most cost effective means to transport groups of people between various locations. Buses are used to transport sailors/airmen and reserve personnel for flight/ship logistic related assignments, mandatory military training and exercises, and for transportation of personnel between administrative areas, ships/airfields, and industrial areas on a daily basis (both scheduled and intermittent).

Automobiles are used to transport small groups of personnel, on and off base, for various work related activities. Law enforcement automobiles provide essential transportation services to insure optimum responsiveness in support of DOD intelligence and base security missions. They are used in Naval intelligence, investigative and surveillance operations, security patrols, and other law enforcement activities.

Ambulances are used by the Medical Corps at Navy hospitals, clinics, and by Naval Expeditionary Medical Command Units. Modular ambulances are used for emergency transport of personnel where emergency medical services are provided in route. Field ambulances provide the same emergency service, but are four-wheel drive to access remote sites in support of field units. Patient transport ambulances are used for transporting stabilized patients to specialized care/other medical facilities. Ambulance conversion buses are used to move mixed loads of ambulatory and/or stretcher-borne patients.

Maintenance/utility trucks are utilized to transport tools, supplies, materials, and equipment necessary for maintenance personnel performing facility maintenance at shore facilities. Carryalls are used for transporting sailors, flight crews, maintenance, and civilian personnel to work sites or for other mission related activities.

Justification:

The funds requested in FY 2018 will provide for recapitalization requirements to support fielding a fleet of equipment within useful life expectancy.

FY 2017 decrease in Passenger Carrying Vehicles OPN by $0.487M as required for the Department of the Navy to comply with the Bipartisan Budget Act of 2015.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 05: Civil Engineering Support Equip / BSA 1: Civil Engineering Support Equipment	**P-1 Line Item Number / Title:** 6007 / General Purpose Trucks

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

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	2.493	4.928	2.946	0.496	3.442	2.930	3.071	3.119	3.155	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	2.493	4.928	2.946	0.496	3.442	2.930	3.071	3.119	3.155	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**2.493**	**4.928**	**2.946**	**0.496**	**3.442**	**2.930**	**3.071**	**3.119**	**3.155**	**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:

This budget line item procures various sizes of utility and cargo trucks of commercial design.

Cargo pickup trucks are used to transport personnel and equipment in support of fleet operations where such mobility is necessary to support the mission. The maintenance/utility trucks are used to transport tools/materials necessary for maintenance personnel performing facility maintenance. Panel and multi-stop trucks are used primarily for the movement of material/equipment requiring protection in an enclosed van-type body and freight trucks are used to move palletized material from warehouses to users. Funding is also included in this line for specialized operations such as the Joint POW/MIA Accounting Command (JPAC), and other mission specific equipment.

Justification:

The funds requested in FY 2018 will provide for recapitalization requirements to support fielding a fleet of equipment within useful life expectancy.

FY 2017 decrease in General Purpose Trucks OPN by $0.084M as required for the Department of the Navy to comply with the Bipartisan Budget Act of 2015.

OCO:
Included in this request is FY 2018 Overseas Contingency Operations (OCO) funding for Operation Enduring Freedom - Horn of Africa (OEF-H) in the amount of $0.390M for Camp Lemonnier, Djibouti. Funds requested are for replacement of general purpose trucks at a core installation that provides key logistics services supporting ship and aircraft movements and command and control services for the warfighter in support of Overseas Contingency Operations. The life expectancy of the cargo trucks being replaced is 6-7 years and the average age is 16 years. Replacing inventory will minimize mission impact by moving towards equipment standardization of parts-stocking, minimize maintenance downtime waiting on parts from the states, and eliminate the need for costly commercial leasing to meet mission requirements.

Cargo Trucks, QTY=14, $0.390M

Included in this request is FY 2018 Overseas Contingency Operations (OCO) funding for the European Resource Initiative in the amount of $0.106M. The request supports Naval Expeditionary Combat Command's participation and support of additional bilateral and multilateral exercises and training with allies and partners; in support of Central and Eastern Europe.

Utility Trucks, QTY=5, $0.106M

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 05: Civil Engineering Support Equip / BSA 1: Civil Engineering Support Equipment	**P-1 Line Item Number / Title:** 6007 / General Purpose Trucks	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 05: Civil Engineering Support Equip / BSA 1: Civil Engineering Support Equipment	**P-1 Line Item Number / Title:** 6024 / Construction & Maint Equip

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

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.184	2.578	18.527	34.970	0.000	34.970	21.666	22.368	22.843	23.289	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.184	2.578	18.527	34.970	0.000	34.970	21.666	22.368	22.843	23.289	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.184**	**2.578**	**18.527**	**34.970**	**0.000**	**34.970**	**21.666**	**22.368**	**22.843**	**23.289**	**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:

In FY18, $13.536M was transferred from LI 7025 Supply Equipment for improved funds management by enabling NAVFAC to directly procure Expeditionary Material Handling Equipment (ExMHE) vice NAVSUP.

This budget line item funds procurement of equipment used for a variety of construction, maintenance, and repair operations. This equipment is used by the Naval Expeditionary Combat Command, Naval Beach Group, Maritime Prepositioning Force, and other Special Operating Units, in support of advance bases and camp sites.

Earth Moving Equipment includes equipment such as ditching machines, excavators, graders, wheeled and tracked loaders, rollers, compactors, scrapers, off-highway dump trucks, crawler tractors, and industrial tractors. This equipment constitutes the backbone of the Naval Construction Force (NCF) in meeting their advanced base construction mission. Dependable earth moving equipment in the fleet and shore inventories is required for the building and renovation of runways and roads, demolition activities at old building sites, and underground utilities excavation.

Miscellaneous Construction Equipment includes four major categories of construction equipment:

-General mix, batch, concrete and asphalt working equipment consists of equipment such as portable concrete mixers, rock crushers, asphalt and water distributors, aggregate spreaders, and asphalt and rubberized compound heating kettles which are used to provide aggregate materials for asphalt mixing plants and concrete batching plants. This equipment is used by the NCF to provide advance base and forward port facility construction and runway, taxi apron, and work area paving projects.

-Air compressors and drilling operations equipment consists of portable air compressors of various sizes and capacities for construction and maintenance projects; rock drills for quarry production, pile hammers and extractors for construction, repair, and disassembly of causeways, docks, piers, and wharves; earth augers to support electrical distribution and communications systems; well drilling machines to supply water in support of Marine Corps contingencies and construction battalions at camp sites and advance bases.

-Floodlights and generators consists of portable floodlight trailers (with 6kW generators) which are used by the NCF to provide light for around-the-clock construction efforts and generators used as portable power to support power tools, runway lighting, and backup systems for electrical power distribution. This equipment is part of the DOD Mobile Electric Power Program (PM-MEP) which provides reliable standardized generators for all DOD components.

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 05: Civil Engineering Support Equip / BSA 1: Civil Engineering Support Equipment	**P-1 Line Item Number / Title:** 6024 / Construction & Maint Equip	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

Other miscellaneous maintenance equipment consists of welders, decontamination apparatus, machine shop trailers and shredders. This equipment is used for a variety of maintenance, repair and construction operations and for purification and decontamination of personnel and equipment.

Cranes (Weight Handling Equipment) includes truck or wheel-mounted cranes, straddle lifts, and crawler cranes. Truck mounted cranes have either lattice or hydraulic booms and range in size from 25 to 150 tons. Wheel-mounted cranes have hydraulic booms and range in size from 8 to 90 tons. Crawler cranes are used primarily for drag line and clam shell operations on terrain inaccessible with truck or wheel-mounted cranes. Amphibious Construction Battalions (PHIBCBs) use wheel-mounted hydraulic cranes and crawler cranes in over-the-beach operations and on elevated causeways (ELCAS).

This program also funds the procurement of Expeditionary Material Handling Equipment (ExMHE) to satisfy operational requirements and replaces overaged non-repairable equipment used in material handling operations at world-wide Navy activities. Expeditionary MHE is used to equip and sustain expeditionary forces to execute combat, combat support, and combat service support missions. Expeditionary MHE belongs to expeditionary activities that are either forward deployed units or whose mission is in direct support of those units. The funds requested in FY18 will provide for, but not limited to: Truck Forklift 5000 LB, TRFK Forklift RT, 11k, EXT Boom, Truck Forklift 12,000 LB Rough Terrain, Truck Forklift t25,000 LBCAP PRT DED W/Top Handler Forklift 53k

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 05: Civil Engineering Support Equip / BSA 1: Civil Engineering Support Equipment	**P-1 Line Item Number / Title:** 6024 / Construction & Maint Equip

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

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	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)*
P-40a	Construction & Maint Equip				- / 0.184	- / 2.578	- / 18.528	- / 34.969	- / -	- / 34.969
P-40	**Total Gross/Weapon System Cost**				**- / 0.184**	**- / 2.578**	**- / 18.527**	**- / 34.970**	**- / 0.000**	**- / 34.970**

*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 sum exactly due to rounding.

Justification:

The increase in funds requested for FY18 will provide for:

- Airfield Damage Repair technology - Replace/update various equipment to close the gap on historical airfield repair technologies still in use today. Equipment includes but is not limited to: Asphalt recyclers, Front end Loaders, Backhoes, etc.
- Cold Form Steel Systems - A method of building that is used commercially and is now planned for military use. This system will increase life safety due to less reliance on convoys to transport building materials through operational environments to operational building sites.
- Investment in generators which are more fuel efficient than the current deployed assets, which in turn also lessen the burden on convoys for fuel.
- Various Earthmoving equipment which has reached or surpassed its useful life.
- Miscellaneous Construction equipment in need of recapitalization as it has reached or surpassed its useful life.

Investment in these areas had been deferred due to sequestration and other fiscal constraints which yields the increase in funding from FY17 to FY18.

In addition, $13.536M was transferred from LI 7025 Supply Equipment into this line for improved funds management by enabling NAVFAC to directly procure Expeditionary Material Handling Equipment (ExMHE) vice NAVSUP.

FY 2017 decrease in Construction & Maint Equip OPN by $0.779M as required for the Department of the Navy to comply with the Bipartisan Budget Act of 2015.

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 05 / 1	**P-1 Line Item Number / Title:** 6024 / Construction & Maint Equip	**Aggregated Items Title:** Construction & Maint Equip

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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) EARTHMOVING																				
1.1) ARMORED SKID STEER LOADER	A		-	-	-	-	-	-	324,950.00	4	1.300	-	-	-	-	-	-	-	-	-
1.2) GRADER MOTORIZED	A		-	-	-	195,573.00	6	1.173	200,308.00	1	0.200	-	-	-	-	-	-	-	-	-
1.3) GRADER ROAD 6X4 12 FT BLADE SCARIFIER	A		-	-	-	-	-	-	262,665.00	1	0.263	286,305.00	1	0.286	-	-	-	286,305.00	1	0.286
1.4) LOADER SCOOP WH	A		-	-	-	136,714.00	1	0.137	139,312.00	1	0.139	-	-	-	-	-	-	-	-	-
1.5) LOADER SCOOP WHL 2.5CY MP BKT FKS	A		-	-	-	-	-	-	181,181.00	2	0.362	184,804.00	12	2.218	-	-	-	184,804.00	12	2.218
1.7) LOADER SKID CLOSED CAB DED B41/APH/FK	A		-	-	-	101,287.00	3	0.304	101,450.00	1	0.101	-	-	-	-	-	-	-	-	-
1.8) LOADER SKID CLOSED CAB DED B41/APH/FK (RESERVE FORCES) (1)	A		-	-	-	-	-	-	63,811.00	6	0.383	103,313.00	39	4.029	-	-	-	103,313.00	39	4.029
1.9) ROLLER MOTORIZED	A		-	-	-	-	-	-	-	-	-	206,493.00	2	0.413	-	-	-	206,493.00	2	0.413
1.10) SLEP EARTHMOVING EQUIPMENT PROGRAM	A		-	-	-	-	-	-	-	-	-	150,000.00	12	1.800	-	-	-	150,000.00	12	1.800
1.14) TRACTOR CRAWLER DED 240 HP W/WATER FORD	A		-	-	-	-	-	-	552,700.00	5	2.764	563,754.00	1	0.564	-	-	-	563,754.00	1	0.564
1.19) TRACTOR WHEELED INDUST 4X2 60 NET HP	A		-	-	-	141,752.00	1	0.142	144,445.00	1	0.144	-	-	-	-	-	-	-	-	-
1.20) TRACTOR WHEELED INDUST 4X2 93HP LDR 1.3 CYD BCKT	A		-	-	-	-	-	-	136,984.00	4	0.548	-	-	-	-	-	-	-	-	-
1.21) TRACTOR WHEELED INDUSTRIAL 50 - 70 HP	A		-	-	-	-	-	-	-	-	-	75,000.00	5	0.375	-	-	-	75,000.00	5	0.375
1.22) TRACTOR WHEELED LDR/ BKHO	A		-	-	-	-	-	-	-	-	-	165,409.00	1	0.165	-	-	-	165,409.00	1	0.165
1.25) TRC WH IND10-70	A		-	-	-	-	-	-	64,849.00	1	0.065	-	-	-	-	-	-	-	-	-
Subtotal: 1) EARTHMOVING			***-***	***-***	***0.000***	***-***	***-***	***1.756***	***-***	***-***	***6.269***	***-***	***-***	***9.850***	***-***	***-***	***-***	***-***	***-***	***9.850***

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 05 / 1	**P-1 Line Item Number / Title:** 6024 / Construction & Maint Equip	**Aggregated Items Title:** Construction & Maint Equip

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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) MISC. CONSTRUCTION																				
2.1) ASPHALT RECYCLER	A		-	-	-	-	-	-	260,000.00	10	2.600	-	-	-	-	-	-	-	-	-
2.2) CENTRAL MIX PLANT, CONCRETE 220 CY PH	A		-	-	-	-	-	-	405,397.00	3	1.216	-	-	-	-	-	-	-	-	-
2.3) CHIPPER SPREADER	A		-	-	-	-	-	-	327,904.00	4	1.312	-	-	-	-	-	-	-	-	-
2.4) COLD FORMED STEEL FACTORY SYSTEMS	A		-	-	-	-	-	-	1,028K	2	2.056	-	-	-	-	-	-	-	-	-
2.5) COMPRESSOR AIR ROTARY 365 CFM AT 100 PSIG DED	A		-	-	-	-	-	-	42,388.00	2	0.085	-	-	-	-	-	-	-	-	-
2.6) CONCRETE MIXER	A		-	-	-	-	-	-	-	-	-	24,278.00	61	1.481	-	-	-	24,278.00	61	1.481
2.7) CONCRETE SAW	A		-	-	-	-	-	-	-	-	-	25,361.00	6	0.152	-	-	-	25,361.00	6	0.152
2.8) ECU 8T 35KW GENERATOR TRAILER MOUNT	A		-	-	-	-	-	-	105,212.00	20	2.104	107,316.00	12	1.288	-	-	-	107,316.00	12	1.288
2.9) ECU 8T 35KW GENERATOR TRAILER MOUNT (RESERVE FORCES)	A		-	-	-	-	-	-	-	-	-	107,316.00	2	0.215	-	-	-	107,316.00	2	0.215
2.10) FLOODLIGHT SET ELECTRIC SELF-CONTAINED TRLR-MTD	A		-	-	-	13,491.00	4	0.054	13,747.00	20	0.275	-	-	-	-	-	-	-	-	-
2.11) GEN 35KW AMMPS MEP 1060 SKID MTD DED	A		-	-	-	-	-	-	-	-	-	32,861.00	6	0.197	-	-	-	32,861.00	6	0.197
2.12) GEN 60KW 50/60HZ AMMPS NEW GENERATION MEP	A		-	-	-	31,781.00	14	0.445	32,416.00	16	0.519	-	-	-	-	-	-	-	-	-
2.13) GEN SET 30KW DIESEL ENGINE 30 KW MEP805B	A		-	-	-	-	-	-	35,246.00	4	0.141	-	-	-	-	-	-	-	-	-
2.15) GENERATOR 60 KW MEP806B	A		-	-	-	43,587.00	1	0.044	44,328.00	3	0.133	-	-	-	-	-	-	-	-	-
2.17) GENERATOR SET 100KW MEP807A TACT QUIET DED SKID	A		-	-	-	91,000.00	2	0.182	92,133.00	5	0.461	-	-	-	-	-	-	-	-	-

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 05 / 1	**P-1 Line Item Number / Title:** 6024 / Construction & Maint Equip	**Aggregated Items Title:** Construction & Maint Equip

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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)
2.21) GENERATOR SET 60KW AMMPS MEP 1070 SKID	A		-	-	-	-	-	-	-	-	-	35,992.00	102	3.671	-	-	-	35,992.00	102	3.671
2.23) HAMMER PILE SELF-POWERED DIESEL 22.4K FT LBS	A		-	-	-	-	-	-	109,527.00	2	0.219	-	-	-	-	-	-	-	-	-
2.24) INDUSTRIAL SAW ATTACHMENT	A		-	-	-	-	-	-	45,000.00	22	0.990	-	-	-	-	-	-	-	-	-
2.25) LUBE SKID	A		-	-	-	-	-	-	-	-	-	121,000.00	5	0.605	-	-	-	121,000.00	5	0.605
2.27) SWEEPER MAGNET SELF-PROPELLED TRACTOR MTD 8FT	A		-	-	-	-	-	-	-	-	-	31,836.00	9	0.287	-	-	-	31,836.00	9	0.287
2.28) WELDER ARC ELECTRIC 300 AMPS AC/DC TIG DED	A		-	-	-	37,209.00	1	0.037	-	-	-	37,916.00	3	0.114	-	-	-	37,916.00	3	0.114
Subtotal: 2) MISC. CONSTRUCTION			**-**	**-**	***0.000***	**-**	**-**	***0.762***	**-**	**-**	***12.111***	**-**	**-**	***8.010***	**-**	**-**	**-**	**-**	**-**	***8.010***
3) CRANES																				
3.1) CRANE HYD TRK MTD 40 TON (RESERVE FORCES)	A		-	-	-	-	-	-	-	-	-	570,193.00	2	1.140	-	-	-	570,193.00	2	1.140
3.5) EXCAVATOR CRAWLER MOUNTED HYDRAULIC OPERATED NONSTANDARD	A		-	-	-	-	-	-	-	-	-	363,000.00	1	0.363	-	-	-	363,000.00	1	0.363
Subtotal: 3) CRANES			**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	***1.503***	**-**	**-**	**-**	**-**	**-**	***1.503***
4) ILS SUPPORT COST																				
4.1) ILS SUPPORT COSTS	A		-	-	0.184	-	-	0.060	-	-	0.139	-	-	0.707	-	-	-	-	-	0.707
4.2) ILS SUPPORT COSTS (RESERVE FORCES) [2]	A		-	-	-	-	-	-	-	-	0.009	-	-	-	-	-	-	-	-	-
Subtotal: 4) ILS SUPPORT COST			**-**	**-**	***0.184***	**-**	**-**	***0.060***	**-**	**-**	***0.148***	**-**	**-**	***0.707***	**-**	**-**	**-**	**-**	**-**	***0.707***
5) EXPEDITIONARY MATERIAL HANDLING EQUIPMENT																				
5.3) FORKLIFT 11K DED PRT ROUGH TERRAIN (182011)	A		-	-	-	-	-	-	-	-	-	190,000.00	3	0.570	-	-	-	190,000.00	3	0.570
5.4) FORKLIFT 11K DED SRT	A		-	-	-	-	-	-	-	-	-	50,000.00	2	0.100	-	-	-	50,000.00	2	0.100
5.6) FORKLIFT 15K DED SRT	A		-	-	-	-	-	-	-	-	-	88,000.00	2	0.176	-	-	-	88,000.00	2	0.176

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 05 / 1	**P-1 Line Item Number / Title:** 6024 / Construction & Maint Equip	**Aggregated Items Title:** Construction & Maint Equip

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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)
5.13) ILS for Truck, Forklift, 12K RT [3]	A		-	-	-	-	-	-	-	-	-	-	-	0.028	-	-	-	-	-	0.028
5.15) ILS for Truck, Forklift, 7-11K MMV [4]	A		-	-	-	-	-	-	-	-	-	-	-	0.039	-	-	-	-	-	0.039
5.16) TRFK D 53K PRT (182051)	A		-	-	-	-	-	-	-	-	-	886,160.00	3	2.658	-	-	-	886,160.00	3	2.658
5.18) Truck, Forklift, 10K DED (134010)	A		-	-	-	-	-	-	-	-	-	126,988.00	4	0.508	-	-	-	126,988.00	4	0.508
5.19) Truck, Forklift, 12K RT (182012)	A		-	-	-	-	-	-	-	-	-	185,000.00	22	4.070	-	-	-	185,000.00	22	4.070
5.24) Truck, Forklift, 25K DED (134025)	A		-	-	-	-	-	-	-	-	-	130,000.00	2	0.260	-	-	-	130,000.00	2	0.260
5.26) Truck, Forklift, 6K DED (133006)	A		-	-	-	-	-	-	-	-	-	38,160.00	4	0.153	-	-	-	38,160.00	4	0.153
5.28) Truck, Forklift, 6K LPG (130506)	A		-	-	-	-	-	-	-	-	-	31,081.00	3	0.093	-	-	-	31,081.00	3	0.093
5.29) Truck, Forklift, 7-11K MMV (182011)	A		-	-	-	-	-	-	-	-	-	156,109.00	40	6.244	-	-	-	156,109.00	40	6.244
Subtotal: 5) EXPEDITIONARY MATERIAL HANDLING EQUIPMENT			**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	***14.899***	**-**	**-**	**-**	**-**	**-**	***14.899***
Total			**-**	**-**	**0.184**	**-**	**-**	**2.578**	**-**	**-**	**18.528**	**-**	**-**	**34.969**	**-**	**-**	**-**	**-**	**-**	**34.969**

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

Footnotes:

[1] FY17 to FY18 unit cost increase due to updated, more accurate pricing estimates

[2] Increase is required to ensure end item is fielded with a complete product support package, tech manuals, Allowance Equipment Lists, Product Support Packages, and training for new equipment such as Airfield Damage Repair (ADR) and Cement Mixer.

[3] ILS is developed in the same year as the product is being procured.

[4] ILS is developed in the same year as the product is being procured.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 05: Civil Engineering Support Equip / BSA 1: Civil Engineering Support Equipment	**P-1 Line Item Number / Title:** 6027 / Fire Fighting Equipment

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

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	14.705	14.199	2.541	2.304	4.845	6.195	14.207	15.452	15.504	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	14.705	14.199	2.541	2.304	4.845	6.195	14.207	15.452	15.504	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**14.705**	**14.199**	**2.541**	**2.304**	**4.845**	**6.195**	**14.207**	**15.452**	**15.504**	**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:

This budget line item funds procurement of aircraft fire/rescue trucks and structural/brush fire trucks.

The aircraft fire/rescue trucks are used at Naval Air Stations for combating aircraft fires and rescue of aircraft crews. The trucks range in size from a small 11,000 pound Gross Vehicle Weight Rating (GVWR) pickup with utility body and twin engine fire fighting unit to the 68,000 pound GVWR crash truck which carries 3,000 gallons of water and 200 gallons of AFFF (foam). The structural/brush fire trucks are used at Naval activities in the same manner as municipal fire trucks in fighting structural and grass fires.

The Navy's investment in ships, aircraft, facilities, personnel and equipment mandates having adequate fire protection. The requested funds are needed to comply with current National Fire Protection Association (NFPA) standards, sustain the Navy Firefighting Fleet and maintain an effective Firefighting Fleet Modernization Program consistent with findings identified in the DoD IG Report: D-2003-121 DoD Fire and Emergency Services Program. The Firefighting Fleet requires annual investments to ensure emergency response vehicles are within specified service life for safety, technological improvements, and maintenance sustainability. Highly reliable trucks are required as the emergency vehicles are key to success. Some older crash response trucks do not meet roll safety criteria, and require continued replacement to ensure safe working limits. As firefighter staffing is reduced and the all-hazards emergency response mission expands, the Navy's firefighting apparatus must evolve to provide additional capabilities for emergency medical services, rescue, confined space, hazardous materials, etc. The ability to save lives and protect property is essential in supporting the Navy's mission. The role of these trucks is to provide the Navy's response to structural fire emergencies, aircraft rescue fire fighting crashes, emergency medical services incidents, all hazards public safety, and emergency response to terrorism incidents, and weapons of mass destruction.

Justification:

The funds requested in FY 2018 will provide for recapitalization requirements to support fielding a fleet of equipment within useful life expectancy.

FY 2017 decrease in Fire Fighting Equipment OPN by $0.572M as required for the Department of the Navy to comply with the Bipartisan Budget Act of 2015.

OCO:
Included in this request is FY 2018 Overseas Contingency Operations (OCO) funding for Operation Freedom's Sentinel in the amount of $.572M for Isa Air Base, Bahrain and for Operation Enduring Freedom - Horn of Africa (OEF-H) in the amount of $1.732M for Camp Lemonnier, Djibouti.

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 05: Civil Engineering Support Equip / BSA 1: Civil Engineering Support Equipment	**P-1 Line Item Number / Title:** 6027 / Fire Fighting Equipment	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

Funds requested are for replacement fire fighting vehicles (beyond serviceable life) at core installations that provide key logistics services supporting ship and aircraft movements and command and control services for the warfighter in support of Overseas Contingency Operations. The life expectancy of fire fighting equipment used in OCO locations is 10 years given the harsh expeditionary type conditions, reduced maintenance support and the lack of proper fire station facilities. The trucks being replaced have met their life expectancy.

Isa Air Force Base:
Truck A/C Crash Fire Rescue 1500 GAL, QTY=1, $0.572M

Camp Lemonnier, Djibouti:
Truck Water Tanker, QTY=1, $0.630M
Truck Fire Fighting Structural Pumper, QTY=1, $0.381M
Truck A/C Crash Fire Rescue 3000 GAL, QTY=1, $0.721M

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 05: Civil Engineering Support Equip / BSA 1: Civil Engineering Support Equipment	**P-1 Line Item Number / Title:** 6028 / Tactical Vehicles
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.612	2.898	14.917	19.699	2.336	22.035	20.516	21.178	22.239	22.317	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.612	2.898	14.917	19.699	2.336	22.035	20.516	21.178	22.239	22.317	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.612**	**2.898**	**14.917**	**19.699**	**2.336**	**22.035**	**20.516**	**21.178**	**22.239**	**22.317**	**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:

This budget line item funds procurement of light and medium duty tactical equipment used primarily by the Naval Expeditionary Combat Command (NECC), Maritime Prepositioning Force (MPF), Naval Beach Group (NBG), and other special operating units. This line also includes Force Protection requirements funding for Tactical Vehicles.

Light duty tactical vehicles (HMMWVs/LSSVs/JLTVs) are used by NECC, MPF, NBG, and special operating units for the movement of personnel and equipment. Medium tactical(MTVR/MRAPs) trucks are required for rapid deployment of containerized table of allowance material and have air transport, water fording, and enhanced combat mobility capability. Medium tactical cargo trucks are used for material/ equipment movement and delivery. Medium tactical dump trucks are used to support combat construction of airfields, landing zones, road battle damage repair and rapid runway repair.

Force Protection funds are used to modify both light and medium tactical vehicles with the necessary upgrades to carry out both primary and secondary missions in a combat environment. Planned modifications include making baseline MTVR models Ready To Accept Armor (RTAA) and integrating vehicles with installations kits for Command, Control, Computers, Communications, Intelligence, Surveillance, and Reconnaissance (C4ISR) equipment and Counter RCIED (Radio-Controlled Improvised Explosive Device) Electronic Warfare systems. This program includes funds for the procurement of HMMWVs to guard and protect the TRIDENT II (D5) missile while the missile is in storage, being handled, or in a movement convoy to and from the waterfront at the Strategic Weapons Facility, Atlantic (SWFLANT) in Kings Bay, GA and the Strategic Weapons Facility, Pacific (SWFPAC) in Bangor, WA. Equipment is used in support of Strategic Systems Programs (SSP) mission of securing the Limited Area and provides for security vehicles to replace existing (aging) vehicles used in roving patrols of the Limited Area and to support TRIDENT II (D5) missile movement convoys.

This program includes funds for the procurement of HMMWVs to guard and protect the TRIDENT II (D5) missile while the missile is in storage, being handled, or in a movement convoy to and from the waterfront at the Strategic Weapons Facility, Atlantic (SWFLANT) in Kings Bay, GA and the Strategic Weapons Facility, Pacific (SWFPAC) in Bangor, WA. Equipment is used in support of Strategic Systems Programs (SSP) mission of securing the Limited Area and provides for security vehicles to replace existing (aging) vehicles used in roving patrols of the Limited Area and to support TRIDENT II (D5) missile movement convoys.

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 05: Civil Engineering Support Equip / BSA 1: Civil Engineering Support Equipment	**P-1 Line Item Number / Title:** 6028 / Tactical Vehicles

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

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	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)*
P-40a	Tactical Vehicles				- / 0.612	- / 2.898	- / 14.917	- / 19.699	- / 2.336	- / 22.035
P-40	**Total Gross/Weapon System Cost**				**- / 0.612**	**- / 2.898**	**- / 14.917**	**- / 19.699**	**- / 2.336**	**- / 22.035**

*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 sum exactly due to rounding.

Justification:
The funds requested in FY18 will provide for, but not limited to:

- Joint Light Tactical Vehicle (JLTV) for US Navy SEAL combat operations in forward deployed contingency locations. These materiel assets support the Seals core mission requirements and are essential to the readiness and battlefield effectiveness of these special forces in winning the current fight against ISIS and other extremist elements.

- LSSVs which have surpassed their life expectancy and will be deployed to the Expeditionary Medical Forces. LSSV's are at end of service life and are required to be recapitalized in FY18 to meet both Expeditionary Medical rotation schedule and Combat Command mission requirements. The Expeditionary Medical Facility (EMF) Tables of Allowance are forward deployed and only be accessed once every 5 years. The LSSV procurements are aligned to meet the rotation of the EMF rotation schedule.

Force Protection:

Ready to Accept Armor (RTAA): Increase in funding is for the efforts involved in providing RTAA modifications to existing Medium Tactical Vehicle Replacements (MTVR's), which will be used in support of the EOD Expeditionary Mine Counter Measures (Ex-MCM) mission. C4ISR: Increase in funding will provide for integration of installation kits for C4ISR and CREW equipment into multiple tactical vehicle platforms. Outfitting of this gear is a lesson learned from OIF/OEF when the Expeditionary Forces lacked means to communicate across vehicles within the same convoy, capability to identify friendly forces, and to identify and defeat Improvised Explosive Devices (IEDs). Lacking these capabilities created unnecessary life-safety risks. This program was delayed due to sequestration and other funding constraints yielding the increase in FY18.

FY 2017 decrease in Tactical Vehicles OPN by $0.629M as required for the Department of the Navy to comply with the Bipartisan Budget Act of 2015.

OCO:
Included in this request is FY 2018 Overseas Contingency Operations (OCO) funding for Operation Enduring Freedom - Afghanistan in the amount of $2.336M for installation of EGRESS ECP kits, life safety issues from lessons learned from OIF/OEF. The Egress ECP Kits were procured in FY14 with OCO and were long lead items. Items are scheduled for delivery starting June of 2017.The MRAP ECPs for Egress and Seat Survivability Upgrades were designed specifically to increase MRAP survivor rates in today's urban warfare environment of IEDs.

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 05 / 1	P-1 Line Item Number / Title: 6028 / Tactical Vehicles	Aggregated Items Title: Tactical Vehicles

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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) Light Trucks																				
1.1) JOINT LIGHT TACTICAL VEHICLE (JLTV) (1)	A		-	-	-	-	-	-	392,700.00	6	2.356	420,000.00	3	1.260	-	-	-	420,000.00	3	1.260
1.2) LSSV CARGO CREWCAB 4X4 TROOP SEATS	A		-	-	-	50,000.00	25	1.250	59,957.00	12	0.719	51,000.00	32	1.632	-	-	-	51,000.00	32	1.632
1.3) LSSV MAINTENANCE UTILITY CREWCAB 4X4	A		-	-	-	-	-	-	73,275.00	2	0.147	-	-	-	-	-	-	-	-	-
1.4) LSSV TRUCK LITTER CARRIER 4X4 TWO DOOR DIESEL	A		-	-	-	-	-	-	163,200.00	9	1.469	166,464.00	10	1.665	-	-	-	166,464.00	10	1.665
Subtotal: 1) Light Trucks			**-**	**-**	***0.000***	**-**	**-**	***1.250***	**-**	**-**	***4.691***	**-**	**-**	***4.557***	**-**	**-**	**-**	**-**	**-**	***4.557***
2) ILS Support Cost																				
2.1) ILS Support Cost	A		-	-	0.612	-	-	-	-	-	0.022	-	-	0.218	-	-	-	-	-	0.218
Subtotal: 2) ILS Support Cost			**-**	**-**	***0.612***	**-**	**-**	**-**	**-**	**-**	***0.022***	**-**	**-**	***0.218***	**-**	**-**	**-**	**-**	**-**	***0.218***
3) Force Protection																				
3.1) Ready to Accept Armor (RTAA) modifications	A		-	-	-	-	-	0.499	-	-	-	-	-	4.937	-	-	-	-	-	4.937
3.2) Modifications to integrate communications equipment	A		-	-	-	-	-	1.149	-	-	9.754	-	-	9.987	-	-	-	-	-	9.987
3.3) Modifications to integrate communications equipment (RESERVE FORCES)	A		-	-	-	-	-	-	-	-	0.450	-	-	-	-	-	-	-	-	-
3.4) MRAP ECP	A		-	-	-	-	-	-	-	-	-	-	-	0.000	-	-	2.336	-	-	2.336
Subtotal: 3) Force Protection			**-**	**-**	***0.000***	**-**	**-**	***1.648***	**-**	**-**	***10.204***	**-**	**-**	***14.924***	**-**	**-**	***2.336***	**-**	**-**	***17.260***
Total			**-**	**-**	**0.612**	**-**	**-**	**2.898**	**-**	**-**	**14.917**	**-**	**-**	**19.699**	**-**	**-**	**2.336**	**-**	**-**	**22.035**

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

Footnotes:

(1) JLTV unit cost coordinated with the Joint Program Office. Navy's JTLV is a different configuration which can result in difference in unit cost.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 05: Civil Engineering Support Equip / BSA 1: Civil Engineering Support Equipment	**P-1 Line Item Number / Title:** 6033 / Amphibious Equipment

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A		

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	25.262	12.517	7.676	12.162	0.000	12.162	14.708	12.688	19.355	19.701	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	25.262	12.517	7.676	12.162	0.000	12.162	14.708	12.688	19.355	19.701	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**25.262**	**12.517**	**7.676**	**12.162**	**0.000**	**12.162**	**14.708**	**12.688**	**19.355**	**19.701**	**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	-	-	-	-	-	-	-	-	-	0.213
Flyaway Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

This budget line item funds the procurement of equipment to support Navy-Marine Corps amphibious operations, Logistics Over the Shore, and Joint Logistics Over the Shore operations. This provides the ability to execute the ship to shore transfer of vehicles, dry cargo, and liquid cargo, delivered over bare beaches, as well as through improved and semi-improved port facilities.

This program is a critical component that enables the Maritime Prepositioning Force (MPF) concept. It is designed and intended to interface with MPF vessels during initial combat operations (Assault Echelon and immediate sustainment of the AE force) and then with Roll-On/Roll-Off, container, dry cargo, and liquid cargo ships to provide war material to the Assault Follow-On Echelon (AFOE). The equipment is employed by the Naval Support Element (Naval Beach Groups) and the Amphibious Ready Group-Marine Expeditionary Unit (ARG/MEU) team.

The Improved Navy Lighterage System (INLS) consists of Causeway Ferries (CF), Warping Tugs (WT), a Roll-on/Roll-off Discharge Facility (RRDF), and a Floating Causeway (FC) pier. All of these systems work in concert to deliver critical war material from MPF and AFOE ships, across a bare beach, and into the hands of warfighters. The INLS achieved IOC in FY06 and FOC in FY11, requiring sustainment efforts to maintain availability for operation in the face of aging components and technical obsolescence of the various control systems. The Sealift Support Program Office is providing lifecyle support to the INLS program as well as other specialized equipment and vehicles that directly participate in and contribute to amphibious operations. Specific to this lifecycle support mission, an improvement is being made to the waterjet system to extend the lifespan of critical components that otherwise would render the craft non-mission capable if the component were to fail, necessitating a significant and time-consuming depot-level repair.

Justification:

The budget requests funds for INLS Waterjet modifications that upgrade primary propulsion components that are failing at an unacceptable rate. The INLS Waterjet modification will increase mean time between overhauls from 12 months to 60 months and extend the life of the craft.

The increase of these upgrades from FY17 to FY18 is critical to meet the delivery deadlines of ready-to-deploy craft for loading onto the MPF ships as part of the MPF Maintenance Cycle (MMC).

Failure to meet this timeline will result in the INLS craft not receiving this critical upgrade for up to three additional years, leading to significantly increased risk to the ability to execute tasking in support of COCOMs.

FY 2017 decrease in Amphibious Equipment OPN by $0.324M as required for the Department of the Navy to comply with the Bipartisan Budget Act of 2015.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 05: Civil Engineering Support Equip / BSA 1: Civil Engineering Support Equipment	**P-1 Line Item Number / Title:** 6058 / Pollution Control Equipment
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A / **Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A	

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	3.018	2.321	2.748	0.000	2.748	2.806	2.744	2.795	2.850	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	3.018	2.321	2.748	0.000	2.748	2.806	2.744	2.795	2.850	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**3.018**	**2.321**	**2.748**	**0.000**	**2.748**	**2.806**	**2.744**	**2.795**	**2.850**	**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 Navy Ashore Pollution Control Equipment program funds hazardous substance spill containment and recovery systems.

Funding requirements for the Navy's oil spill program include procurement of oil spill containment booms and related deployment equipment. After initial containment with boom, shore activities can efficiently collect spilled oil with vacuum trucks. This equipment will enable the Navy to meet the requirements established by the EPA in the National Contingency Plan which requires rapid and effective response to oil spills. The revised National Spill Contingency Plan mandates that the DOD and the Navy assume responsibility for their own oil and hazardous substance spills. These broad responsibilities require the Navy to maintain sufficient spill response equipment for the Navy activities worldwide, such as oil spill containment systems and recovery systems. The severe oil spills in Alaska, California and the Gulf of Mexico have increased the public's sensitivity to releases of oil into the environment.

Justification:

Additional procurement of shore based equipment in FY18 is required to improve mission readiness at Naval Installations. Without additional procurement, there is increased maintenance costs to extend equipment service life and readiness is impacted during increased maintenance cycle times.

FY 2017 decrease in Pollution Control Equipment OPN by $0.098M as required for the Department of the Navy to comply with the Bipartisan Budget Act of 2015.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 05: Civil Engineering Support Equip / BSA 1: Civil Engineering Support Equipment	**P-1 Line Item Number / Title:** 6060 / Items under $5 million

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

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.016	13.838	12.459	18.084	0.000	18.084	29.843	27.753	24.341	24.835	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.016	13.838	12.459	18.084	0.000	18.084	29.843	27.753	24.341	24.835	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.016**	**13.838**	**12.459**	**18.084**	**0.000**	**18.084**	**29.843**	**27.753**	**24.341**	**24.835**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	0.033	-	-	-	-	-	-	-	-	0.033
Flyaway Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

SPECIAL PURPOSE VEHICLES/EQUIPMENT

This program includes special purpose vehicles and trailers of commercial design which support the Naval Expeditionary Combat Command (NECC), shore activities, and Naval Special Warfare. Included are tank trucks used to transport fuel to construction equipment at remote locations, waste disposal trucks used to transport waste oil/water, overhead maintenance trucks with insulated buckets and pole and line trucks used for repair/replacement of power systems, wreckers used in vehicle recovery/towing, field servicing vehicles used for on-site preventive maintenance of construction equipment in the field, and ammunition handling trucks used in loading/unloading and transporting munitions. Truck tractors and trailers required by the active operating forces in the logistics support of the fleet are also included in this program. Representative types and uses include van and stake bed semi-trailers to support loading/unloading of ships and aircraft and movement of materials and equipment for fleet operations, lowbed semitrailers for transport of construction equipment, tank trailers for transport and dispensing of water, fuel, and hazardous liquids, and semi-trailers transport of materials.

This program includes funds for the procurement of Bearcats, used on paved or improved roads, to guard and protect the TRIDENT II (D5) missile while the missile is in storage, being handled, or in a movement convoy to and from the waterfront at the Strategic Weapons Facility, Atlantic (SWFLANT) in Kings Bay, GA and the Strategic Weapons Facility, Pacific (SWFPAC) in Bangor, WA. Equipment is used in support of Strategic Systems Programs (SSP) mission of securing the Limited Area and provides for security vehicles to replace existing (aging) vehicles used in roving patrols of the Limited Area and to support TRIDENT II (D5) missile movement convoys.

COMBAT CONSTRUCTION SUPPORT EQUIPMENT

The equipment included in this program is used by the Naval Expeditionary Combat Command (NECC), Naval Beach Group (NBG), and Naval Special Warfare to provide responsive military construction support to the Navy, Marine Corps, and other forces during military operations, construction of base facilities, and in the conduct of limited defensive operations. These facilities and equipment are vital for maintaining the integrity and sustainability of these units during contingency and wartime operations. Equipment items include containers, required for prepacking and securing on-site storage of expensive equipment to expedite mobilization, fuel storage tanks required for on-site storage of fuel, water purification units required for camp water treatment systems, water storage tanks (collapsible fabric) required for water treatment, storage and distribution systems, power distribution panelboards required for camp electrical distribution systems, and tension fabric structures required for expeditionary facilities to provide equipment maintenance and company shops, berthing, laundry, and combat operations centers.

OCEAN CONSTRUCTION EQUIPMENT

Ocean Construction Equipment are those specialized equipment and facilities components used primarily by the Naval Construction Force (NCF) to perform site selection, construction, inspection, maintenance, repair and removal of fleet and other Navy fixed underwater and ocean facilities, and in support of shore-based hyperbarics. Some equipment is centrally procured under this line as initial outfitting for the

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 05: Civil Engineering Support Equip / BSA 1: Civil Engineering Support Equipment	**P-1 Line Item Number / Title:** 6060 / Items under $5 million	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

Underwater Construction Teams' (UCT) Tables of Allowance (TOA). Most of the equipment is for the Ocean Construction Equipment Inventory (OCEI). It is centrally procured and maintained by the Naval Facilities Engineering Command in a controlled inventory to ensure the NCF response to fleet needs is both timely and adequate. Utilization of funds from this program sustains the Naval Construction Force (NCF) capability to meet fleet requirements for ocean facility site survey, construction, inspection, repair, and removal, resulting in the ability of the fleet to retain its readiness through utilization of its underwater facilities. The funds requested in FY 2018 will be used to replace existing equipment kits and systems which are well beyond their useful and maintainable lives. In many instances, these replacements will result in slightly improved or modified capabilities.

MOBILE UTILITIES SUPPORT EQUIPMENT (MUSE)
Equipment in this program consists of electric power generation plants, electric substations, and electric switch gear. MUSE provides short-term support for fleet and shore utility requirements resulting from equipment failures, changes in planning and programming, temporary replacement of utilities equipment which is out of service, ship support and testing, expeditionary military operations, and utilities outages resulting from natural disaster. Operations supported are submarine testing, ships' repair, retrofit and nuclear refueling, cold iron applications, serious utility system deficiencies, MILCON delay, and advanced base requirements.

Justification:
The funds requested in FY 2018 will provide for requirements to support fielding a fleet of equipment within useful life expectancy, this includes replacement of equipment which has exceeded its useful life or new approved equipment requirements necessary to support the various expeditionary missions. Focus for expeditionary facilities is the procurement and fielding of Command and Control tent camp equipment and berthing. These engineered capabilities integrate joint standardization board (JSB) approved equipment to ensure interoperability, energy enhancements and commonality across the Navy and DOD. These materiel assets support Naval Special Warfare (NSW) core mission requirements and are essential to the readiness and battlefield effectiveness of NSW in winning the current fight against ISIS and other extremist elements. In order to take the fight to the enemy and deny them the use of remote safe havens, NSW must be prepared to construct and operate from austere, expeditionary camps in the most remote corners of the globe.

FY18 funds for Ocean Construction Equipment will provide for the planned incorporation of the new technology of Autonomous Underwater Vehicles (AUVs) into the capability of the UCTs. These AUVs will allow the Underwater Construction Teams (UCTs) to perform their underwater survey and data gathering missions in dangerous forward areas in a much safer way. UCT personnel can program the AUV to go to a certain underwater location, collect the data that has been requested by the mission commander, and return with the data. This reduces the exposure of the UCT personnel to hostile actions.

MUSE funds requested in FY 2018 will be utilized to procure one One-Megawatt (1-MW) mobile electric power generation plant.

Capabilities presented on the P40-A consist of many components. Variation in components being procured in a given fiscal year will yield fluctuation in the unit costs.

FY 2017 decrease in Items under $5 million OPN by $0.520M as required for the Department of the Navy to comply with the Bipartisan Budget Act of 2015.

The FY 2017 funding request was also reduced by $0.161M to account for the availability of prior year execution balances.

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 05: Civil Engineering Support Equip / BSA 1: Civil Engineering Support Equipment	**P-1 Line Item Number / Title:** 6075 / Physical Security Vehicles
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	1.186	1.095	1.170	0.000	1.170	1.195	1.222	1.246	1.249	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	1.186	1.095	1.170	0.000	1.170	1.195	1.222	1.246	1.249	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**1.186**	**1.095**	**1.170**	**0.000**	**1.170**	**1.195**	**1.222**	**1.246**	**1.249**	**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:

This budget line item funds procurement of physical security vehicles to include armored sedans and armored cargo/utility trucks assigned to Antiterrorism (AT), Counterintelligence (CI), and Counternarcotics (CN) missions in high threat OCONUS locations.

Sedans and cargo/utility trucks are armored to various levels of protection and are on platforms of varying sizes and gross vehicle weights, dependent upon the level of threat and the operating environment. These vehicles are generically referred to as either Commercial Heavy Armored Vehicles (CHAVs) or Commercial Light Armored Vehicles (CLAVs).

Justification:

FY 2017 decrease in Physical Security Vehicles OPN by $0.046M as required for the Department of the Navy to comply with the Bipartisan Budget Act of 2015.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 06: Supply Support Equipment / BSA 1: Supply Support Equipment	**P-1 Line Item Number / Title:** 7015 / Materials Handling Equipment

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0203422N, 0203425N, 0204230N, 0204413N, 0204423N, 0204424N, 0204455N, 0208036N, 0708012N

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	19.211	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	19.211
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	19.211	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	19.211
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**19.211**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**-**	**19.211**
(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:

Starting FY17, line items 7015 Materials Handling Equipment and 7050 Other Supply Support Equipment has been combined into line item 7025, Supply Equipment.

MATERIAL HANDLING EQUIPMENT (MHE): This program funds the procurement of Material Handling Equipment to satisfy operational requirements and replaces overaged non-repairable equipment used in material handling operations at world-wide Navy activities. Major using activities include ships, naval magazines, air stations, weapon stations, and overseas support activities such as Sigonella and Sasebo. The MHE program also funds General Fund activities to meet known operational requirements for replacement of equipment which has exceeded its economic life. Overaged equipment is not cost effective to maintain for continued operation, and repair parts are difficult to obtain. Replacement of overaged equipment with new and more efficient models will reduce excessive costs attributed to repair/overhaul, downtime and maintenance. New equipment will enhance productivity and enable stations to meet handling and logistics requirements in an efficient and effective manner.

Justification:

FY16 increase includes procurement of three 25K aircraft loader/unloaders ($2.6M) critical to logistics operations at naval installations. Additionally, procurement of 18 Millennia Military Vehicle (MMVs) is critical to the success of expeditionary operations carried out by the Naval Construction Force ($2.9M). MMVs are armored which adds weight to the vehicles and results in additional wear. Navy-wide there are at least 4,489 pieces of Material Handling Equipment which will be more than 10 years old in 2016. This quantity includes gas-powered, diesel-powered and electric-powered forklifts and tow tractors that are critical to the operations of shore Navy Shore activities ($2.583M). The normal life expectancy for Materials Handling Equipment is 10 years. Navy must recapitalize the MHE inventory to support the Warfighter.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 06: Supply Support Equipment / BSA 1: Supply Support Equipment	**P-1 Line Item Number / Title:** 7025 / Supply Equipment

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: 0708012N	Other Related Program Elements: 0203422N, 0203425N, 0204413N, 0204423N, 0204424N, 0204455N, 0204996N, 0208036N, 0502380N, 0502384N

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	16.023	21.797	0.164	21.961	19.354	17.374	17.711	18.059	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	16.023	21.797	0.164	21.961	19.354	17.374	17.711	18.059	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**16.023**	**21.797**	**0.164**	**21.961**	**19.354**	**17.374**	**17.711**	**18.059**	**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:

Note: Efforts within this budget line were consolidated from LIs 7015 and 7050 in FY16 and prior. Starting in FY17, the funding for Expeditionary Material Handling Equipment requirements transferred to Naval Facilities Engineering Command.

MATERIAL HANDLING EQUIPMENT (MHE): This program funds the procurement of Material Handling Equipment to satisfy operational requirements and replaces overaged non-repairable equipment used in material handling operations at world-wide Navy activities. Major using activities include ships, naval magazines, air stations, weapon stations, and overseas support activities such as Sigonella and Sasebo. The MHE program also funds General Fund activities to meet known operational requirements for replacement of equipment which has exceeded its economic life. Overaged equipment is not cost effective to maintain for continued operation, and repair parts are difficult to obtain. Replacement of overaged equipment with new and more efficient models will reduce excessive costs attributed to repair/overhaul, downtime and maintenance. New equipment will enhance productivity and enable stations to meet handling and logistics requirements in an efficient and effective manner.

NAVY CASH PROGRAM: This program funds the procurement of the Navy Cash system. Navy Cash was developed to improve business processes, create workload efficiencies, and enhance the quality of life for Sailors and Marines on board ship. It enhances the efficiencies and security of automated pay delivery and safekeeping deposit provided by the ATMs-at-Sea system that Navy Cash replaced. Everyone on a ship receives a Navy Cash or Marine Cash card, a branded debit card that looks like a typical debit or check card. It utilizes a pre-paid debit model to provide for a cashless shipboard environment for all retail and other personal financial transactions and helps to reduce the workload for the Disbursing Office and retail locations throughout the ship. This affords more time for core functions and thereby increases readiness. It also improves shipboard business practices by automating and significantly reducing the handling of bills, coins, personal checks, and money orders, automating back-end financial processes and minimizing error-prone cash transactions while it reduces the workload associated with cash management and improves the efficiency and accuracy of fiscal accountability. This overall reduction in the need for cash decreases the costs associated with maintaining large amounts of cash in the safes of ships for the six or more months of deployment.

The current Navy Cash environment is dependent on a specific hardware and software environment that is costly to maintain and reaching end-of-life on key operating components. Navy Cash 2.0/Europay, Mastercard, Visa (EMV) is the next logical progression in cashless operations that will enhance the current Navy Cash solution by operating in a virtual environment such as the Consolidated Afloat Networks and Enterprise Services and aligns with Navy directives for virtualization of Fleet-wide systems. Navy Cash 2.0/EMV also builds on the technical expertise gained with remote updates to ship systems, and enhances this functionality to introduce full automation of application patching processes for quicker deployment of security fixes to the Fleet. Cost savings will be a direct result of reduced maintenance required for hardware and software support. Deployment is anticipated to begin in FY19.

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 06: Supply Support Equipment / BSA 1: Supply Support Equipment	**P-1 Line Item Number / Title:** 7025 / Supply Equipment	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** 0708012N	**Other Related Program Elements:** 0203422N, 0203425N, 0204413N, 0204423N, 0204424N, 0204455N, 0204996N, 0208036N, 0502380N, 0502384N
Line Item MDAP/MAIS Code: N/A		

The Navy Cash program currently uses a smart card solution containing a proprietary ePurse that carries a higher card production and maintenance cost. Benefits and substantial savings can be achieved by replacing the ePurse with EMV a global standard for credit and debit payment cards based on chip card technology. EMV was recently mandated by Executive Order 13681, improving the Security of Consumer Financial Transactions (EMV Chip & PIN). EMV chip-based payment cards, also known as smart cards, contain an embedded microprocessor, a type of small computer. The microprocessor chip contains the information needed to use the card for payment, and is protected by various security features. Chip cards are a more secure alternative to traditional magnetic stripe payment cards.

Navy Cash Installation Program:
2017 19 Installations (10 Small / 5 Med / 2 Large / 2 CVN)
2018 32 Installations (21 Small / 6 Med / 3 Large / 2 CVN)
2019 31 Installations (21 Small / 6 Med / 2 Large / 2 CVN)
2020 28 Installations (21 Small / 4 Med / 2 Large / 1 CVN)
2021 24 Installations (14 Small / 6 Med / 2 Large / 2 CVN)
2022 12 Installations (7 Small / 2 Med / 1 Large / 2 CVN)

AUTOMATIC IDENTIFICATION TECHNOLOGY (AIT): The Department of Defense (DoD) promulgated Radio Frequency Identification (RFID) Policy on 30 July 2004. Current DoD RFID policy focuses on In-Transit Visibility (ITV) support of the Combatant Commanders (COCOMs) as the primary application of active RFID, and DoD Supply Management applications for passive RFID. This effort will ensure Fleet and component commands have deployable active RFID capability to support contingencies and DoD/Navy RFID policy. Navy has invested in and taken action to support implementation of 35 CONUS and OCONUS locations. These funds represent the Navy costs for the initial outfitting and life cycle costs to fully fund all currently identified COCOM ITV requirements. The Navy continues to coordinate with the Army's Product Director Automated Movement and Identification Solutions (PD-AMIS) for all aRFID and DOD AIT RF-ITV Contract installations, upgrades, hardware, software and infrastructure procurement requirements for Navy sites. Recently AIT aRFID Program Management support changed from the NAVSUP Global Logistics Support to the Weapons Systems Support Transportation and Distribution which provides a unique integration of logistics and analysis capability.

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 06: Supply Support Equipment / BSA 1: Supply Support Equipment	**P-1 Line Item Number / Title:** 7025 / Supply Equipment

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: 0708012N	Other Related Program Elements: 0203422N, 0203425N, 0204413N, 0204423N, 0204424N, 0204455N, 0204996N, 0208036N, 0502380N, 0502384N

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	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)*
P-40a	Materials Handling Equipment				- / 0.000	- / -	- / 11.449	- / 18.071	- / 0.164	- / 18.235
P-5	1 / Other Supply Support Equipment				- / 0.000	- / 0.000	- / 4.574	- / 3.726	- / 0.000	- / 3.726
P-40	**Total Gross/Weapon System Cost**				**- / 0.000**	**- / 0.000**	**- / 16.023**	**- / 21.797**	**- / 0.164**	**- / 21.961**

*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 sum exactly due to rounding.

Justification:
Specific FY18 increase in MHE includes $663K for one Mobile Cleaning Reclaim and Recovery System (MCRRS) unit. MCRRS is an environmentally safe vehicle for cleaning flight decks aboard aircraft carrier and air-capable L-class ships. The MCRRS is expected to speed up carrier flight deck cleaning operations, reduce costs and virtually eliminate environmental impact of previous cleaning methods.

The remaining increase reduces replacement backlog of over-aged and failing MHE equipment, which includes 31 of the 6,000 lb. 1330, 34 of the 6,000 lb. 1351 Shipboard, 35 of the 4,000 lb. 1370 Shipboard and 50 of the 4,000 lb. 1390 Shipboard.

OCO:
OCO request procures two 15K forklifts for the European Reassurance Initiative to support P-8A operations in Sigonella, IT.

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 06 / 1	P-1 Line Item Number / Title: 7025 / Supply Equipment	Aggregated Items Title: Materials Handling Equipment

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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 Requirements																				
1.1) 15,000 lb 1340 (W4001)	A		-	-	-	-	-	-	-	-	-	-	-	0.000	82,000.00	2	0.164	82,000.00	2	0.164
1.2) Non-Powered MHE	A		-	-	-	-	-	-	-	-	0.046	-	-	0.041	-	-	-	-	-	0.041
1.3) 5700 MCRRS Deck Cleaning System	A		-	-	-	-	-	-	-	-	-	663,000.00	1	0.663	-	-	-	663,000.00	1	0.663
Subtotal: 1) New Requirements			**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	***0.046***	**-**	**-**	***0.704***	**-**	**-**	***0.164***	**-**	**-**	***0.868***
2) Replacement Program																				
2.1) 4,000 lb 1300 (W4001)	A		-	-	-	-	-	-	27,852.00	3	0.084	-	-	-	-	-	-	-	-	-
2.2) 6,000 lb 1300 (W4001)	A		-	-	-	-	-	-	32,593.00	4	0.130	33,245.00	2	0.066	-	-	-	33,245.00	2	0.066
2.3) 4,000 lb 1302 (W4001)	A		-	-	-	-	-	-	26,170.00	1	0.026	-	-	-	-	-	-	-	-	-
2.4) 6,000 lb 1302 (W4001)	A		-	-	-	-	-	-	32,727.00	3	0.098	33,382.00	3	0.100	-	-	-	33,382.00	3	0.100
2.5) 4,000 lb 1305 (W4001)	A		-	-	-	-	-	-	29,561.00	1	0.030	30,152.00	2	0.060	-	-	-	30,152.00	2	0.060
2.6) 6,000 lb 1305 (W4001)	A		-	-	-	-	-	-	32,670.00	6	0.196	33,323.00	5	0.167	-	-	-	33,323.00	5	0.167
2.7) 8,000 lb 1305 (W4001)	A		-	-	-	-	-	-	36,429.00	1	0.036	-	-	-	-	-	-	-	-	-
2.8) 4,000 lb 1320 (W4001)	A		-	-	-	-	-	-	28,708.00	2	0.057	-	-	-	-	-	-	-	-	-
2.9) 4,000 lb 1325 (W4001)	A		-	-	-	-	-	-	29,175.00	2	0.058	29,758.00	5	0.149	-	-	-	29,758.00	5	0.149
2.10) 6,000 lb 1325 (W4001)	A		-	-	-	-	-	-	36,429.00	1	0.036	37,157.00	2	0.074	-	-	-	37,157.00	2	0.074
2.11) 4,000 lb 1330 (W4001)	A		-	-	-	-	-	-	38,238.00	8	0.306	-	-	-	-	-	-	-	-	-
2.12) 6,000 lb 1330 (W4001)	A		-	-	-	-	-	-	32,594.00	29	0.945	33,246.00	31	1.031	-	-	-	33,246.00	31	1.031
2.13) 10,000 lb 1340 (W4001)	A		-	-	-	-	-	-	65,062.00	8	0.520	66,364.00	4	0.265	-	-	-	66,364.00	4	0.265
2.14) 15,000 lb 1340 (W4001)	A		-	-	-	-	-	-	70,115.00	17	1.192	71,517.00	10	0.715	-	-	-	71,517.00	10	0.715
2.15) 20,000 lb 1340 (W4001)	A		-	-	-	-	-	-	129,961.00	1	0.130	132,560.00	2	0.265	-	-	-	132,560.00	2	0.265
2.16) 20,000 lb 1340 (W4001) Shipboard	A		-	-	-	-	-	-	159,756.00	1	0.160	-	-	-	-	-	-	-	-	-
2.17) 25,000 lb 1340 (W4001)	A		-	-	-	-	-	-	160,200.00	2	0.320	-	-	-	-	-	-	-	-	-

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 06 / 1	**P-1 Line Item Number / Title:** 7025 / Supply Equipment	**Aggregated Items Title:** Materials Handling Equipment

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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)
2.18) 34,000 lb 1340 (W4001)	A		-	-	-	-	-	-	164,756.00	1	0.165	168,051.00	2	0.336	-	-	-	168,051.00	2	0.336
2.19) 10,000 lb 1343 (W4001)	A		-	-	-	-	-	-	82,180.00	2	0.164	83,824.00	6	0.503	-	-	-	83,824.00	6	0.503
2.20) 3,000 lb 1350 (W4001)	A		-	-	-	-	-	-	34,737.00	1	0.035	-	-	-	-	-	-	-	-	-
2.21) 6,000 lb 1350 (W4001)	A		-	-	-	-	-	-	41,022.00	1	0.041	-	-	-	-	-	-	-	-	-
2.22) 6,000 lb 1350 (W4001) Shipboard	A		-	-	-	-	-	-	59,445.00	5	0.297	60,633.00	5	0.303	-	-	-	60,633.00	5	0.303
2.23) 6,000 lb 1351 (W4001) Shipboard	A		-	-	-	-	-	-	79,270.00	6	0.476	80,855.00	34	2.749	-	-	-	80,855.00	34	2.749
2.24) 4,000 lb 1370 (W4001)	A		-	-	-	-	-	-	28,812.00	8	0.230	29,388.00	9	0.264	-	-	-	29,388.00	9	0.264
2.25) 6,000 lb 1370 (W4001)	A		-	-	-	-	-	-	34,885.00	4	0.140	35,582.00	5	0.178	-	-	-	35,582.00	5	0.178
2.26) 4,000 lb 1370 (W4001) Shipboard	A		-	-	-	-	-	-	67,651.00	26	1.759	69,004.00	35	2.415	-	-	-	69,004.00	35	2.415
2.27) 4,000 lb 1371 (W4001)	A		-	-	-	-	-	-	38,501.00	8	0.308	-	-	-	-	-	-	-	-	-
2.28) 6,000 lb 1380 (W4001)	A		-	-	-	-	-	-	34,885.00	1	0.035	-	-	-	-	-	-	-	-	-
2.29) 3,000 lb 1390 (W4001)	A		-	-	-	-	-	-	37,155.00	1	0.037	-	-	-	-	-	-	-	-	-
2.30) 4,000 lb 1390 (W4001) Shipboard	A		-	-	-	-	-	-	-	-	-	117,975.00	50	5.899	-	-	-	117,975.00	50	5.899
2.31) 6,000 lb 1820 (W4001)	A		-	-	-	-	-	-	154,606.00	3	0.464	-	-	-	-	-	-	-	-	-
2.32) 10,000 lb 1820 (W4001) Shipboard	A		-	-	-	-	-	-	-	-	-	193,657.00	1	0.194	-	-	-	193,657.00	1	0.194
2.33) 10,000 lb 1823 (W4001)	A		-	-	-	-	-	-	180,582.00	1	0.181	-	-	-	-	-	-	-	-	-
2.34) 4,000 lb 1100 (W4003)	A		-	-	-	-	-	-	30,375.00	2	0.061	-	-	-	-	-	-	-	-	-
2.35) 4,000 lb 1125 (W4003)	A		-	-	-	-	-	-	42,230.00	2	0.084	-	-	-	-	-	-	-	-	-
2.36) 20,000 lb 1200 (W4004) Shipboard	A		-	-	-	-	-	-	-	-	-	165,832.00	2	0.332	-	-	-	165,832.00	2	0.332
2.37) 30,000 lb 1200 (W4004) Shipboard	A		-	-	-	-	-	-	-	-	-	296,223.00	4	1.185	-	-	-	296,223.00	4	1.185
2.38) 4,000 lb 1400 (W4005)	A		-	-	-	-	-	-	31,231.00	1	0.031	-	-	-	-	-	-	-	-	-
2.39) 6,000 lb 1610 (W4006)	A		-	-	-	-	-	-	24,821.00	2	0.050	-	-	-	-	-	-	-	-	-

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 06 / 1	**P-1 Line Item Number / Title:** 7025 / Supply Equipment	**Aggregated Items Title:** Materials Handling Equipment

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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)
2.40) 6,000 lb 1610 (W4006) Shipboard	A		-	-	-	-	-	-	24,821.00	1	0.025	-	-	-	-	-	-	-	-	-
2.41) 6,000 lb Manual Pallet Jack (Shipboard)	A		-	-	-	-	-	-	6,063.00	30	0.182	6,184.00	19	0.117	-	-	-	6,184.00	19	0.117
Subtotal: 2) Replacement Program			**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	***9.089***	**-**	**-**	***17.367***	**-**	**-**	**-**	**-**	**-**	***17.367***
3) New Requirements (Expeditionary)																				
3.1) 11,000lb 1820 MMV (W4001) Reserve Forces	A		-	-	-	-	-	-	160,814.00	4	0.643	-	-	-	-	-	-	-	-	-
3.2) Non-Powered (Expeditionary)	A		-	-	-	-	-	-	-	-	0.013	-	-	-	-	-	-	-	-	-
3.3) Non-Powered (Reserve)	A		-	-	-	-	-	-	-	-	0.012	-	-	-	-	-	-	-	-	-
Subtotal: 3) New Requirements (Expeditionary)			**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	***0.668***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
4) Replacement Program (Expeditionary)																				
4.1) 4,000lb 1300 (W4001) Reserve Forces	A		-	-	-	-	-	-	27,824.00	2	0.056	-	-	-	-	-	-	-	-	-
4.2) 4,000lb 1370 (W4001) Expeditionary	A		-	-	-	-	-	-	28,783.00	12	0.345	-	-	-	-	-	-	-	-	-
4.3) 20,000lb 1820 (W4001) Expeditionary	A		-	-	-	-	-	-	311,233.00	4	1.245	-	-	-	-	-	-	-	-	-
Subtotal: 4) Replacement Program (Expeditionary)			**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	***1.646***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Total			**-**	**-**	**0.000**	**-**	**-**	**-**	**-**	**-**	**11.449**	**-**	**-**	**18.071**	**-**	**-**	**0.164**	**-**	**-**	**18.235**

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

Exhibit P-5, Cost Analysis: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 06 / 1	P-1 Line Item Number / Title: 7025 / Supply Equipment	Item Number / Title [DODIC]: 1 / Other Supply Support Equipment
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	4.574	3.726	0.000	3.726
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	4.574	3.726	0.000	3.726
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**4.574**	**3.726**	**0.000**	**3.726**
(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)*	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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)*
Support - Other Program Cost																		
1.1) Navy Cash Program	-	-	0.000	-	-	0.000	-	-	4.506	-	-	3.305	-	-	0.000	-	-	3.305
1.2) Automatic Identification Technology (AIT)	-	-	0.000	-	-	0.000	-	-	0.068	-	-	0.421	-	-	0.000	-	-	0.421
Subtotal: Support - Other Program Cost	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***4.574***	**-**	**-**	***3.726***	**-**	**-**	***0.000***	**-**	**-**	***3.726***
Gross/Weapon System Cost	**-**	**-**	**0.000**	**-**	**-**	**0.000**	**-**	**-**	**4.574**	**-**	**-**	**3.726**	**-**	**-**	**0.000**	**-**	**-**	**3.726**

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Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 06: Supply Support Equipment / BSA 1: Supply Support Equipment	**P-1 Line Item Number / Title:** 7050 / Other Supply Support Equipment

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: 0708012N	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	10.469	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	10.469
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	10.469	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	10.469
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**10.469**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**-**	**10.469**
(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:

Starting FY17, line items 7015 Materials Handling Equipment and 7050 Other Supply Support Equipment has been combined into line item 7025, Supply Equipment.

NAVY CASH PROGRAM: This program funds the procurement of the Navy CashTM system. Navy Cash was developed to improve business processes, create workload efficiencies, and enhance the quality of life for Sailors and Marines on board ship. It enhances the efficiencies and security of automated pay delivery and safekeeping deposit provided by the ATMs-at-Sea system that Navy Cash replaced. Everyone on a ship receives a Navy Cash or Marine Cash card, a branded debit card that looks like a typical debit or check card. It utilizes a pre-paid debit model to provide for a cashless shipboard environment for all retail and other personal financial transactions and helps to reduce the workload for the Disbursing Office and retail locations throughout the ship. This affords more time for core functions and thereby increases readiness. It also improves shipboard business practices by automating and significantly reducing the handling of bills, coins, personal checks, and money orders, automating back-end financial processes and minimizing error-prone cash transactions while it reduces the workload associated with cash management and improves the efficiency and accuracy of fiscal accountability. This overall reduction in the need for cash decreases the costs associated with maintaining large amounts of cash in the safes of ships for the six or more months of deployment.

Navy Cash Installation Program:
2016 29 Installations (15 Small / 10 Med / 2 Large / 2 CVN)

AUTOMATIC IDENTIFICATION TECHNOLOGY (AIT): The Department of Defense (DoD) promulgated Radio Frequency Identification (RFID) Policy on 30 July 2004. Current DoD RFID policy focuses on In-Transit Visibility (ITV) support of the Combatant Commanders (COCOMs) as the primary application of active RFID, and DoD Supply Management applications for passive RFID. This effort will ensure Fleet and component commands have deployable active RFID capability to support contingencies and DoD/Navy RFID policy. Navy has invested in and taken action to support implementation of 35 CONUS and OCONUS locations. These funds represent the Navy costs for the initial outfitting and life cycle costs to fully fund all currently identified COCOM ITV requirements. The Navy continues to coordinate with the Army's Product Director Automated Movement and Identification Solutions (PD-AMIS) for all aRFID and DOD AIT RF-ITV Contract installations, upgrades, hardware, software and infrastructure procurement requirements for Navy sites. Recently AIT aRFID Program Management support changed from the NAVSUP Global Logistics Support to the Weapons Systems Support Transportation and Distribution which provides a unique integration of logistics and analysis capability.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 06: Supply Support Equipment / BSA 1: Supply Support Equipment	**P-1 Line Item Number / Title:** 7066 / First Destination Transportation

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

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	30.710	5.908	5.140	5.572	0.420	5.992	5.673	5.776	5.951	6.069	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	30.710	5.908	5.140	5.572	0.420	5.992	5.673	5.776	5.951	6.069	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**30.710**	**5.908**	**5.140**	**5.572**	**0.420**	**5.992**	**5.673**	**5.776**	**5.951**	**6.069**	**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:

This program funds the procurement of First Destination Transportation services providing for the movement of newly procured equipment from the contractor's plant to the initial point of receipt by the government. Major using activities include ships, systems commands, and overseas support activities.

Prior to FY2014, all funds were allocated to and managed by Naval Supply Systems Command (NAVSUP). Starting in FY2014, funds have been decentralized for allocation, management and oversight by the following commands: Naval Air Systems Command (NAVAIR), Naval Supply Systems Command (NAVSUP), Naval Sea Systems Command (NAVSEA), Naval Facilities Engineering Command (NAVFAC), Strategic Systems Programs(SSP) and Space & Naval Warfare Systems Command (SPAWAR).

Justification:

OCO:

Included in this request is FY 2018 Overseas Contingency Operations (OCO) funding for Operation Freedom's Sentinel (OFS-T) in the amount of $0.035M for Isa Air Base, Bahrain and for Operation Enduring Freedom - Horn of Africa (OEF-H) in the amount of $0.385M for Camp Lemonnier, Djibouti, Funds are requested for shipment of Other Procurement, Navy (OPN) General Purpose Trucks (LI 6007) and Fire Fighting Equipment (LI 6027) OCO requirements identified in those LIs. Baseline First Destination Transportation funding is not sufficient to move OCO equipment to the designated location once it is available from the manufacturer.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 06: Supply Support Equipment / BSA 1: Supply Support Equipment	**P-1 Line Item Number / Title:** 7069 / Special Purpose Supply Systems

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

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	3,293.342	211.714	295.471	482.916	0.000	482.916	588.121	676.484	808.346	956.366	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	3,293.342	211.714	295.471	482.916	0.000	482.916	588.121	676.484	808.346	956.366	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**3,293.342**	**211.714**	**295.471**	**482.916**	**0.000**	**482.916**	**588.121**	**676.484**	**808.346**	**956.366**	**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 funding reported in this line item is classified and is reported in accordance with Title 10, United States Code, Section 119(a)(1) in the Special Access Program Annual Report to Congress.

[P40A / CLASSIFIED]: The Cost Element labeled "Classified" supports classified efforts. Details with respect to these efforts are reported in accordance with Title 10, United States Code, Section 119(a)(1) in the Special Access Program Annual Report to Congress.

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 06: Supply Support Equipment / BSA 1: Supply Support Equipment	**P-1 Line Item Number / Title:** 7069 / Special Purpose Supply Systems
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A / **Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A	

Exhibits Schedule					Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	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)*
P-40a	Special Purpose Supply Systems				- / 3,293.342	- / 211.714	- / 295.471	- / 482.916	- / -	- / 482.916
P-40	**Total Gross/Weapon System Cost**				**- / 3,293.342**	**- / 211.714**	**- / 295.471**	**- / 482.916**	**- / 0.000**	**- / 482.916**

*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 sum exactly due to rounding.

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 06 / 1	**P-1 Line Item Number / Title:** 7069 / Special Purpose Supply Systems	**Aggregated Items Title:** Special Purpose Supply Systems

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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) Special Purpose Supply Systems																				
1) CLASSIFIED	A		-	-	3,293.342	-	-	211.714	-	-	295.471	-	-	482.916	-	-	-	-	-	482.916
Subtotal: 1) Special Purpose Supply Systems			**-**	**-**	***3,293.342***	**-**	**-**	***211.714***	**-**	**-**	***295.471***	**-**	**-**	***482.916***	**-**	**-**	**-**	**-**	**-**	***482.916***
Total			**-**	**-**	**3,293.342**	**-**	**-**	**211.714**	**-**	**-**	**295.471**	**-**	**-**	**482.916**	**-**	**-**	**-**	**-**	**-**	**482.916**

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

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Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 07: Personnel & Command Support Equip / BSA 1: Training Devices	**P-1 Line Item Number / Title:** 8081 / Training Support Equipment

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0204219N, 0204423N, 0804731N

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	80.246	7.468	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	87.714
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	80.246	7.468	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	87.714
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**80.246**	**7.468**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**-**	**87.714**
(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 Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Starting in FY17, funding was consolidated under LI 8101 Training and Education Equipment.

Fleet Simulators Support (PE 0204219N) / Naval Special Warfare Forces (PE 0204423N) / General Skill Training (PE 0804731N)

[P40A / TRAINING SUPPORT EQUIPMENT]: Funding provides for the training support equipment / systems used in support of and connected to the Navy Continuous Training Environment (NCTE) as well as all of the equipment / systems required to support the Fleet's Live, Virtual, and Constructive (LVC) training capability. The Fleet's LVC training capability includes all training systems, network equipment, IT equipment, communications equipment, C4I systems, and training devices used in the U.S. Navy.

[P40A / AA800 - LIFE CYCLE MANAGEMENT (NCTE)]: Navy Continuous Training Environment (NCTE): The NCTE is a distributed training architecture and network that interconnects eighty-three plus (83+) Navy, Joint and Coalition training sites. To maximize return on the training dollar, reduce overall operating expense, and support the global live, virtual, and constructive nature of the NCTE, the suite of equipment must be continuously maintained, upgraded and keep pace with mandated DISA and DoD requirements. Planned periodic replacement of hardware is essential to keep pace with technology upgrades, allow virtualization of the NCTE infrastructure, and end of life issues associated with existing equipment. The upgrades/spare parts are vital to the Fleet's LVC training capabilty used by the U.S. Navy and Joint Services to prepare for deployment.

[P40A / AA800 - BALLISTIC MISSILE DEFENSE (BMD)]: Ballistic Missile Defense (BMD) training equipment is required for the Navy to conduct BMD synthetic training events (BMDEX, Fleet Synthetic Training (FST) and FST at Sea) and shipboard qualification / certification events. The Navy has BMD-capable ships that must be adequately trained to meet operational BMD mission tasking to employ weapons systems, and to attain the BMD qualification required for deployment certification. TYCOMs, Numbered Fleet Commanders (NFC), and Afloat Training Groups (ATG) / Tactical Training Groups are responsible for the training, qualification, and certification of BMD ships and units. The integrated/advanced phase training and BMD qualification is a quarterly unit training requirement. This funds necessary equipment to support BMD training. The Fleet's LVC training capabilty funds the necessary equipement to support BMD training used by the U.S. Navy.

[P40A / AA800 - BMD FST AT SEA]: Ballistic Missile Defense (BMD) Fleet Synthetic Training (FST) at Sea: Funding required to provide the capability to conduct integrated Live, Virtual and Constructive (LVC) single or multi-ship exercises with ships at sea using the Navy Continuous Training Environment (NCTE). This capability will support BMD and Integrated Air Missile Defense (IAMD) mission area Fleet sustainment training and mission rehearsal in theater, allow ships to participate in COCOM/Navy Component Commander mandated BMD/IAMD exercises while pierside or underway, as well as enhance BMD/

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 07: Personnel & Command Support Equip / BSA 1: Training Devices	**P-1 Line Item Number / Title:** 8081 / Training Support Equipment	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** 0204219N, 0204423N, 0804731N
Line Item MDAP/MAIS Code: N/A		

IAMD training objective accomplishment in current FRTP underway training events such as COMPTUEX and JTFEX. The NCTE and FST directly support Fleet training readiness and strike group and BMD platform deployment certifications. The Fleet's LVC training capabilty funds the necessary equipement to support BMD FST at Sea training used by the U.S. Navy.

[P40A / AA800 - ANTI-ACCESS AREA DENIAL (A2AD)]: Anti-Access Area Denial (A2AD) capability: Funds required to provide the NCTE architecture the systems required to incorporate specific technologies, C4ISR stimulation capabilities to train Fleet units in Anti-Access Area Denial (A2AD) Tactics, Techniques and Procedures (TTPs). The Fleet's LVC training capabilty funds the necessary equipement to support A2AD training used by the U.S. Navy.

[P40A / AA800 - COMMON DATA LINK (CDL)]: Common Data Link (CDL): Funds required to procure systems required to support CDL architecture to provide realistic adversary and own-force presentations that allows CDL platforms and operators to coordinate and operate in a realistic manner utilizing real-world systems and protocols. Advanced training capabilities will permit development and certification of operational proficiency in Surface Warfare (SUW), Anti-Submarine Warfare (ASW) and Electronic Warfare (EW). The capability transports images and full motion video and supports intelligence gathering and exploitation training objectives. The Fleet's LVC training capabilty funds the necessary equipement to support CDL training used by the U.S. Navy.

[P40A / AA800 - DIGITAL RADIO MANAGEMENT SYSTEM (DRMS) WHOLENESS]: Digital Radio Management System (DRMS) Wholeness: Funds required to provide expanded capacity, improved reliability, and increased RF spectrum to live voice communications in the Digital Radio Management System (DRMS) for Tactical Training Ranges (TTR) and NCTE. Provide a single FST communications system enabling realistic tactical communications across all warfare areas, classification levels, and releasable domains. The Fleet's LVC training capabilty funds the necessary equipement to support DRMS Wholeness training used by the U.S. Navy.

[P40A / AA800 - NAVAL INTEGRATED FIRE CONTROL - COUNTER AIR (NIFC-CA)]: Naval Integrated Fire Control - Counter Air (NIFC-CA): Funds required to meet the goal of Naval Integrated Fire Control - Counter Air (NIFC-CA) for Fleet Synthetic Training (FST) that includes a Cooperative Engagement Capability (CEC) training solution, shore side constructive CEC units, and low fidelity E-2D virtual distributed aircrew training systems. The capabilities will supplement and integrate existing platform-level program of record solutions and is complementary to NAVAIR and NAVSEA efforts to deliver From the Sea (FTS) training capabilities. The Fleet's LVC training capabilty funds the necessary equipement to support NIFC-CA training used by the U.S. Navy.

[P40A / AA800 - NCTE DISA COMPLIANCE]: Navy Continuous Training Environment (NCTE) Defense Information Security Agency (DISA) Compliance: Funds the transition of the NCTE from Asynchronous Transfer Mode (ATM) to Internet Protocol (IP) technology, as mandated by DISA. Supports simulators/simulation use in the Basic-through-Integrated phases of the Fleet Response Training Plan (FRTP).

[P40A / AA800 - AEGIS ASHORE FLEET TRAINING]: Aegis Ashore (AA) Fleet Training: Funding required for Fleet Training Instructor support and Navy Continuous Training Environment connectivity and technical support for Aegis Ashore CONUS-based trainer. Funding will support Phased Adaptive Approach for missile defense of Europe

[P40A / AA800 - FDNF EUROPE FLEET TRAINING]: Forward Deployed Naval Forces (FDNF) Europe Fleet Training: Funding required for Fleet Training Instructor support and Navy Continuous Training Environment connectivity for Forward Deployed Naval forces in Europe. Provides technical support and operational assistance of the deployed NCTE node. Funding will support Phased Adaptive Approach for missile defense of Europe.

[P40A / H0004 - VBSS TRAINING CRAFT]: Visit, Board, Search, and Seizure (VBSS) Training 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.

[P40A / YP001 - BOATS]: Boats: Funds procurement of service craft and small boats for training use. Planned procurements include:
FY-13 - One 27FT Boston Whaler small boats used for EOD underwater training @ NAVSCOLEOD.
FY-14 - Two 7M RHIB small boats used for EOD underwater training @ NAVSCOLEOD.

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 07: Personnel & Command Support Equip / BSA 1: Training Devices	**P-1 Line Item Number / Title:** 8081 / Training Support Equipment	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** 0204219N, 0204423N, 0804731N
Line Item MDAP/MAIS Code: N/A		

[P40A / YP300 - GUARD TOWERS]: Guard Towers (Scenario Training Devices at both SERE East and SERE West locations): The Guard Towers used in support of delivering the resistance and escape phase of the training serves three separate functions. It is the command and control point for managing the training being conducted while the students are in the POW camp; it serves as the primary safety observation point for the training and is primary focal point for the POW camp scenario driven training. The tower is in poor condition and needs to be replaced.

[P40A / YPYAV - AUDIO/VISUAL EQUIPMENT FOR JPME]: Naval War College (NWC) requires audio visual educational and research support equipment to complete P103 MILCON conversion of current Library and underground garage parking spaces of Hewitt Hall into a integrated learning commons for the Naval War College, CNO's Strategic Studies Group and Command Leadership School. This $12M MILCON project is in direct response to the repeat accreditation findings by Chairman Joint Chiefs of Staff that NWC has inadequate spaces to support to student study and collaboration spaces. Additionally CNIC has previously documented inadequate NWC facilities space for its mission requirements. The project is also required because the library is considered a key mission deficit area, as cited by the CJCS during the last two accreditation Inspection. To complete the renovations, the P-103 requires $376K of A/V capabilities to make the Library and Learning commons spaces usable as intended for the MILCON renovation. A modern higher education institution must support the use of the most current instructional and pedagogical tools and technology to deliver and support a 21st century curriculum for the proper development of 21st century leaders.

[P40A / YPYOE- OTH EQUIP: SPPT EQUIP & COMPUTER STATIONS]: Naval War College (NWC) requires audio visual educational and research support equipment to complete P103 MILCON conversion of current Library and underground garage parking spaces of Hewitt Hall into a integrated learning commons for the Naval War College, CNO's Strategic Studies Group and Command Leadership School. This $12M MILCON project is in direct response to the repeat accreditation findings by Chairman Joint Chiefs of Staff that NWC has inadequate spaces to support to student study and collaboration spaces. Additionally CNIC has previously documented inadequate NWC facilities space for its mission requirements. The project is also required because the library is considered a key mission deficit area, as cited by the CJCS during the last two accreditation Inspection. To complete the renovations, the P-103 requires $124K of A/V capabilities to make the Library and Learning commons spaces usable as intended for the MILCON renovation. A modern higher education institution must support the use of the most current instructional and pedagogical tools and technology to deliver and support a 21st century curriculum for the proper development of 21st century leaders.

[P40A / YPYIP - NPS- INTERNET PROTOCOL VERSION 6 (IPv6) INITIATIVE]: Upgrade Network, Telephone Switching and Education Delivery Systems to attain Internet Protocol version 6 (IPv6) compliance as mandated by OMB Memo to CIOs: Transition to IPv6 September 28, 2010 and DoD and DoN directives. This upgrade leverages BUPERS/Naval Post Graduate School's (NPS) lifecycle replacement schedule to meet the mandates. The current network electronics, telephone switch, and educational delivery systems have either reached or have exceeded end-of life in FY14. These devices will be IPv6 capable and allow implementation of the external facing compliance requirement as well as establishing the platform to fully implement IPv6 capability on the internal network for secuirty, applications and web services.

[P40A / YPYTD - TRAINING DELIVERY SERVICES (TDS)]: Virtual Desktop Infrastructure Initiative. The training enterprise is moving forward with implementing more efficient technologies to meet the training delivery mission via a virtual desktop infrastructure solution. The virtual desktop solution will be implemented over the next several years at each location in lieu of conducting the traditional one-for-one workstation refresh. The goals and benefits of VDI are to establish an agile, sustainable enterprise training delivery environment; standardize the processes, services and technology used to deliver training; improve the enterprise security posture; refresh outdated electronic classroom workstations and operating systems; and provide a solution that enables a streamlined, centralized IT workforce.

[P40A / ECR VDI IMPLEMENTATION (VIRTUALIZATION SOFTWARE)]: NETC requires OPN funding in support of meeting the enterprise training delivery operations across the enterprise. Funds are utilized on virtual solutions that enable NETC to meet the DoD/DoN requirements ofconsolidating footprint while ensuring optimized performance of the desktops and servers in support of the Sailor 2025 and Ready, Relevant Learning.

[P40A / YP010 - CONTINUITY OF OPERATIONS (COOP)]: Continuity of Operations (COOP): Existing IT infrastructure for training applications is insufficient to support the projected growth in content, users, and requirements for continuity of operations. Funds will be used to expand the capacity of servers, storage, and networks in addition to providing fail-over capability in the data center for storage of data and application code at an alternate site. These systems are vital to the operational readiness and effectiveness of education and training. Failure to make these investments could lead to immediate and sustained loss of mission effectiveness.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 07: Personnel & Command Support Equip / BSA 1: Training Devices	**P-1 Line Item Number / Title:** 8101 / Training and Education Equipment

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

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	9.504	25.624	0.000	25.624	15.860	13.936	13.709	14.479	-	93.112
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	9.504	25.624	0.000	25.624	15.860	13.936	13.709	14.479	-	93.112
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**9.504**	**25.624**	**0.000**	**25.624**	**15.860**	**13.936**	**13.709**	**14.479**	**-**	**93.112**
(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:

Note: Efforts within this budget line were consolidated from LI's 8081 and 8108 in FY16 and prior.

[P40A / TRAINING SUPPORT EQUIPMENT]: Funding provides for the training support equipment / systems used in support of and connected to the Navy Continuous Training Environment (NCTE) as well as all of the equipment / systems required to support the Fleet's Live, Virtual, and Constructive (LVC) training capability. The Fleet's LVC training capability includes all training systems, network equipment, IT equipment, communications equipment, C4I systems, and training devices used in the U.S. Navy.

Changes from FY17 to FY18 reflects the procurement of more items for the NCTE infrastructure, which has seen significant growth as the program has expanded to meet the Fleet's integrated Fleet Training Wholeness demands and to maintain systems cyber security.

In FY18, additional funding is programmed for the Integrated Maritime Portable Acoustic Scoring & Simulation (IMPASS) System Replacement and Modernization in support of Fleet Training.

[P40A / LIFE CYCLE MANAGEMENT (NCTE)]: Funding will support Enterprise Network refresh. The Navy Continuous Training Environment (NCTE) is a distributed training architecture and network that interconnects 111 Navy, Joint and Coalition training sites.

[P40A / BALLISTIC MISSILE DEFENSE (BMD)]: Procurement and site upgrades scheduled to begin in FY17. Ballistic Missile Defense (BMD) training equipment is required for the Navy to conduct BMD synthetic training events (BMDEX, Fleet Synthetic Training (FST) and FST at Sea) and shipboard qualification / certification events. The Navy has BMD-capable ships that must be adequately trained to meet operational BMD mission tasking to employ weapons systems, and to attain the BMD qualification required for deployment certification. TYCOMs, Numbered Fleet Commanders (NFC), and Afloat Training Groups (ATG) / Tactical Training Groups are responsible for the training, qualification, and certification of BMD ships and units. The integrated/advanced phase training and BMD qualification is a quarterly unit training requirement. The Fleet's LVC training capability funds the necessary equipment to support BMD training used by the U.S. Navy.

[P40A / BMD FST AT SEA]: Ballistic Missile Defense (BMD) Fleet Synthetic Training (FST) at Sea: Funding required to provide the capability to conduct integrated Live, Virtual and Constructive (LVC) single or multi-ship exercises with ships at sea using the Navy Continuous Training Environment (NCTE). This capability will support BMD and Integrated Air Missile Defense (IAMD) mission area Fleet sustainment training and mission rehearsal in theater, allow ships to participate in COCOM/Navy Component Commander mandated BMD/IAMD exercises while pierside or underway, as well as enhance BMD/IAMD training

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy		Date: May 2017
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Line Item MDAP/MAIS Code: N/A		

objective accomplishment in current Fleet Readiness Training Plan (FRTP) underway training events such as COMPTUEX and JTFEX. The NCTE and FST directly support Fleet training readiness and strike group and BMD platform deployment certifications.

[P40A / ANTI-ACCESS AREA DENIAL (A2AD)]: Anti-Access Area Denial (A2AD) Capability provide the NCTE architecture the systems required to incorporate specific technologies, C4ISR stimulation capabilities to train Fleet units in Anti-Access Area Denial (A2AD) Tactics, Techniques and Procedures (TTPs).

[P40A / COMMON DATA LINK (CDL)]: Common Data Link (CDL) systems required to support CDL architecture to provide realistic adversary and own-force presentations that allows CDL platforms and operators to coordinate and operate in a realistic manner utilizing real-world systems and protocols. Advanced training capabilities will permit development and certification of operational proficiency in Surface Warfare (SUW), Anti-Submarine Warfare (ASW) and Electronic Warfare (EW). The capability transports images and full motion video and supports intelligence gathering and exploitation training objectives. The Fleet's LVC training capability funds the necessary equipment to support CDL training used by the U.S. Navy.

[P40A / DIGITAL RADIO MANAGEMENT SYSTEM (DRMS) WHOLENESS]: Digital Radio Management System (DRMS) Wholeness provides expanded capacity, improved reliability, and increased RF spectrum to live voice communications in the Digital Radio Management System (DRMS) for Tactical Training Ranges (TTR) and NCTE. Provide a single FST communications system enabling realistic tactical communications across all warfare areas, classification levels, and releasable domains. The Fleet's LVC training capability funds the necessary equipment to support DRMS Wholeness training used by the U.S. Navy.

[P40A / NAVAL INTEGRATED FIRE CONTROL - COUNTER AIR (NIFC-CA)]: Naval Integrated Fire Control - Counter Air (NIFC-CA) is required for Fleet Synthetic Training (FST) that includes a Cooperative Engagement Capability (CEC) training solution, shore side constructive CEC units, and low fidelity E-2D virtual distributed aircrew training systems. The capabilities will supplement and integrate existing platform-level program of record solutions and is complementary to NAVAIR and NAVSEA efforts to deliver From the Sea (FTS) training capabilities. The Fleet's LVC training capability funds the necessary equipment to support NIFC-CA training used by the U.S. Navy.

[P40A / IMPASS SCORING SYSTEM]: Funding will support the Integrated Maritime Portable Acoustic Scoring & Simulation (IMPASS) System Replacement and Modernization in support of Fleet Training. The Surface Force Training Manual mandates the use of the IMPASS Naval Gunfire Scoring System as the only accredited means by which a CG or DDG with five (5) inch guns can attain initial Naval Gunfire Support certification in the U.S. Atlantic Fleet and Forward Deployed Naval Forces (FDNF) units stationed in Rota.

[P40A / FIRE ARMS TRAINING SIMULATOR (FATS)]: Fire Arms Training Simulator (FATS) Equipment: Funds provide for procurement of shore-based fire arms training simulators at Center for Submarine Learning (CSL) to reduce time and energy expended for small arms proficiency by personnel assigned to small ships and submarines that lack this capability afloat as required by COMSUBLANT. These un-tethered weapons systems and scenarios place the students into the action and afford them the ability to freely maneuver and handle the weapons. Procurement of these simulators in FY18 allow for repetitive training and learning of the movements without the cost of ammunition or the wear and tear on weapons and ranges.

[P40A / YPYTD - TRAINING DELIVERY SERVICES (TDS)]: Virtual Desktop Infrastructure Initiative. The training enterprise is moving forward with implementing more efficient technologies to meet the training delivery mission via a virtual desktop infrastructure solution. The virtual desktop solution will be implemented over the next several years at each location in lieu of conducting the traditional one-for-one workstation refresh. The goals and benefits of VDI are to establish an agile, sustainable enterprise training delivery environment; standardize the processes, services and technology used to deliver training; improve the enterprise security posture; refresh outdated electronic classroom workstations and operating systems; and provide a solution that enables a streamlined, centralized IT workforce.

[P40A / TRAINING DELIVERY SYSTEMS]: FY18 procurements enable NETC to meet DoD/DoN requirements to consolidate IT equipment footprint while ensuring optimized performance of Navy Electronic Classroom (ECR) desktops and servers in support of the Sailor 2025 and Ready, Relevant Learning. Funding provides for equipment technology refresh for 630 Cisco Network Switches ($2.33M), 2700 Virtual Desktop Infrastructure (VDI) Electronic Classroom workstations ($ 0.805M), 2700 VDI Electronic Classroom Software licenses ($0.815M), and 9 sets of VDI Electronic Classroom Storage Hardware ($ 0.500M) in support of training delivery operations across the enterprise. Additional increase of $1.033M in FY18 is required to accelerate planned addition of robust graphics processing capabilities which to VDI sites to support Ready, Relevant Learning requirements.

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Line Item MDAP/MAIS Code: N/A		

[P40A / Multi-purpose Reconfigurable Training System (MRTS)]: FY18 OPN funding provides for procurement of Multi-purpose Reconfigurable Training System (MRTS) to meet IT A-School and Journeyman Communications Course (JCC) C-School training mission for 2000+ students annually. The Multi-Purpose Reconfigurable Training System (MRTS) family of trainers provides a virtual training environment simulating a variety of shipboard systems.

[P40A - 2 / D. LAN Room Video Surveillance]: Provides for management and protection of the Academy's numerous distributed local area network equipment spaces. The system will provide cameras for real-time and recorded playback of critical infrastructure locations to ensure a safe and secure enterprise computing environment.

[P40A - 2 / F. Backup System Replacement]: Provides for IT hardware and software to replace obsolete tape library. The proposed replacement system will facilitate faster and more reliable backup of enterprise data using current technologies.

[P40A - 2 / I. Library Circulation System Replacement]: Provides upgrades to the existing library circulation, inventory and security system. Provides more efficient use of staff time by permitting simultaneous processing of materials and automatically update system records without need for repeat data entry errors. Replaces existing, obsolete, manual barcode system with industry-standard, distributed solution typically found in facilities of this type.

[P40A - 2 / J. Virtual Desktop Infrastructure]: Provides lifecycle replacement of outdated electronic classroom workstations and operating systems by standardizing content delivery through central hosting to reduce operating costs and information assurance risks.

[P40A - 2 / K. Advanced Computing Cluster Replacement]: Provides replacement of high-end computer cluster for midshipmen and faculty computational requirements in science and technology disciplines. Applications supported include flow visualization, computer-aided design and computational fluid dynamics. The server also provides central file back-up, software and communication services for numerous laboratories, classrooms and courses. The computer will replace a device for which incremental upgrades will no longer be feasible due to intervening technological advancements.

[P40A - 2 / N. Bridge Simulator Upgrade]: Provides life-cycle upgrades to extend the useful life of two existing full-mission bridge simulator devices used for watchstanding training and qualification of midshipmen. It is also used for demonstrations of ship handling and navigation learning points not otherwise possible to convey through existing underway laboratories (i.e. Yard Patrol Craft).

[P40A - 2 / O. Articulated Hub & Rotor Blade Assembly]: Provides for end-of-life replacement of wavemaker acquired in FY 1978. The existing wavemaker is unable to produce the quality of waves required for academic instruction and research. The replacement wavemaker will reduce the need for unplanned emergency repairs which jeopardize ongoing operations.

[P40A - 2 / P. Chromatography Replacement]: Provides physical apparatus for chemistry laboratory study of spectral series. This capability will permit measurement and demonstration of chemical processes at the visible spectrum level critical to understanding of naval and other technologies.

[P40A - 2 / Q. Pelletron Accelerator Replacement]: Replaces an existing Pelletron Accelerator and associated support equipment acquired in FY 1988. The device permits study and experimentation in the area of nuclear physics.

[P40A - 2 / R. Microfabrication Facility]: Provides capability to educate midshipmen in micro-fabrication technology through photolithography and with other techniques. Equipment would be used to demonstrate metal deposition and surface micro-machining techniques, along with alignment and ultraviolet exposure of coated wafers for bulk silicon etching through wafer masking. These capabilities are the foundation for semi-conductor, nana-system, and micro scale heat transfer topics in various engineering courses. This will keep the academic curriculum current by providing an operational capability that allows midshipmen to conduct hands-on experiments in areas increasingly important to national defense.

[P40A - 2 / S. Voice Switch Upgrades]: Provides for IT hardware and software to achieve IPv6 capability for mission execution and continuity. The proposed replacement system will meet the Navy's transition goal of maintaining technological currency.

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy		Date: May 2017
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Line Item MDAP/MAIS Code: N/A		

[P40A - 2 / T. Mission System Host Platform]: Provides for replacement of IT hardware hosting information system applications meeting specific USNA requirements in academic, administrative, athletic, and professional areas.

[P40A - 2 / U. Coastal Engineering Tank Wavemaker Replacement]: Provides for end-of-life replacement of wavemaker acquired in fiscal year 1978. The existing wavemaker is unable to produce the quality of waves required for academic instruction and research. The replacement wavemaker will reduce the need for unplanned emergency repairs which jeopardize ongoing operations.

[P40A - 2 / V. Auditorium Sound System Replacement]: Provides for lifecycle replacement of FY 2009 speaker cluster and sound system in heavily-used, multifunctional presentation and performance facility. Delivers modern audio capabilities to meet diverse range of educational, professional, and athletic events hosted in the multi-purpose Alumni Hall facility. The system provides capability of multi-directional sound propagation allowing audience members increased fidelity and comprehension of audio components.

[P40A - 2 / W. Microscale Thermal Transport Replacement]: Provides for replacement of physical apparatus for propulsion laboratory study of nano-technology based heat transfer and thermal sciences acquired FY 2010. This capability permits measurement and demonstration of electromagnetic (thermal) processes at the nano-technology level critical to naval propulsion technology.

[P40A - 2 / X. Enterprise Network Upgrades]: Permits modular, phased upgrade, replacement, and modernization of the Academy's enterprise computing network to maintain currency with changing industry standards and user demands. Provides for replacement of aging switches and routers used to direct data communication traffic across fiber optic cables to various places throughout the enterprise.

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

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	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)*
P-40a	Training Support Equipment				- / 0.000	- / -	- / 7.902	- / 22.406	- / -	- / 22.406
P-40a	Education Support Equipment				- / 0.000	- / -	- / 1.602	- / 3.218	- / -	- / 3.218
P-40	**Total Gross/Weapon System Cost**				**- / 0.000**	**- / 0.000**	**- / 9.504**	**- / 25.624**	**- / 0.000**	**- / 25.624**

*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 sum exactly due to rounding.

Justification:
TRAINING SUPPORT EQUIPMENT - Main driver of increase from FY17 to FY18 reflects procuring more items for the NCTE infrastructure, which has seen significant growth as the program has expanded to meet the Fleet's integrated Fleet Training Wholeness demands and to maintain systems cyber security.

1.1 LIFE CYCLE MANAGEMENT (NCTE) Funding will support Enterprise Network refresh. The Navy Continuous Training Environment (NCTE) is a distributed training architecture and network that interconnects 111 Navy, Joint and Coalition training sites. To maximize return on the training dollar, reduce overall operating expense, and support the global live, virtual, and constructive nature of the NCTE, the suite of equipment must be continuously maintained, upgraded and keep pace with mandated DISA and DoD cyber information assurance requirements. Planned periodic replacement of hardware is essential to keep pace with technology upgrades, allow DoD mandated virtualization of the NCTE infrastructure. Virtualizing hardware systems reduces hardware requirements by consolidating hundreds of individual physical machines onto a much smaller number of virtualization server machines. This reduces Life Cycle Maintenance hardware costs, as well as space and cooling costs. Virtualization also improves resource availability by pooling computing resources and sharing them in response to real time demands. This means that instead of buying hundreds of computers that sit partially idle most of the time, the virtualization server is more efficiently utilized, reducing costs. The upgrades/spare parts are vital to the Fleet's Live, Virtual, Constructive (LVC) training capability used by the U.S. Navy and Joint Services to prepare for deployment. Changes from FY17 to FY18 are: Increase of $2.499M is supporting planned hardware replacement of the NCTE infrastructure to ensure compliance with cyber security. Additional sustainment costs are due to requirements for increased cross domain information sharing needed for Carrier Strike Group (CSG) integrated training. NCTE Tier 1 hardware refresh/replacement includes routers, switches, firewalls and computers; network time servers; desktop/servers/zero-clients to allow continued availability of services and comply with cyber security requirements including proxy firewalls and web proxies' requirements.

1.3 BALLISTIC MISSLE DEFENSE (BMD) FLEET SYNTHETIC TRAINING (FST) at Sea : This capability will support BMD and Integrated Air Missile Defense (IAMD) mission area Fleet sustainment training and mission rehearsal in theater, allow ships to participate in COCOM/Navy Component Commander mandated BMD/IAMD exercises while pierside or underway, as well as enhance BMD/IAMD training objective accomplishment in current Fleet Readiness Training Plan (FRTP) underway training events such as COMPTUEX and JTFEX. Changes from FY17 to FY18 are: Increase of $0.010M supports increased number of BMD/IAMD exercises and certification events conducted during FRTP and by Numbered Fleet Commanders for deployed forces. The NCTE and FST directly support Fleet training readiness and strike group and BMD platform deployment certifications. The Fleet's LVC training capability funds the necessary equipment to support BMD FST at Sea training used by the U.S. Navy.

1.4 ANTI-ACCEESS AREA DENIAL (A2AD): Anti-Access Area Denial (A2AD) Capability provide the NCTE architecture the systems required to incorporate specific technologies, C4ISR stimulation capabilities to train Fleet units in A2AD Tactics, Techniques and Procedures (TTPs). The Fleet's LVC training capability funds the necessary equipment to support A2AD training used by the U.S. Navy. Changes from FY17 to FY18 are increase of $0.065M supports incorporation of expanded capabilities developed in partnership with the Office of Naval Research. These enhancements improve representations of advanced anti-ship missiles and non-kinetic effects. Procures additional A2AD capability gateway portable embarkation kits to allow advanced Electronic Warfare training during Carrier Strike Group (CSG) Fleet training events/ exercises.

1.7 NAVAL INTEGRATED FIRE CONTROL COUNTER AIR (NIFC-CA): Changes from FY17 to FY18 are: Increase of $0.267M establishes steady state production of systems supporting NIFC-CA training requirement, following initial prototyping efforts. The capabilities will supplement and integrate existing platform-level program of record solutions and is complementary to NAVAIR and NAVSEA efforts to deliver

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From the Sea (FTS) training capabilities. The Fleet's LVC training capability funds the necessary equipment to support NIFC-CA training used by the U.S. Navy. Procures additional Cooperative Engagement Capability (CEC) Interim Training (CIT) System portable embarkation kits to support CSG Fleet training requirements.

1.8 IMPASS SCORING SYSTEM : Changes in FY18 are: $2.200M required for the planned replacement of the Integrated Maritime Portable Acoustic Scoring & Simulation (IMPASS) Naval Gunfire Scoring System to comply with Surface Force Training Manual (SFTM) to attain Naval Gunfire Support certification. IMPASS was an Office of Naval Research (ONR) system fielded in 2003 to allow continued certification for Naval Gunfire Scoring. The system was fielded without any follow-on sustainment or modernization funding. The current IMPASS buoy scoring systems need critical systems modernization due to obsolesce of hardware and software. OPN is required for the replacement and modernization of five (5) IMPASS Buoy Systems to include portable scoring buoys, controller stations, spares, engineering support and oversight. Existing IMPASS systems are currently beyond their 10 year life expectancy, non-IA complaint and will attrite due to lack of hardware and unsupported software. The Surface Force Training Manual (SFTM) mandates that the use of the IMPASS Naval Gunfire Scoring System as the only accredited means by which a deploying CG or DDG with five (5) inch guns can attain Naval Gunfire Support Certification in the U.S. Atlantic Fleet. Additionally this requirement applies to Forward Deployed Naval Forces (FDNF) units stationed in Rota. The Atlantic coast lacks fixed land scoring systems to support mandated pre-deployment certification. Without certification, Commander Fifth and Sixth Fleet will not accept these ships and require them to certify on a NATO range. NATO ranges have restrictive use and availability as well as charge for their services. There are no guarantees that a NATO range will be available for a deploying unit to be able to attain required Naval Gunfire Certification.

2.1 Fire Arms Training Simulator (FATS) Equipment: $0.474M required for procurement of shore-based fire arms training simulators at Center for Submarine Learning (CSL) to reduce time and energy expended for small arms proficiency by personnel assigned to small ships and submarines that lack this capability afloat as required by COMSUBLANT. These un-tethered weapons systems and scenarios place the students into the action and afford them the ability to freely maneuver and handle the weapons. Procurement of these simulators in FY18 allow for repetitive training and learning of the movements without the cost of ammunition or the wear and tear on weapons and ranges.

3.1 FY18 procurements enable NETC to meet the DoD/DoN requirements of consolidating footprint while ensuring optimized performance of the desktops and servers in support of the Sailor 2025 and Ready, Relevant Learning. Funding provides for procurement of 630 Cisco Network Switch Tech Refresh at a cost of $2.330M, 2700 Virtual Desktop Infrastructure (VDI) Electronic Classroom Tech Refresh Hardware at a cost of $ 0.805M, 2700 VDI Electronic Classroom Tech Refresh Software at a cost of $0.815M, and 9 VDI Electronic Classroom Storage Hardware at a cost of $0.500M in support of meeting the enterprise training delivery operations across the enterprise. Additional increase of $1.038M in FY18 is required to accelerate planned addition of robust graphics processing capabilities which to VDI sites to support Ready, Relevant Learning requirements.

4.1 Multi-purpose Reconfigurable Training System (MRTS): $5.400M required for the Center for Information Warfare Training (CIWT) to replace the obsolete Virtual Radio Room suite and capitalize on using a single hardware suite to simulate various pieces of Technical Training Equipment (TTE). CIWT needs to upgrade training system to meet IT A-School and Journeyman Communications course (JCC) C-School training mission for 2000+ students annually.

Education Support Equipment

1.2 Backup System Replacement ($0.400M in FY 2018) : Provides for IT hardware and software to replace obsolete tape library. The proposed replacement system will facilitate faster and more reliable backup of enterprise data using current technologies.

1.4 Virtual Desktop Infrastructure ($0.318M in FY 2018): Provides lifecycle replacement of outdated electronic classroom workstations and operating systems by standardizing content delivery through central hosting to reduce operating costs and information assurance risks. Replacement sustains current teaching and learning capabilities utilized on a daily basis by 4,500 midshipmen and 2,000 faculty and staff in meeting USNA academic and administrative requirements.

1.5 Advanced Computing Cluster Replacement ($0.750M in FY 2018): Provides a replacement high-end computer cluster for midshipmen and faculty computational requirements in science and technology disciplines. Applications supported include flow visualization, computer-aided design and computational fluid dynamics. The server also provides central file back-up, software and communication services for numerous laboratories, classrooms and courses. The computer will replace a device for which incremental upgrades will no longer be feasible due to intervening technological advancements. Sustainment of current services is essential to maintaining relevance of Naval Academy advanced academic computational research involving large or complex data sets. The replacement annually benefits approximately 100 midshipmen, faculty and staff by providing state of the art computing capabilities.

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Line Item MDAP/MAIS Code: N/A		

1.7 Articulated Hub & Rotor Blade Assembly ($0.800M in FY 2018): Provides for life-cycle upgrades to conduct rotary-wing aerodynamic and performance testing in support of the engineering curriculum and research related to fluid dynamics, vibrations, acoustics, structural dynamics, flight propulsion, helicopter performance and aerodynamics. The equipment will replace existing assets acquired in the 1970s that are no longer viable. Failure to sustain currency of the USNA aeronautical engineering program risks loss of accreditation and inability to meet Navy demand for officers with subspecialty education backgrounds in the aviation field. This line item annually benefits midshipmen, faculty and staff, and enables USNA to provide 35% of midshipmen with practical, experimental, and theoretical applications/experiences within aerospace and mechanical engineering and related mathematics and physics courses. Without this tech refresh science, technology, engineering, and mathematic (STEM) majors would be at risk for accreditation

1.13 Voice Switch Software Upgrades ($0.500M in FY 2018): FY 2018 provides software updates and IP voice telephony to maintain technical equivalence and interoperability with evolving marketplace requirements. Upgrades directly benefit 4,000 end-users reliant on voicemail services in meeting Naval Academy academic, professional, and athletic mission requirements. This enables faculty, staff, and midshipmen to maintain communication regardless of their location.

1.15 Coastal Engineering Tank Wave-maker Replacement ($0.450M in FY 2018): Provides for end-of-life replacement of wave-maker acquired in FY 1978. The existing wave-maker is unable to produce the quality of waves required for academic instruction and research. The replacement wave-maker will reduce the need for unplanned emergency repairs which jeopardize ongoing operations. Restoration of as-built capabilities is essential to maintaining relevance of Naval Academy near-shore educational programs annually benefitting approximately 250 midshipmen, faculty and staff. Failure to restore system performance risks loss of accreditation and inability to meet Navy demand for officers with subspecialty education backgrounds in the Ocean Engineering field.

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 07 / 1	P-1 Line Item Number / Title: 8101 / Training and Education Equipment	Aggregated Items Title: Training Support Equipment

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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) TRAINING SUPPORT EQUIPMENT																				
1.1) LIFE CYCLE MANAGEMENT (NCTE)	A		-	-	-	-	-	-	1,465K	1	1.465	3,964K	1	3.964	-	-	-	3,964K	1	3.964
1.2) BALLISTIC MISSILE DEFENSE (BMD)	A		-	-	-	-	-	-	3,373K	1	3.373	2,113K	1	2.113	-	-	-	2,113K	1	2.113
1.3) BMD FST AT SEA	A		-	-	-	-	-	-	208,000.00	1	0.208	218,000.00	1	0.218	-	-	-	218,000.00	1	0.218
1.4) ANTI-ACCESS AREA DENIAL (A2AD)	A		-	-	-	-	-	-	389,000.00	1	0.389	454,000.00	1	0.454	-	-	-	454,000.00	1	0.454
1.5) COMMON DATA LINK (CDL)	A		-	-	-	-	-	-	324,000.00	1	0.324	300,000.00	1	0.300	-	-	-	300,000.00	1	0.300
1.6) DIGITAL RADIO MANAGEMENT SYSTEM (DRMS) WHOLENESS	A		-	-	-	-	-	-	1,327K	1	1.327	1,244K	1	1.244	-	-	-	1,244K	1	1.244
1.7) NAVAL INTEGRATED FIRE CONTROL - COUNTER AIR (NIFC-CA)	A		-	-	-	-	-	-	284,000.00	1	0.284	551,000.00	1	0.551	-	-	-	551,000.00	1	0.551
1.8) IMPASS SCORING SYSTEM	A		-	-	-	-	-	-	-	-	-	2,200K	1	2.200	-	-	-	2,200K	1	2.200
Subtotal: 1) TRAINING SUPPORT EQUIPMENT			**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	***7.370***	**-**	**-**	***11.044***	**-**	**-**	**-**	**-**	**-**	***11.044***
2) Fire Arms Training Simulator																				
2.1) FIRE ARMS TRAINING SIMULATOR (FATS)	A		-	-	-	-	-	-	-	-	-	474,000.00	1	0.474	-	-	-	474,000.00	1	0.474
Subtotal: 2) Fire Arms Training Simulator			**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	***0.474***	**-**	**-**	**-**	**-**	**-**	***0.474***
3) YPYTD - TRAINING DELIVERY SERVICES (TDS)																				
3.1) TRAINING DELIVERY SYSTEMS	A		-	-	-	-	-	-	-	-	-	5,488K	1	5.488	-	-	-	5,488K	1	5.488
3.2) ECR VDI IMPLEMENTATION (VIRTUALIZATION SOFTWARE)	A		-	-	-	-	-	-	6,200.00	5	0.031	-	-	-	-	-	-	-	-	-
3.3) ECR VDI/ VIRTUAL SERVER SERVICES IMPLEMENTATION	A		-	-	-	-	-	-	10,020.00	50	0.501	-	-	-	-	-	-	-	-	-
Subtotal: 3) YPYTD - TRAINING DELIVERY SERVICES (TDS)			**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	***0.532***	**-**	**-**	***5.488***	**-**	**-**	**-**	**-**	**-**	***5.488***

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 07 / 1	P-1 Line Item Number / Title: 8101 / Training and Education Equipment	Aggregated Items Title: Training Support Equipment

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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)
4) Multi-purpose Reconfigurable Training System (MRTS)																				
4.1) Multi-purpose Reconfigurable Training System (MRTS)	A		-	-	-	-	-	-	-	-	-	5,400K	1	5.400	-	-	-	5,400K	1	5.400
Subtotal: 4) Multi-purpose Reconfigurable Training System (MRTS)			**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	***5.400***	**-**	**-**	**-**	**-**	**-**	***5.400***
Total			**-**	**-**	**0.000**	**-**	**-**	**-**	**-**	**-**	**7.902**	**-**	**-**	**22.406**	**-**	**-**	**-**	**-**	**-**	**22.406**

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

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 07 / 1	**P-1 Line Item Number / Title:** 8101 / Training and Education Equipment	**Aggregated Items Title:** Education Support Equipment

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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) U.S. Naval Academy (USNA)																				
1.1) D. LAN Room Video Surveillance	A		-	-	-	-	-	-	283,000.00	1	0.283	-	-	-	-	-	-	-	-	-
1.2) F. Backup System Replacement	A		-	-	-	-	-	-	-	-	-	400,000.00	1	0.400	-	-	-	400,000.00	1	0.400
1.3) I. Library Circulation System Replacement	A		-	-	-	-	-	-	336,000.00	1	0.336	-	-	-	-	-	-	-	-	-
1.4) J. Virtual Desktop Infrastructure	A		-	-	-	-	-	-	-	-	-	318,000.00	1	0.318	-	-	-	318,000.00	1	0.318
1.5) K. Advanced Computing Cluster Replacement	A		-	-	-	-	-	-	-	-	-	750,000.00	1	0.750	-	-	-	750,000.00	1	0.750
1.6) N. Bridge Simulator Upgrade	A		-	-	-	-	-	-	500,000.00	1	0.500	-	-	-	-	-	-	-	-	-
1.7) O. Articulated Hub & Rotor Blade Assembly	A		-	-	-	-	-	-	-	-	-	800,000.00	1	0.800	-	-	-	800,000.00	1	0.800
1.13) S. Voice Switch Upgrades	A		-	-	-	-	-	-	483,000.00	1	0.483	500,000.00	1	0.500	-	-	-	500,000.00	1	0.500
1.15) U. Coastal Engineering Tank Wavemaker Replacement	A		-	-	-	-	-	-	-	-	-	450,000.00	1	0.450	-	-	-	450,000.00	1	0.450
Subtotal: 1) U.S. Naval Academy (USNA)			**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	***1.602***	**-**	**-**	***3.218***	**-**	**-**	**-**	**-**	**-**	***3.218***
Total			**-**	**-**	**0.000**	**-**	**-**	**-**	**-**	**-**	**1.602**	**-**	**-**	**3.218**	**-**	**-**	**-**	**-**	**-**	**3.218**

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

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 07: Personnel & Command Support Equip / BSA 2: Command Support Equipment	**P-1 Line Item Number / Title:** 8106 / Command Support Equipment

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A		

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	90.980	29.745	55.242	59.076	21.650	80.726	40.835	39.034	34.668	36.269	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	90.980	29.745	55.242	59.076	21.650	80.726	40.835	39.034	34.668	36.269	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**90.980**	**29.745**	**55.242**	**59.076**	**21.650**	**80.726**	**40.835**	**39.034**	**34.668**	**36.269**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	0.168	0.005	0.022	-	0.022	0.023	0.029	0.026	0.022	Continuing	Continuing
Flyaway Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

This line provides for new and systematic replacement of investment items required in support of the operational mission of the Navy's claimancy. Procurement of Command Support Equipment throughout the Navy involves the purchase, replacement and upgrade of various pieces of equipment such as Cable Replacements and the purchase, repair, and upgrade of IT Infrastructure and Security Systems. This equipment is an integral part of the programs to improve the fleet and shore establishment by maintaining or expanding existing capabilities or replacing ineffective units.

[P40A / NCIS Data Modernization & Analytical Tools]: The NCIS mission is to support the day-to-day operations to Prevent Terrorism, Protection of National Secrets, Reduce Crime across the Department of Navy and Marine Corps, and comply with DON Mandates. Without the IT Program and Technical Support, these systems will impact NCIS ability to fulfill its mission as designated by SECNAVINST 5430.107. This will Negatively impact mission commanders in their warfighting capacity. Additionally, these IT services have a direct impact on security and monitoring of IT systems as defined in DOD 8500.02 and would violate the requirement and raise the risk of system security vulnerabilities. In addition, NCIS will be supporting the Naval Justice Information System (NJIS), Tactical Network, and VTC infrastructure initiatives.

[P40A / OCHR - Human Resource IT system]: Procurement funding ensures that production and modernization of Human Resources Civilian Personnel (HRCP) in support of DON HR Enterprise Systems remain in accordance with DOD and DON modernization efforts are met, technical refresh of past-shelf-life infrastructure supporting HRCP, and planned HRLINK licensing expansion in compliance to ESL mandates to DON Functional Communities.

Routine Technical Refresh - $116K
Licensing - IBM/ESL Contract via ImmixTechnology $325K

[P40A / FIP]: Funding will be used for procurement of additional modules/ capabilities to improve Navy ERP user experience and actions to correct deficiencies found in the Federal Information System Controls Audit Manual (FISCAM) audit. FISCAM resourcing requirements are growing as an increasing number of deficiencies are identified due to non-compliance with financial audit standards resulting from inadequate internal controls among DON business processes and IT systems.

[P40A / Insider Threat]: The Navy Insider Threat program seeks to meet Defense and Department of the Navy direction to deter, detect, and mitigate the risk of compromise due to insider threats. Insider Threat to Cybersecurity will enable accomplishment of these objectives by providing a user activity monitoring capability, a mechanism for fusing collected information with security risk data from multiple other sources, and a graphical display to facilitate threat analysis, identification, and initial action. This effort is to procure, configure, and install hardware and software in support of the Insider Threat program.

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 07: Personnel & Command Support Equip / BSA 2: Command Support Equipment	**P-1 Line Item Number / Title:** 8106 / Command Support Equipment	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

[P40A / Electronic Military Personnel Record System (EMPRS)]: Electronic Military Personnel Record System (EMPRS):

Electronic Military Personnel Record System (EMPRS) is an electronic document/image based system that serves as the repository for all Department of Navy (DoN) official military personnel record images (over 170 million images). It supports retired, active, and reserve military personnel in the functional areas of selection board operations, casualty management, mobilization, veteran benefits (providing automated Sailor information to the Veterans Administration) and other military personnel management functions. EMPRS annually supports over 150 statutory and administrative selection boards, providing over 12 million service record images, covering promotions, assignments, and retention. References: Title 10 & 44, U. S. Code and Title 36, CFR (Record Management Requirements), DoD Directive 5015.2

OPN funding provided allows us to use an acquisition strategy that is both cost efficient and effective. This strategy sustains the EMPRS program throughout the FYDP, providing technology refreshment (TR) throughout the years (evolutionary) as opposed to a TR every 8 years. This provides vital upgrades in a more timely manner. An 8 year refresh cycle of IT would require reliance on old system and software, by IT standards, that frequently result in compatibility issues as new systems and software are fielded, thus driving up sustainment costs. Evolutionary technical refreshment is a more cost effective strategy.

[P40A / Peripherals]: : Peripherals represent auxiliary and infrastructure components that make up and are associated with the EMPRS system, which supports the Navy's selection board processes for all Officer and senior enlisted personnel (E7 & above). EMPRS is the major information system which is mutually supported by infrastructure to conduct 160 selection boards on an annual basis. Peripherals include items such as removable walls within boardrooms that function as display screen for military personnel record display, keyboards, printers, monitors, mice for workstations in the boardrooms, etc.

[P40A / Electronic Security System (ESS) Replacement/Upgrade]: Electronic Security System (ESS) Replacement/Upgrade
An integrated, open-architecture, non-proprietary digital replacement and/or upgraded corrections/detention-grade electronic security management system. Purchases to include but not limited to: New infrastructure; Multiple CCTV camera monitoring; On-line recording systems; Redundant server/workstation/client fail-over capabilities; VOIP Intercommunication & Paging Audio System; CCTV state-of-the-art, solid state, IP (Internet Protocol) cameras; NVR Recording System Network Video Recorders (NVRs); Integration of CCTV systems to other Brig sub-systems; Access Control System; Proximity-type cards and contactless readers; Integration of the access control system and other facility security control subsystems; Radio Frequency Identification Tracking System; Personal Duress and Alarm System; Personal Digital/ Detention Assistant for staff with 802.11 Wi-Fi connectivity; and other requirements necessary to replace/upgrade to a fully functional and integrated Electronic Security System.

[P40A / System - Crisis Announcement]: The U.S. Naval War College (NWC) requires a distributed control crisis mass emergency real time assisted voice evacuation and mass communication system within the NWC complex to comply with published safety standards. The required installation will enable NWC security and leadership personnel to operate a supervised and distributed, integrated compound wide system of emergency response. This system will provide an announcement system for the College to mitigate additional emergency situations such as active shooter, bomb threats and other threat scenarios. The required system would assist in the protection of life and property by indicating the existence of an emergency situation and providing "real time" instructions to a large number of people whether inside a building or spread out the NWC complex and surrounding area on Newport Naval Station. As a host of International Senior Officers and numerous U.S. dignitaries, both military and civilian, the Naval War College lacks to capability coordinate the responses of the 1,500 personnel on campus.

[P40A / Converged ERP]: Converged Enterprise Resource Planning: The Navy Enterprise Resource Planning (ERP) solution is an integrated business management system that modernizes and standardizes Navy's business processes. Navy ERP utilizes best commercial practices to provide real-time information exchange, unprecedented financial and asset visibility, and improved reporting and decision-making capabilities across key acquisition, financial, and logistics operations.

Navy ERP is the tool chosen to meet Congressional mandates to establish and maintain federal financially compliant management systems, federal accounting standards, and U.S. Government General Ledger procedures at the transaction level. The Navy ERP foundation to achieve enterprise-wide business transformation is accomplished through two releases: the Financial/Acquisition Solution and the Single Supply Solution.

The Navy has overcome a broad range of challenges to successfully deploy financial, acquisition, and workforce management capabilities to all the major acquisition Systems Commands, the Office of Naval Research (ONR), and Strategic Systems Programs (SSP). These commands include up to 72,000 users and $69B of the Navy's Total Obligation Authority (TOA). Navy ERP has deployed and stabilized the Single Supply Solution covering all Navy's Material Groups and Fleet Logistic Centers (FLCs) and Partner Sites.

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 07: Personnel & Command Support Equip / BSA 2: Command Support Equipment	**P-1 Line Item Number / Title:** 8106 / Command Support Equipment	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

The project acquires standard applications servers (ADP hardware) which are hosted in a Navy Data Center at NAS Patuxent River to support ERP software for the Navy Converged ERP Program. Funding reflects procurement of Government Furnished Equipment (GFE) hardware, software, and licenses in support of the SAP enterprise system environment for the Navy ERP Program.

[P40A / Ashore Equipment]: NSIPS is the Navy's world-wide system for the field level input of pay and personnel transactions. NSIPS supports active duty and reserve users ashore through a single web site, and on approximately 125 ships. NSIPS collects, validates, processes and transfers the data necessary to ensure accurate and timely pay and maintenance of personnel records.

NSIPS is a modern, cost-effective human resources capability that fully integrates business processes, tools, and authoritative data to efficiently and effectively manage the military workforce. NSIPS is being enhanced to systematically modernize the Navy's pay and personnel processes and systems. NSIPS relies on technical refresh to maintain the usability, functionality and supportability of the systems ashore to avoid technical obsolescence. The technical refresh of ashore equipment (hardware and software) will be performed on an annual basis throughout the FYDP.

[P40A / Electronic Procurement System (ePS)]: ELECTRONIC PROCUREMENT SYSTEM (ePS):
The electronic Procurement System (ePS) is the Department of the Navy's (DON) End-to-End (E2E) Contract Writing System (CWS). It will provide the Navy and Marine Corps contracting community with a full contract writing management capability and facilitate integration with federally mandated systems, DON financial systems, and industry. The ePS will utilize Department of Defense (DoD) standards and support auditability. The ePS will address existing CWS challenges including outdated architecture, limited capabilities, scalability concerns, and existing legacy systems.

Full deployment of the ePS ensures compliance of the DON's contracting abilities with the following legislative mandates: the writing and management of all contracts must now occur in congressionally approved computer systems (Section 862 of the National Defense Authorization Act (NDAA) of 2013); the central management and oversight of all DoD business (10 U.S. Code (U.S.C.) Section 2222); and all contracting actions must be fully auditable and traceable (Section 1003 of the NDAA 2010 & Office of the Secretary of Defense (OSD) Financial Improvement and Audit Readiness (FIAR) Guidance).

The ePS will use DoD data exchange capabilities (e.g.; Procurement Data Standard (PDS) and Purchase Request Data Standard (PRDS)) in order to achieve standardized data interoperability with external systems. The Navy Enterprise Service Bus (NESB) serves as the hub to relay procurement data to various finance and other systems of record, such as Navy Enterprise Resource Planning (NERP), Standard Accounting & Reporting System (STARS) and Standard Accounting Budgeting & Reporting System (SABRS).

The result of successful ePS implementation will be a contracting workforce that issues accurate and timely contracts in a standard format that comply with all DoD/Federal laws, regulations, and policies.

[P40A / Electronic Procurement System (ePS)]: ELECTRONIC PROCUREMENT SYSTEM (ePS):
The electronic Procurement System (ePS) is the Department of the Navy's (DON) End-to-End (E2E) Contract Writing System (CWS). It will provide the Navy and Marine Corps contracting community with full contract writing management capability and facilitate integration with federally mandated systems, DON financial systems, and industry. ePS will utilize Department of Defense (DoD) standards and support auditability. ePS will address existing CWS challenges including outdated architecture, limited capabilities, scalability concerns, and existing legacy systems.

Full deployment of the ePS ensures DON's compliance with the following legislative mandates: writing and management of all contracts in congressionally approved computer systems (Section 862 of the National Defense Authorization Act (NDAA) of 2013); central management and oversight of all DoD business (10 U.S. Code (U.S.C.) Section 2222); and contracting actions must be fully auditable and traceable (Section 1003 of the NDAA 2010 & Office of the Secretary of Defense (OSD) Financial Improvement and Audit Readiness (FIAR) Guidance).

[P40A / Maritime Operations Center (MOC) Procurement]: MOCs deliver Navy Command and Control (C2) capabilities at the Operational Level of War (OLW) that guide execution of the six (6) core capabilities of the Navy as outlined in the 2009 A Cooperative Strategy for 21st Century Seapower (Forward Presence, Deterrence, Sea Control, Power Projection, Maritime Security, Humanitarian Assistance and Disaster Response) through the full range of military operations (ROMO). The MOC initiative focuses on improving the Navy's OLW C2 by establishing baseline capabilities in globally-networked MOCs enabling Numbered Fleet and Navy Component Commanders (NFC/NCC) to assume a range of Service and Joint roles while continuing to accomplish traditional Fleet management functions. The MOC construct enhances C2 of Navy forces at the operational level through headquarters manned by individuals qualified in joint operational-level staff processes and enabled by globally interoperable Command, Control, Communications, Computers, and Intelligence (C4I) systems. MOCs provide organizational consistency, the scalability and flexibility to transition between various command roles, and enhanced global networking among Navy and Joint organizations. The desired end state/goal of the system-of-systems methodology embodied in each of the eight (8) MOCs is to achieve globally-networked operational-level C2 decisions by NCC, Joint Force Maritime Component Commanders (JFMCC) and Commanders of Joint Task Forces (CJTF). Focused acquisition of standard and common suites of systems (from the existing

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 07: Personnel & Command Support Equip / BSA 2: Command Support Equipment	P-1 Line Item Number / Title: 8106 / Command Support Equipment	
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A		

base of Navy, Army, Air Force and joint Programs of Record (PORs) and non-PORs) facilitates successful accomplishment of designated Joint Mission-Essential Tasks (JMETS) aligned to Joint Capability Areas (JCAs) and in support of Combatant Commander theater objectives.

This system of systems approach aims to achieve effective, agile, networked and scalable MOCs, employing common doctrine, standardized processes and common C4I systems. Each MOC will be able to operate within a common organizational construct in various roles (joint, interagency and combined). The global network and commonality enable both reach-back and load-sharing across all MOCs within a Navy enterprise network to include Ballistic Missile Defense (BMD) networks. The eight (8) MOCs consist of nine (9) sites (seven (7) ashore and two (2) afloat) including each of the numbered Fleets (Commander Third Fleet (C3F); Commander Fourth Fleet (C4F); Commander Fifth Fleet (C5F); Commander Sixth Fleet (C6F) ashore and forward afloat; Commander Seventh Fleet (C7F); Commander Tenth Fleet (C10F); Commander Pacific Fleet (COMPACFLT); and U.S. Fleet Forces Command (COMUSFLTFORCOM) NCCs.

[P40A / CNIC]: Smart Grid System provides the ability to centrally monitor, manage, and control energy supply and distribution as well as helps to sustain lower cost of shore operations gained through identification and execution of energy efficiency projects. To attain the Navy's Shore Energy Security Goals, funding will be used to support the procurement of the software and equipment suite to connect advanced metering infrastructure (AMI) with building energy controls across various Navy installations via a secure IT network connection.

This procurement provides full capability consisting of hardware, software, integration, & operator training necessary to aggregate data from thousands of disparate control systems into a centralized and secure data management system. It provides the operator(s) transparency of the operational condition of building and utility infrastructure and includes advanced analytics that enable timely action for preventive maintenance, prevention of disruption in operations and support of condition based maintenance, supporting mission assurance and bringing further operational savings. Smart Grid is a regional capability that centralizes energy management for multiple bases at each of nine (9) regions. Two of those regions currently have partial Smart Grid capability but need upgrades to achieve the full capability.
Regions are prioritized as follows:
(1) Fleet concentration areas and mission assurance (cyber security) - MIDLANT (FY16 1st article test), Hawaii, South West, Marianas, South East
(2) OCONUS - EURAFSWA, Far East
(3) Upgrade (backfit) existing Smart Grids - NDW, Northwest

[P40A / United States Fleet Forces Command]: The procurement of Command Support Equipment throughout the Navy Information Forces (NAVIFOR) involves the purchase, replacement and upgrade of various types of equipment, to include, but not limited to, critical cable plant repair / upgrade, Voice, Video, and Data Infrastructure and security disintegrators / systems at 114 world-wide Base Communications Office (BCO) sites throughout the Pacific and Atlantic areas of responsibility.

BASE COMMUNICATIONS OFFICE (BCO) (NAVIFOR): Telephone switch Uninterruptible Power Supply (UPS) - Procure and install telephone switch UPS and rectifier systems at CONUS / OCONUS locations which are necessary in order to remedy safety concerns, hazardous situations and performance deficiencies.

BASE COMMUNICATIONS OFFICE (BCO) INFRASTRUCTURE REPLACEMENT/UPGRADE (CABLE & EQUIPMENT) (NAVIFOR): Base Communications Office (BCO) provides telecommunications services to include the transport of voice, video and data information at 114 world-wide sites. The BCO is responsible for the daily operations and maintenance of Base Telecommunication services, devices and systems. Funding this requirement will allow for immediate repair of cable/equipment. It provides the ability to respond to casualties and to upgrade when necessary for BCO's throughout the Pacific and Atlantic areas of responsibility.

INFOCON 3 (NAVIFOR): Funding required for the procurement of software, licensing upgrades and technical support, to include patches and version upgrades as required, for the Joint Information Management System (JIMS) in support of U.S. Cyber Command (USCC) Taskorder 12-0373. This software enables JIMS capability to work across systems (Navy to Joint); provides reciprocal communications via web service calls from Navy Cyber Defense Operations Command systems to Defense Information Service Agency; allows process and technology interfaces for incident reporting, and provides situational awareness of U.S. Navy incidents.

DEFENSE RED SWITCH NETWORK (DRSN) (NAVIFOR): Procure and install 5 new DSS-2A red switch systems. Must replace obsolete DRSN switches to maintain operation of Navy DRSN sites. DRSN is the only secure voice system that provides a single user desktop platform Integrated Services Telephone (IST) that allows interface/access to multiple strategic and tactical secure voice systems.

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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A		

EQUIPMENT PROCUREMENT FOR C10F MOC (NAVIFOR): Funding for equipment procurement and sustainment for Maritime Operations Center (MOC) architecture for the Enterprise. Funding provided to procure and install Maritime Operations Center / Marine Headquarter (MOC/MHQ) to provide common operational picture. Common MOC architecture will provide the command the ability to paint a global picture of network health and defense.

DEPLOYABLE MISSION SUPPORT SYSTEMS (DMSS) (Fleet Cyber Command): Funding for DMSS kits to support simultaneous team deployments with the primary mission to survey, secure, and protect military networks aboard Navy ships, data centers, and shore sites worldwide which necessitates onsite vulnerability assessments and incident response on little to no notice. DMSS kits are required to allow deployed teams to conduct intensive, computationally-heavy analysis when reach-back capability is unavailable or bandwidth is limited. Navy Cyber Protection Teams (CPTs) located in CONUS will be required to deploy cyber planning and incident response elements into theater to support C4F, C5F, and C6F mission assurance objectives to include identification of cyber key terrain and OPLAN development.

ELECTRICAL POWER SYSTEMS: Procures, installs, and replaces generators and uninterruptible power supply (UPS) systems to provide highly reliable, continuous, high quality power subsystems to support Fleet Cyber Command. Some of the operational load is designated as "critical" and requires UPS Systems for instantaneous application in case of loss or disturbance of the primary power source.

[P40A / New Joint Regional Security Stack (JRSS)]: Funds supports the Navy's transition to the Joint Regional Security Stack (JRSS)/Service Migration Team (SMT) to enhance the Department of Defense (DOD)firewall functions, intrusion detection and prevention, enterprise management, virtual routing and cyber network security capabilities. JRSS defends the cyber warfighting domain and resolves the Joint Information Environment (JIE) Initial Capabilities Document (ICD) gaps by shrinking the attack surface area. JRSS also achieves standard network security architecture and accelerates a standardized command and control platform for JIE.

[P40A / C4I Equipment Naval Computer and Telecommunications Station]: NCTAMS Det Rota acts as a hub and provides communications services to Naval Station Rota,Spain and Naval units in Madrid, Valencia, Lisbon (Portugal), and Gibraltar for approximately 10,000 DoD personnel. In addition to this defense telecommunication capacity, NCTAMS provides commercial telecommunication services to Naval Station Rota users. Commercial fiber and copper lines come into the base via Building 3307, the main telephone switch facility. From this facility, DoN managed copper and fiber cables are routed throughout NAVSTA Rota so that communications data can be distributed to interconnecting five remote telephone switch nodes. NCTAMS LANT Det Rota significant Joint Support includes:
- Provide direct C4I support for USEUCOM, USAFRICOM, USCENTCOM, and USTRANSCOM. Rota is
TRANSCOM's premier en route air mobility hub for support to EUCOM, CENTCOM and AFRICOM.
- Provide COMSEC support for Strike Force NATO in Lisbon, Portugal.
Constructs a new consolidated, secure, state-of-the-art, communications station and support facility. Project will allow consolidation of administrative, personnel and operational support functions into a new facility and subsequent demolition of eleven old and deteriorated buildings.

[P40A / BCO Infrastructure Replacement (Cable & Equipment)]: In FY18 the following work efforts will be performed (BSO 60): Naval Computer and Telecommunications Station Far East (NCTSFE) requires Fiber Optic Backbone Realignment on Fleet Activities Yokosuka. BLII engineering and installation did not ensure nor provide for redundancy in case of meteorological, geological, or intentional service interruption. Out-side plant Fiber has been installed by many different efforts with no logical hierarchy and no redundancy to the critical C2 nodes as there are actually five separate fiber optical backbones that do not connect. Current optical backbone infrastructure will not support Assured Services LAN (ASLAN) in accordance with DOD Unified Capability Requirements (DOD UCR 2008) allowing converged distribution of voice, video and data services to include redundancy and diversity of critical C2 and special C2 infrastructure. This results in C2 buildings being single-threaded and at great risk of potential loss of service in a catastrophic event. Key users who will lose connectivity include the NATIONAL COMMAND AUTHORITIES, Combatant Commanders of the Unified Commands, and strategic and tactical subordinate commanders.
Additional cost in FY17 and FY18 are due to new/upgraded Base Communication Office (BCO) Outside cable plant infrastructure upgrades required to comply with Unified Capabilities (UC) specifications IAW DoDI 8100.04. Unified Capabilities are the integration of voice, video, and/or data services delivered ubiquitously across a secure and highly available infrastructure, independent of technology, to provide increased mission effectiveness to the warfighter and business communities.

[P40A / Electrical Power Systems]: FY18 Procurement Plan Electrical Power (BSO 60): Replacing satellite communications (SATCOM) power control panels at the NAVSATCOMFAC in Wahiawa, Hawaii. SATCOM, inclusive of Teleport, is a DoD Acquisition Category 1 (ACAT I) Acquisition Major Automated Information Systems (MAIS) program. Navy manages 7 of the DoD Gateway sites (Wahiawa, Guam, Diego Garcia, Australia, Chesapeake, Lago Patria, and Bahrain). DOD Teleport is a Joint program that is interoperable with Joint, Allied, and Coalition operations, providing multi-band satellite communications capability and seamless access to terrestrial components of the DISN for worldwide operations. Joint Requirements Oversight Council Memorandum (JROCM) 140-00 (Aug 28, 2000) "Teleport addresses the

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warfighter's growing requirements for emerging deployed military and commercial SATCOM systems interfaces into key DISN and legacy C4I services". Any degradation of the Wahiawa NAVSATCOMFAC will directly impact joint warfighters requiring services provided in the Pacific AOR and could result in catastrophic failures.

[P40A / INFOCON 3 - Security Compliance]: FY18 INFOCON 3 Procurement Plan (BSO 60): Operation ROLLING TIDE (ORT) Remediation outstanding tasking includes Host Based Security System (HBSS) modernization, Global computer network defense enclave hardening, addition of analytical capacity at NCDOC, establishing continuous monitoring, Noesis, and web risk assessment. Increase from FY17 to FY18 supports Hardware/software for enhancing Defensive Cyberspace Operations (DCO) enterprise capabilities and increasing analytical capacity, Continuous Monitoring and Risk Scoring implementation as part of the cyber defense mission support system, HBSS mission system changes to provide Attack Sensing and Warning to mitigate host level malicious activity. Additionally, increase supports Cyber Defense Mission Support System which increases capacity to ingest, process, analyze, store, combat advance persistence threats against Navy networks, report new and emerging data sets, and ensure web vulnerability protection by performing risk assessment.

[P40A / Defense Red Switch Network Replacement]: Defense Red Switch Network (DRSN) is a separate, secure switched network that is considered part of the DISN providing high quality, secure voice communications, secure data communications, and secure conferencing capabilities to the senior decision-makers and Combatant Commanders. DRSN provides the National Command Authority (NCA), the National Military Command Center (NMCC), Combatant Commander Command Centers, Warfighters, and other critical DoD and federal activities with reliable, secure, interoperable Command and Control (C2) and crisis management capabilities.

FY18 DRSN Procurement Plan (BSO 60): Defense Red Switch Network (DRSN) DSS-IIA Upgrade installation for Pacific Fleet(USAF Contract # FA8218-15-D-0001) related to the Department of the Navy DRSN tech refresh.

[P40A / Deployable Mission Support Systems (DMSS)]: Per USCYBERCOM System Requirements Document, each CPT must be provisioned with 2 Deployable Mission Support Systems (DMSS) to support two simultaneous team deployments (40 total). The CPTs primary mission is to Survey, Secure, and Protect military networks (aboard Navy ships, data centers, and shore sites worldwide) which necessitates onsite vulnerability assessments and incident response on little to no notice. Field deployable computing assets for the 20 Navy CPTs are required to allow deployable teams to conduct intensive, computationally-heavy analysis when reach-back capability is unavailable or bandwidth is limited. In addition, Navy CPTs located in CONUS will be required to deploy cyber planning and incident response elements into theater to support C4F, C5F, and C6F mission assurance objectives to include identification of cyber key terrain and OPLAN development.

[P40A / United States Pacific Fleet]: These funds are used by PACFLT for the procurement and installation of support equipment required to maintain and modernize the fleet.

[P40A / Canopy Shelters]: Temporary Enclosed Dehumidified Tension Fabric Structures to Store Attrition Aircraft at Naval Base Coronado.

[P40A / Briefing Display System Upgrade]: PNCSE - Briefing Display System Upgrade (NAVCENT): Procure and install NAVCENT HQ Briefing and Display System (BDS) Upgrade. Coalition partners are currently standing operations on the C5F Maritime Operations Center (MOC) Watch Floor which is powered by the BDS. All Coalition missions are observed and monitored within the MOC and both C5F and Coalition forces use BDS throughout the rest of NAVCENT HQ to include the War Room, MOC conference room, and within Flag Officer spaces. BDS is a critical capability to allow US, and Coalition Nations, to pursue Strategic Security Objectives within the CENTCOM Area of Responsibility. In addition the BDS capability can be configured to share Situational Awareness with Higher Echelons of Command and Peer Commands. The new BDS system will replace the current architecture and allow for capability enhancements to provide increased strategic Command and Control, be CYBERSAFE Compliant, allow for flexibility to adjust displays with the MOC Watch Floor and secure conference rooms. The BDS is the primary battle space awareness tool used by the Combined Maritime Forces US and Coalition Watch Team as well as NAVCENT leadership Command and Control. BDS is a multifaceted Video Information System providing battle-space awareness video to the Combined Maritime Operation Center (CMOC), Alternate Maritime Operations Center (AMOC), War Room, Flag/Coalition Command Suite, Department Head offices, conference rooms and key coalition leadership. BDS is essential to US and Coalition leadership command and control of all naval forces in the CENTCOM area of responsibility. BDS is currently part of Core Build/Mission Build (CB/MB) for every Fleet Maritime Operations Center (MOC) as annotated in OPNAVINST 3500.42 "Maritime Operations Standardization".

[P40A / Undersea Warfare Decision Support System - CNE]: NAVEUR Undersea Warfare Decision Support System. Funds will provide for procurement of MD-1324 modem and two systems installs at HQ MOC CTF-69 and CTF-67 for P3-8 Integration. Details held at a higher classification.

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ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

[P40A / Maritime Operations Center (MOC) Server Room]: Supplemental funding requested for engineering, procurement and installation services in support of MOC C2 server room relocation and reconfiguration. NAVCENT MOC C2 Server Room houses all the mission essential equipment for both the Warfighting Mission Area (WMA) and Enterprise Information Environment Mission Area (EIEMA) used by the Combined Maritime Forces US and Coalition Watch Team as well as NAVCENT leadership Command and Control. MOC C2 systems provide Combined Maritime Operation Center (CMOC), Alternate Maritime Operations Center (AMOC), War Room, Flag/Coalition Command Suite, Department Head offices, conference rooms and key coalition leadership with critical decision making information to allow Naval Forces Central Command and Combined Maritime Forces Commander to direct.

[P40A / Briefing Display System (BDS) Delta]: Update of BDS system to replace the current system and allow for capability enhancements to provide increased strategic Command and Control capability enhancements, be CYBERSAFE Compliant, and allow NAVCENT to "buy back" up to 20KW of power in order to support other critical system installations.

[P40A / Navy Enterprise Tactical Command and Control (NETC2)]: The Navy Enterprise Tactical Command and Control, NETC2, is an integrated command and control headquarters which enables a commander to set up a self-contained, self-powered, computer network-enabled temporary headquarters facility anywhere in the world within 6 - 24 hours of arrival at a location. This system will replace the current JMAST CENT. The current JMAST in NACENT's current Command and Control (C2) systems Continuity of Operations (COOP) site; it is scheduled to be decommissioned as of 30 Sept 2016 with no replacement identified. Navy Enterprise Tactical Command Control (NETC2) offers a one-for-one replacement of the existing JMAST capabilities. JMAST is antiquated and cannot be made Information compliant in its current state. Moreover, JMAST is comprised of legacy equipment that is no longer supported by the Program of Record (POR).

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	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)*
P-40a	Command Support Equipment				- / 90.980	- / 29.745	- / 55.242	- / 59.076	- / 21.650	- / 80.726
P-40	**Total Gross/Weapon System Cost**				**- / 90.980**	**- / 29.745**	**- / 55.242**	**- / 59.076**	**- / 21.650**	**- / 80.726**

*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 sum exactly due to rounding.

Justification:
NCIS Data Modernization & Analytical Tools

Increase in funding supports components of NCIS' NJIS Scanning, Tactical Network and VTC infrastructure initiatives. As the DON begins the roll-out of NJIS, NCIS has a requirement to deploy a variety of high speed scanning capabilities across the enterprise to capture investigative data. NCIS is under development to host critical investigative and operational capabilities which will provide a secure and private environment that allows the investigative technical components of the organization to conduct their mission more efficiently. A number of investigative tools and techniques will leverage this tactical network to include Investigative Cyber Security; Technical Services; Cyber, Technical Surveillance Counter Measures (TSCM), Tech Services, Bio-Metrics, etc. Currently, these capabilities are scattered across separate networks and are not integrated or available to the agency as a whole. Furthermore, NCIS' conference rooms and Leadership Desktop Units are reaching end-of-life and replacement of these systems will give NCIS the capabilities to securely communicate about ongoing investigative and operational sensitive cases to support mission requirements.

Office of Civilian Human Resources (OCHR): Human Resources IT System

Office of Civilian Human Resources (OCHR) provides information technology system support for over 204,000 civilians at more than 1,340 naval activities throughout the world. These systems are the core of human resource support for the Department of the Navy. The OCHR Systems Division has the responsibility to implement, sustain, and support the hardware, software, systems and applications, functional administration, and communications infrastructure in accordance with the Department of Navy Chief Information Office, Naval Network Warfare Command, Navy Marine Corp Intranet, and DOD Civilian Personnel Management Services mandates, directives, and policies. The technology for the myriad of human resource applications requires upgrades and/or additional capability to support and maintain the integrity of these systems cost effectively.

DON Financial Improvement Program (FIP) -- formed in response to Congressional mandates for Navy-Marine Corps and the rest of the Defense Department to achieve financial auditability. The FIP is a Department-wide multi-year change management effort which requires fundamental improvements to processes and systems as well as to the business culture to implement those strengthened internal controls. Increase in FY18 will be used for the STARS to SABRS (S2S) transition hardware and software (HW/SW) required for supporting DON SABRS/SMARTS. This funding begins to address the many HW/SW requirements to transition the 11 BSOs migrating over to SABRS. Implementation will allow DON to comply with OSD's Financial Management (FM) Functional Strategy, to (1) simplify the financial management environment; (2) make the environment more efficient; and, (3) generate auditable budget and accounting data.

Insider Threat
Funds were transferred from MIP OPN LI 8114. This effort is to procure, configure, and install hardware and software in support of the Insider Threat program.

EMPRS -- Increase from FY17 to FY18 funds critical workstation tech refreshes previously deferred.

Converged Enterprise Resource Planning (ERP): FY18 funds provide technical refresh of hardware/servers at the Navy Data Center at NAS Patuxent River.

NSIPS

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Line Item MDAP/MAIS Code: N/A		

In FY18 NSIPS will purchase ashore equipment (hardware and software) to provide the additional capacity and capabilities required by personnel modernization, and to meet Information Assurance requirements. Funds will be used to procure servers, CAC verification and load balancing devices, computer storage, and associated software for the NSIPS web ashore development, test, production, and COOP environments. Hardware purchases will be through NGEN contract which includes installation costs.

The increase in NSIPS in FY18 is to procure licenses to improve productivity and reduce future development and sustainment cost of added back office functionality. Additional licenses are required to increase Cyber Security and add necessary security modules limiting Information Assurance (IA) vulnerabilities. These licenses are needed to improve system security, improve auditability, reduce the amount of PeopleCode required for development and sustainment of additional functionality, support the expanded usage from the system consolidations, and improve overall performance of the system.

ELECTRONIC PROCUREMENT SYSTEM (ePS): FY18 funding is for the procurement of user licenses for the limited deployment of ePS.

CNIC: SMARTGRID

Smart Grid Energy Management Computer Software Suite Description: Smart Grid is a new building and utility energy management capability comprised of a computer software suite that through daily operations brings significant savings from predictive maintenance and efficient management of energy sources across the Navy's 70 CONUS and OCONUS installations. The Smart Grid provides first time capability to intelligently analyze energy data from 16,849 smart meters previously installed to comply with the Energy Policy Act 2005 (Public Law 109-58-August 8, 2005) and the Energy Independence and Security Act 2007 (Public Law 110-140-December 19, 2007. The Smart Grid aggregates meter data with highest energy consuming 2042 buildings and 174 utility control systems to intelligently and continuously identify cost savings opportunities, providing 2 of the 8 Trillion BTU energy savings needed to achieve the 50% Navy energy reduction target. The Smart Grid brings first time transparency of building and utility system operations and behavior, essential to both monitor for, and react to, a cyber-event.

Maritime Operations Center (MOC): The FY 2018 funding will provide for procurement, production engineering, integration and installations required to continue incremental improvements of the common capabilities of the MOCs, leading to fully-integrated, globally-networked operational-level commands with a Navy enterprise network and appropriate capabilities to exercise Command and Control (C2) over Navy missions, such as Ballistic Missile Defense (BMD), in accordance with MOC baseline requirements.

BCO Infrastructure: FY18 increase is to support infrastructure upgrades, Fiber and copper, in the Far East Region and represents a fraction of the BCO OPN requirements. This antiquated cable plant needs to be replaced due to hazardous material and are not compliant with OSHA 29 CFR 1910.1025 or 29CFR 1926.62. The outside cable plant at Navy facilities is antiquated, resulting in significant and frequent failures due to deterioration of cabling insulation. The failure rate is accelerating which is causing prolonged system outages.

Deployable Mission Support Systems (DMSS)

Per USCYBERCOM System Requirements Document, each CPT must be provisioned with 2 Deployable Mission Support Systems (DMSS) to support two simultaneous team deployments (40 total). The CPTs primary mission is to Survey, Secure, and Protect military networks (aboard Navy ships, data centers, and shore sites worldwide) which necessitates onsite vulnerability assessments and incident response on little to no notice. Field deployable computing assets for the 20 Navy CPTs are required to allow deployable teams to conduct intensive, computationally-heavy analysis when reach-back capability is unavailable or bandwidth is limited. In addition, Navy CPTs located in CONUS will be required to deploy cyber planning and incident response elements into theater to support C4F, C5F, and C6F mission assurance objectives to include identification of cyber key terrain and OPLAN development.

OCO:
Maritime Operations Center (MOC) Server Room

MOC C2 Server Room Relocation is needed now to correct material and safety hazards. MOC C2 Server Room was designed using 1990's technologies, safety and physical security practices. COMUSNAVCENT recognized many deficiencies and safety hazards and funded SSCLANT $3.2M in FY15 to provide design and engineering services to determine requirements to correct safety hazards and relocate the current MOC C2 Server Room and all systems to another location. The current MOC C2 Server Room presents several risks to life, mission, and cybersecurity. Critical issues needing immediate correction are replacement of wet fire suppression with dry system, replacing cabinets/racks with hot-aisle containment system to improve cooling and physical security, and replace rack power distribution to

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy		Date: May 2017
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Line Item MDAP/MAIS Code: N/A		

overhead vice below floor to eliminate shock hazard in case of wet fire suppression discharge. If not funded with OCO funds, C5F MOC, and Coalition forces will not be able to provide timely and effective Command and Control decisions necessary in the pursuit of US, and Coalition, Strategic Objectives within the CENTCOM Theatre

Briefing Display System

An approved FY17 upgrade of BDS did not properly take into consideration scope growth of the project needed to replace or upgrade all end-of-life components or technology inflation. The U.S. Naval Forces Central Command's (NAVCENT) Briefing Display System (BDS) is the primary battlespace awareness tool used by the Combined Maritime Forces US and Coalition Watch Team as well as NAVCENT leadership Command and Control. BDS is a multifaceted Video Information System providing battlespace awareness video to the Combined Maritime Operation Center (CMOC), Alternate Maritime Operations Center (AMOC), War Room, Flag/Coalition Command Suite, Department Head offices, conference rooms and key coalition leadership. BDS is essential to US and Coalition leadership command and control of all naval forces in the CENTCOM area of responsibility. Current BDS suite is beyond end-of-life with necessary repairs to critical components like VTC and the "Knowledge Wall" made all the more expensive due to their obsolescence. As a result, a proposed rough Order of Magnitude (ROM) for this upgrade fell short of completing all needed work. The BDS fund is a supplemental follow on from the approved project in PB17. Loss of any of these feeds would severely hamper the mission of COMUSNNAVCENT and Coalition Partners to direct operations in the CENTCOM AOR.

Navy Enterprise Tactical Command and Control (NETC2)

NETC2 is required to provide cyber compliant COOP capability. JMAST in COMUSNAVENCT's current Command and Control (C2) systems COOP site; it is scheduled to be decommissioned as of 30SEP2016 with no replacement identified. JMAST is antiquated (beyond end-of-life) and cannot be made Information assurance (IA) compliant in its current state. Moreover, JMAST is comprised of legacy equipment that is no longer supported by the POR. Only 1 NETC2 is required. Further discussions with PMW 790 after UFR submitted indicated that one unit can scale to meet NAVCENT requirements with additional cost. Cost of $2.5M is for 50 seats. NAVCENT requires 100 seats therefore; requested funding level remains at $5M to support capacity and capability of the COOP requirement. Failure to fund the NETC2 procurement with OCO funding results in dramatically increased unfunded requirement to be potentially filled with Operation and Management costs (estimated to be over $2Million per annum) as COMUSNAVCENT will be required to maintain all existing JMAST equipment and personnel organically.

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 07 / 2	**P-1 Line Item Number / Title:** 8106 / Command Support Equipment	**Aggregated Items Title:** Command Support Equipment

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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) Purchase of Equipment																				
1.1) NCIS Data Modernization & Analytical Tools (1)	A		2,316.500	4	9.266	2,172.000	1	2.172	1,843.000	1	1.843	3,661.000	1	3.661	-	-	-	3,661.000	1	3.661
Subtotal: 1) Purchase of Equipment			**-**	**-**	***9.266***	**-**	**-**	***2.172***	**-**	**-**	***1.843***	**-**	**-**	***3.661***	**-**	**-**	**-**	**-**	**-**	***3.661***
2) Tech Refresh																				
2.1) OCHR - Human Resource IT system (2)	A		435.800	5	2.179	346.000	1	0.346	520.000	1	0.520	441.000	1	0.441	-	-	-	441.000	1	0.441
2.2) FIP (3)	A		2,351.000	1	2.351	1,628.000	1	1.628	1,676.000	1	1.676	2,682.000	1	2.682	-	-	-	2,682.000	1	2.682
Subtotal: 2) Tech Refresh			**-**	**-**	***4.530***	**-**	**-**	***1.974***	**-**	**-**	***2.196***	**-**	**-**	***3.123***	**-**	**-**	**-**	**-**	**-**	***3.123***
3) Insider Threat																				
3.1) Operational Spares	A		-	-	-	-	-	-	-	-	-	200.000	1	0.200	-	-	-	200.000	1	0.200
3.2) Configuration / Install	A		-	-	-	-	-	-	-	-	-	175.000	1	0.175	-	-	-	175.000	1	0.175
3.3) Hardware/ Software License Procurement	A		-	-	-	-	-	-	-	-	-	535.000	1	0.535	-	-	-	535.000	1	0.535
3.4) ONI Refresh Hardware/Software	A		-	-	-	-	-	-	-	-	-	90.000	1	0.090	-	-	-	90.000	1	0.090
Subtotal: 3) Insider Threat			**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	***1.000***	**-**	**-**	**-**	**-**	**-**	***1.000***
4) Electronic Military Personnel Record System (EMPRS)																				
4.1) Servers	A		105.263	19	2.000	150.000	4	0.600	-	-	-	-	-	-	-	-	-	-	-	-
4.2) Content Management HW SW	A		8.837	221	1.953	-	-	-	-	-	-	20.190	39	0.787	-	-	-	20.190	39	0.787
4.3) Records Mgmt SW	A		768.000	4	3.072	-	-	-	-	-	-	450.000	1	0.450	-	-	-	450.000	1	0.450
4.4) Configuration Management HW SW	A		142.500	2	0.285	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.5) Selection Board Management HW SW	A		150.000	1	0.150	6.000	33	0.198	6.000	22	0.132	1.806	253	0.457	-	-	-	1.806	253	0.457
4.6) Client Management HW SW	A		500.000	2	1.000	-	-	-	0.760	267	0.203	1.000	280	0.280	-	-	-	1.000	280	0.280
4.7) Network Management HW SW	A		28.571	21	0.600	10.000	10	0.100	-	-	-	-	-	-	-	-	-	-	-	-
4.8) Network Devices	A		170.750	4	0.683	121.667	3	0.365	-	-	-	-	-	-	-	-	-	-	-	-
4.9) Storage Devices	A		309.833	12	3.718	100.000	10	1.000	-	-	-	-	-	-	-	-	-	-	-	-
4.10) Workstations (Sel Board)	A		14.423	52	0.750	2.000	475	0.950	-	-	-	-	-	-	-	-	-	-	-	-
4.11) Scanners High Speed	A		63.364	11	0.697	75.000	6	0.450	-	-	-	-	-	-	-	-	-	-	-	-

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 07 / 2	P-1 Line Item Number / Title: 8106 / Command Support Equipment	Aggregated Items Title: Command Support Equipment

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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)
4.12) Peripherals [4]	A		34.909	22	0.768	50.000	34	1.700	3.000	60	0.180	-	-	-	-	-	-	-	-	-
4.13) Sel Board Display	A		350.000	1	0.350	148.000	1	0.148	-	-	-	152.000	2	0.304	-	-	-	152.000	2	0.304
Subtotal: 4) Electronic Military Personnel Record System (EMPRS)			**-**	**-**	***16.026***	**-**	**-**	***5.511***	**-**	**-**	***0.515***	**-**	**-**	***2.278***	**-**	**-**	**-**	**-**	**-**	***2.278***
5) Electronic Security System (ESS) Replacement/Upgrade																				
5.1) Electronic Security System (ESS) Replacement Update	A		-	-	-	7,903.000	1	7.903	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 5) Electronic Security System (ESS) Replacement/Upgrade			**-**	**-**	***0.000***	**-**	**-**	***7.903***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
6) System - Crisis Announcement																				
6.1) Control Unit	A		225.000	3	0.675	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.2) Speakers/ Strobes/Message Displays	A		0.933	150	0.140	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.3) Remote Control/ Monitoring Units	A		2.500	70	0.175	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.4) Remote Alert System	A		1.000	55	0.055	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.5) Alert Status Communications	A		1.000	20	0.020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.6) Power Supplies	A		2.500	24	0.060	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.7) Wiring, Installation, Testing	A		375.000	1	0.375	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 6) System - Crisis Announcement			**-**	**-**	***1.500***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
7) Converged ERP (39)																				
7.1) Converged ERP [5]	A		-	-	-	-	-	0.765	-	-	0.873	-	-	4.201	-	-	-	-	-	4.201
Subtotal: 7) Converged ERP (39)			**-**	**-**	***0.000***	**-**	**-**	***0.765***	**-**	**-**	***0.873***	**-**	**-**	***4.201***	**-**	**-**	**-**	**-**	**-**	***4.201***
8) Navy Standard Integrated Personnel System (NSIPS)																				
8.1) Ashore Equipment [6]	A		-	-	-	-	-	0.573	-	-	0.536	-	-	2.755	-	-	-	-	-	2.755
Subtotal: 8) Navy Standard Integrated Personnel System (NSIPS)			**-**	**-**	***0.000***	**-**	**-**	***0.573***	**-**	**-**	***0.536***	**-**	**-**	***2.755***	**-**	**-**	**-**	**-**	**-**	***2.755***
9) Electronic Procurement System (ePS)																				
9.1) Electronic Procurement System (ePS)	A		-	-	-	-	-	-	-	-	3.875	-	-	3.658	-	-	-	-	-	3.658
Subtotal: 9) Electronic Procurement System (ePS)			**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	***3.875***	**-**	**-**	***3.658***	**-**	**-**	**-**	**-**	**-**	***3.658***

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 07 / 2	**P-1 Line Item Number / Title:** 8106 / Command Support Equipment	**Aggregated Items Title:** Command Support Equipment

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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)
10) Maritime Operations Center (MOC) Procurement (7)																				
10.1) Baseline Equipment - Ashore (8)	A		475.804	51	24.266	174.429	7	1.221	213.429	7	1.494	230.285	7	1.612	-	-	-	230.285	7	1.612
10.2) Baseline Equipment - Afloat (9)	A		291.250	4	1.165	172.500	2	0.345	211.000	2	0.422	227.150	2	0.454	-	-	-	227.150	2	0.454
Subtotal: 10) Maritime Operations Center (MOC) Procurement			**-**	**-**	***25.431***	**-**	**-**	***1.566***	**-**	**-**	***1.916***	**-**	**-**	***2.066***	**-**	**-**	**-**	**-**	**-**	***2.066***
11) Maritime Operations Center (MOC) Production Support																				
11.1) Production Support - Ashore	A		-	-	0.721	-	-	0.069	-	-	0.084	-	-	0.091	-	-	-	-	-	0.091
11.2) Production Support - Afloat	A		-	-	0.070	-	-	0.023	-	-	0.028	-	-	0.030	-	-	-	-	-	0.030
Subtotal: 11) Maritime Operations Center (MOC) Production Support			**-**	**-**	***0.791***	**-**	**-**	***0.092***	**-**	**-**	***0.112***	**-**	**-**	***0.121***	**-**	**-**	**-**	**-**	**-**	***0.121***
12) Maritime Operations Center (MOC) Ashore Installations																				
12.1) Installations - Ashore	A		-	-	14.921	-	-	0.583	-	-	0.761	-	-	0.818	-	-	-	-	-	0.818
Subtotal: 12) Maritime Operations Center (MOC) Ashore Installations			**-**	**-**	***14.921***	**-**	**-**	***0.583***	**-**	**-**	***0.761***	**-**	**-**	***0.818***	**-**	**-**	**-**	**-**	**-**	***0.818***
13) Maritime Operations Center (MOC) Afloat Installations																				
13.1) Installations - Afloat	A		-	-	0.702	-	-	0.164	-	-	0.215	-	-	0.231	-	-	-	-	-	0.231
Subtotal: 13) Maritime Operations Center (MOC) Afloat Installations			**-**	**-**	***0.702***	**-**	**-**	***0.164***	**-**	**-**	***0.215***	**-**	**-**	***0.231***	**-**	**-**	**-**	**-**	**-**	***0.231***
14) CNIC (10)																				
14.1) SG Software Procure & Install (11)	A		-	-	-	1,406.000	1	1.406	1,707.500	2	3.415	1,718.000	2	3.436	-	-	-	1,718.000	2	3.436
14.2) Common Operating Picture & Data Configuration (12)	A		-	-	-	459.000	1	0.459	808.500	2	1.617	766.000	2	1.532	-	-	-	766.000	2	1.532
14.3) Hardware - Middleware panels for Data Normalization (13)	A		-	-	-	160.000	1	0.160	218.000	2	0.436	165.000	2	0.330	-	-	-	165.000	2	0.330
14.4) Aggragate & Configure Bldg & Utility data to Cyber Secured Network (14)	A		-	-	-	2,446.000	1	2.446	4,308.500	2	8.617	4,082.000	2	8.164	-	-	-	4,082.000	2	8.164
14.5) Install Advanced Analytics for Meter Consumptioin Data (15)	A		-	-	-	390.000	1	0.390	157.550	2	0.315	149.000	2	0.298	-	-	-	149.000	2	0.298

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 07 / 2	P-1 Line Item Number / Title: 8106 / Command Support Equipment	Aggregated Items Title: Command Support Equipment

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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: 14) CNIC			**-**	**-**	***0.000***	**-**	**-**	***4.861***	**-**	**-**	***14.400***	**-**	**-**	***13.760***	**-**	**-**	**-**	**-**	**-**	***13.760***
15) United States Fleet Forces Command																				
15.1) New Joint Regional Security Stack (JRSS) [16]	A		-	-	-	-	-	-	4,971.000	1	4.971	-	-	-	-	-	-	-	-	-
15.3) BCO Infrastructure Replacement (Cable & Equipment) [17]	A		439.500	8	3.516	-	-	-	284.000	4	1.136	412.250	4	1.649	-	-	-	412.250	4	1.649
15.4) Electrical Power Systems	A		467.667	3	1.403	-	-	-	1,374.000	1	1.374	1,411.000	1	1.411	-	-	-	1,411.000	1	1.411
15.5) INFOCON 3 - Security Compliance	A		671.667	3	2.015	-	-	-	1,042.000	1	1.042	702.750	4	2.811	-	-	-	702.750	4	2.811
15.6) Defense Red Switch Network Replacement	A		1,419.750	4	5.679	460.000	1	0.460	1,415.000	1	1.415	1,333.000	1	1.333	-	-	-	1,333.000	1	1.333
15.7) Deployable Mission Support Systems (DMSS)	A		-	-	-	-	-	-	-	-	-	1,014.286	14	14.200	-	-	-	1,014.286	14	14.200
Subtotal: 15) United States Fleet Forces Command			**-**	**-**	***12.613***	**-**	**-**	***0.460***	**-**	**-**	***9.938***	**-**	**-**	***21.404***	**-**	**-**	**-**	**-**	**-**	***21.404***
16) United States Pacific Fleet																				
16.1) Canopy Shelters	A		2,600.000	2	5.200	3,121.000	1	3.121	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 16) United States Pacific Fleet			**-**	**-**	***5.200***	**-**	**-**	***3.121***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
17) Briefing Displaying System (BDS) Upgrade - NAVCENT																				
17.1) Briefing Display System Upgrade [18]	A		-	-	-	-	-	-	8,662.000	1	8.662	-	-	-	-	-	-	-	-	-
Subtotal: 17) Briefing Displaying System (BDS) Upgrade - NAVCENT			**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	***8.662***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
18) Undersea Warfare Decision Support System - CNE																				
18.1) Hardware and Software	A		-	-	-	-	-	-	1,500.000	1	1.500	-	-	-	-	-	-	-	-	-
18.2) Production Engineering Support	A		-	-	-	-	-	-	400.000	1	0.400	-	-	-	-	-	-	-	-	-
18.3) Maritime Operations Center (MOC) Server Room	A		-	-	-	-	-	-	-	-	-	-	-	0.000	13,530.000	1	13.530	13,530.000	1	13.530
Subtotal: 18) Undersea Warfare Decision Support System - CNE			**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	***1.900***	**-**	**-**	***0.000***	**-**	**-**	***13.530***	**-**	**-**	***13.530***
19) Navy Enterprise Tactical Command and Control (NETC2)																				
19.1) Briefing Display System (BDS) Delta	A		-	-	-	-	-	-	-	-	-	-	-	0.000	3,120.000	1	3.120	3,120.000	1	3.120

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 07 / 2	**P-1 Line Item Number / Title:** 8106 / Command Support Equipment	**Aggregated Items Title:** Command Support Equipment

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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)
19.2) Navy Enterprise Tactical Command and Control (NETC2)	A		-	-	-	-	-	-	-	-	-	-	-	0.000	2,500.000	2	5.000	2,500.000	2	5.000
Subtotal: 19) Navy Enterprise Tactical Command and Control (NETC2)			**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	***0.000***	**-**	**-**	***8.120***	**-**	**-**	***8.120***
20) Navy Human Resource Operations Center (HROC) My Navy Portal [19]																				
20.1) Software individual workstations	A		-	-	-	-	-	-	1.000	1,000	1.000	-	-	-	-	-	-	-	-	-
20.2) Hardware (computer, telephones, networking, cables, and monitors	A		-	-	-	-	-	-	1.500	1,000	1.500	-	-	-	-	-	-	-	-	-
20.3) Software Enterprise Licenses	A		-	-	-	-	-	-	2.000	1,000	2.000	-	-	-	-	-	-	-	-	-
20.4) PeopleSoft Modules for the Enterprise license	A		-	-	-	-	-	-	3.000	1,000	3.000	-	-	-	-	-	-	-	-	-
Subtotal: 20) Navy Human Resource Operations Center (HROC) My Navy Portal			**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	***7.500***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Total			**-**	**-**	**90.980**	**-**	**-**	**29.745**	**-**	**-**	**55.242**	**-**	**-**	**59.076**	**-**	**-**	**21.650**	**-**	**-**	**80.726**

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

Footnotes:

(1) Increase in funding supports components of NCIS' NJIS Scanning, Tactical Network and VTC infrastructure initiatives. As the DON begins the roll-out of NJIS, NCIS has a requirement to deploy a variety of high speed scanning capabilities across the enterprise to capture investigative data. NCIS is under development to host critical investigative and operational capabilities which will provide a secure and private environment that allows the investigative technical components of the organization to conduct their mission more efficiently. A number of investigative tools and techniques will leverage this tactical network to include Investigative Cyber Security; Technical Services; Cyber, Technical Surveillance Counter Measures (TSCM), Tech Services, Bio-Metrics, etc. Currently, these capabilities are scattered across separate networks and are not integrated or available to the agency as a whole. Furthermore, NCIS' conference rooms and Leadership Desktop Units are reaching end-of-life and replacement of these systems will give NCIS the capabilities to securely communicate about ongoing investigative and operational sensitive cases to support mission requirements.

(2) Funding decrease FY17 to FY 18 is due to cost savings as a result of executing major hardware technical refresh in FY16 and FY17 which resulted in elimination of costly/older technology, substantial reduction in the number of servers/ footprint within OCHR's infrastructure, and given the new state of the art technology lower costs in the future for technical refresh.

(3) Increase will be used for the STARS to SABRS (S2S) transition hardware and software (HW/SW) required for supporting DON SABRS/SMARTS. This funding begins to address the many HW/SW requirements to transition the 11 BSOs migrating over to SABRS.

(4) The funding profile for peripheral items will vary each year based on what IT and supporting infrastructure items require refresh.

(5) FY18 significantly increased funding to procure critical system hardware. This adjustment supports the refresh of very large enterprise-class servers and large enterprise Storage Area Networks, as well as commodity servers and low-end storage.

(6) Increase in OPN in FY18 is to procure licenses to improve productivity and reduce future development and sustainment cost of added back office functionality. Licenses include Oracle Audit Vault, Oracle Data Integrator, Query Surge - Analytical Automation Testing, Golden Benthic, Quest Toad, Oracle Database Vault, Advanced compression, Label Security, Oracle Identity and Access Management Suite (Identity Provisioning, CAC / SSO), Oracle Privileged Account Manager, Oracle Data Masking, Windows Server Licenses, F5 security modules. These licenses are needed to improve system security, improve auditability, reduce the amount of PeopleCode required for development and sustainment of additional functionality, support the expanded usage from the system consolidations, and improve overall performance of the system.

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 07 / 2	**P-1 Line Item Number / Title:** 8106 / Command Support Equipment	**Aggregated Items Title:** Command Support Equipment

(7) The Maritime Operations Center (MOC) delivers global maritime capabilities at the Operational level of War throughout the full range of military operations. The goal end state is to achieve globally-networked operational level Numbered Fleet and Navy Component Commander, Joint Force Maritime Component Commander and Staff and Joint Task Force capable commands, based on Joint Capability Areas and Joint Mission-Essential Tasks through focused acquisition of standard and common suites of systems from the existing base of Navy, Army, Air Force and joint Programs of Record (POR) and non-PORs.

(8) Quantity listed for Maritime Operations Command (MOC) Ashore represents shore sites. In any given year, MOC procures different equipment sets for the current build, as well as upgrades for prior builds/spirals, causing the unit cost per site to vary between fiscal years.

(9) Quantity listed for MOC Afloat represents the only two ships that the MOC is on: the USS Mt. Whitney and the USS Blue Ridge. In any given year, MOC procures different equipment sets for the current build, as well as upgrades for prior builds/spirals, causing the unit cost per site to vary between fiscal years.

(10) Quantities are based on regions. Regions are prioritized as follows: (1) Fleet concentration areas and mission assurance (cyber security) - MIDLANT (FY16 1st article test), Hawaii, South West, Marianas, South East (2) OCONUS - EURAFSWA, Far East (3) Upgrade (backfit) existing Smart Grids - NDW, Northwest

(11) SG Software Procure & Install: Analytics and control software licenses, installation, testing, and functional configuration.

(12) Common Operating Picture & Data Configuration: Develop and test Navy configuration, COP for Building/Utility Control Systems, and configuration of AMI data for included buildings

(13) Hardware - Middleware panels for Data Normalization: Hardware procurement for panels supporting data normalization and cybersecurity

(14) Aggregate & Configure Bldg & Utility Data to Cyber Secured Network: Securing and connection of Building/Utility Control Systems to monitoring, control, and analytics

(15) Install Advanced Analytics for Meter Consumption Data: Import and configure advanced meter data for included buildings for advanced analytics

(16) JRSS Funds to support uninterruptible power supply (UPS) systems and heating, ventilation and air conditioning (HVAC)at NCTS Guam Bldg 112 and NCTAMS PAC 409.

(17) Increase in FY18 due to new/upgraded Base Communication Office (BCO) Outside cable plant infrastructure upgrades required to comply with Unified Capabilities (UC) specifications IAW DoDI 8100.04. Unit cost fluctuations are a result of the varying system configuration requirements of particular sites, architecture, and varying number of locations or sites per region.

(18) The BDS is a battle space awareness platform that supports overseas operations and contingencies through a common operating picture for all Naval Forces (CONUS and OCONUS) and is consistent with the purpose and use of OCO funds.

(19) My Navy Portal (MNP) is a program to build an integrated portal that consolidates the Navy's Human Resource (HR) portals, knowledge, and applications to simplify the user experience. MNP is a key business initiative of Personnel Service Delivery Transformation, the overarching Navy effort to facilitate Sailor human resource interactions via automation. To that end, MNP will provide a single electronic point of entry for Sailors to manage and view their personnel and career information within a self-service environment. Sailors will experience a common look and feel in using various manpower, personnel, training, and education (MPTE) applications. The primary users of MNP are active component (AC) and reserve component (RC) Sailors. In addition to increasing self-service, MNP will reduce service delivery costs and improve HR data accuracy and availability.

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 07: Personnel & Command Support Equip / BSA 2: Command Support Equipment	**P-1 Line Item Number / Title:** 8108 / Education Support Equipment

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A		

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	3.122	3.180	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	6.302
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	3.122	3.180	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	6.302
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**3.122**	**3.180**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**-**	**6.302**
(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:

Beginning in FY17, funding was consolidated under LI 8101 Training and Education Equipment.

The U. S. Naval Academy's mission is to ensure the best educated and most qualified junior officers enter the naval service. The Academy must maintain the highest standards in academic disciplines and supporting infrastructure. Planned upgrades and replacements are vital in ensuring graduates are technologically prepared to serve in tomorrow's Fleet and Fleet Marine Force while supporting institutional accreditation and competitiveness with peer institutions.

A. Universal Wireless Telecommunications System - DAS Cellular ($1,585K FY 2016):
FY 2013 provides upgrades of existing telecommunications system to enhance cellular coverage within the historic Bancroft Hall dormitory for midshipmen quality of life and personal safety benefits. Existing mobile communications coverage within this 1.4 million square foot historic facility is inadequate to accommodate evolving midshipmen, staff and faculty needs. The envisioned provider-neutral solution will include a distributed antenna system (DAS) enabling robust signal coverage for the benefit of all occupants. FY 2016 follow-on extends cellular coverage to academic buildings for enhancement of classroom and laboratory instruction as existing mobile communications coverage within these facilities is inadequate to accommodate evolving science, technology, engineering and math (STEM) and cyber computing needs of midshipmen, faculty and staff.

B. LAN Room Entry Control and Video Surveillance ($474K in FY 2015):
Provides current technology capability for management and protection of the Academy's numerous distributed local area network equipment spaces. The system will provide integrated card reader systems for controlled access and cameras for real-time and recorded playback of critical infrastructure locations to ensure a safe and secure enterprise computing environment.

C. Primary Storage System Replacement ($400K in FY 2015):
Provides for IT hardware and software in support of the data storage simplification and redundancy for mission's execution and continuity. The proposed replacement system will facilitate on-site back-up and recovery activities in maximizing enterprise system user availability.

D. Bridge Simulator Upgrade ($491K in FY 2016):
Provides life-cycle upgrades to extend the useful life of two existing full-mission bridge simulator devices used for watchstanding training and qualification of midshipmen. It is also used for demonstrations of ship handling and navigation learning points not otherwise possible to convey through existing underway laboratories (i.e. Yard Patrol Craft).

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 07: Personnel & Command Support Equip / BSA 2: Command Support Equipment	**P-1 Line Item Number / Title:** 8108 / Education Support Equipment	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

E. Virtual Desktop Infrastructure ($315K in FY 2016):
Provides lifecycle replacement of outdated electronic classroom workstations and operating systems by standardizing content delivery through central hosting to reduce operating costs and information assurance risks.

F. NMR Spectrometer Replacement ($442K in FY 2016):
Replaces an existing Nuclear Magnetic Resonance (NMR) data acquisition device acquired in FY 2004. The device permits spectral analysis of a wide variety of chemical compounds in support of curriculum requirements. The American Chemical Society guidelines specifically list an operational NMR spectrometer as a requirement for accreditation.

G. Library Circulation System Replacement ($347K in FY 2016):
Provides upgrades to the existing library circulation, inventory and security system. Provides more efficient use of staff time by permitting simultaneous processing of materials and automatically updating system records without need for repeat data entry errors. Replaces existing, obsolete, manual barcode system with industry-standard, distributed solution typically found in facilities of this type.

[P40A / A. Universal Wireless Telecommunications System]: Provides upgrades of existing telecommunications system to enhance cellular and Wi-Fi coverage within the historic Bancroft Hall dormitory for midshipmen quality of life and personal safety benefits. Existing mobile communications coverage within this 1.4 million square foot historic facility is inadequate to accommodate evolving midshipmen, staff and faculty needs. The envisioned provider-neutral solution will include a distributed antenna enabling robust signal coverage for the benefit of all occupants. FY 2013 follow-on extends cellular and Wi-FI coverage to academic buildings for enhancement of classroom and laboratory instruction as existing mobile communications coverage within these facilities is inadequate to accommodate evolving science, technology, engineering and math (STEM) and cyber computing needs of midshipmen, faculty and staff.

[P40A / B. Primary Storage System Replacement]: Provides for IT hardware and software in support of the data storage simplification and redundancy for mission's execution and continuity. The proposed replacement system will facilitate on-site back-up and recovery activities in maximizing enterprise system user availability. Future periodic replacement will be required to maintain technological currency and meet increased storage demand.

[P40A / D. LAN Room Video Surveillance]: Provides for management and protection of the Academy's numerous distributed local area network equipment spaces. The system will provide cameras for real-time and recorded playback of critical infrastructure locations to ensure a safe and secure enterprise computing environment.

[P40A / H. NMR Spectrometer Replacement]: Replaces an existing Nuclear Magnetic Resonance (NMR) data acquisition device acquired in FY 2004. The device permits spectral analysis of a wide variety of chemical compounds in support of curriculum requirements. The American Chemical Society guidelines specifically list an operational NMR spectrometer as a requirement for accreditation.

[P40A / I. Library Circulation System Replacement]: Provides upgrades to the existing library circulation, inventory and security system. Provides more efficient use of staff time by permitting simultaneous processing of materials and automatically update system records without need for repeat data entry errors. Replaces existing, obsolete, manual barcode system with industry-standard, distributed solution typically found in facilities of this type.

[P40A / J. Virtual Desktop Infrastructure]: Provides lifecycle replacement of outdated electronic classroom workstations and operating systems by standardizing content delivery through central hosting to reduce operating costs and information assurance risks.

[P40A / N. Bridge Simulator Upgrade]: Provides life-cycle upgrades to extend the useful life of two existing full-mission bridge simulator devices used for watchstanding training and qualification of midshipmen. It is also used for demonstrations of ship handling and navigation learning points not otherwise possible to convey through existing underway laboratories (i.e. Yard Patrol Craft).

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 07: Personnel & Command Support Equip / BSA 2: Command Support Equipment	**P-1 Line Item Number / Title:** 8109 / Medical Support Equipment

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A		

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	8.148	32.790	9.128	4.383	0.000	4.383	4.562	5.228	4.727	4.818	17.603	91.387
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	8.148	32.790	9.128	4.383	0.000	4.383	4.562	5.228	4.727	4.818	17.603	91.387
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**8.148**	**32.790**	**9.128**	**4.383**	**0.000**	**4.383**	**4.562**	**5.228**	**4.727**	**4.818**	**17.603**	**91.387**
(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:

This line item provides funding for the Medical Support Equipment (MSE) and the Fleet Hospital/Expeditionary Medical Facility (EMF) Programs.

The Medical Support Equipment (MSE) program funds new medical capability and new technology on naval operating ships. Medical Support Equipment configuration management, spares, technical manuals and installations are also funded through this line item. Requirements are determined through Commander, U.S. Fleet Forces Command and Commander, U.S. Pacific Fleet, and procurement is managed by Naval Medical Logistics Command (NAVMEDLOGCOM). Funding is used to procure modifications or additions to the ships' allowance items that are identified within the Authorized Medical Allowance List (AMAL) and Authorized Dental Allowance List (ADAL). AMALs and ADALs are unique to specific classes or types of ship or Commands to fulfill its intended health care mission. AMAL and ADAL allowances are approved by the respective Fleet Type Commander (TYCOM) Force Surgeon with concurrence by the Commander, Fleet Forces Command Surgeon. The initiation of a change to the current depth (allowance amount) of material or addition of a new allowance for an item(s) within an AMAL or ADAL results from either a change in the scope of care a specific ship must provide in accordance with its Required Operational Capability (ROC) and Projected Operational Environment (POE) and/or a change in the standard of medical care the assigned personnel are expected to provide. Changes to AMAL and ADAL requirements are determined through Individual Allowance Change Requests, as a result of reviews chaired by TYCOM Fleet Surgeons.

The Fleet Hospital/Expeditionary Medical Facility (EMF) program funds critical medical equipment to support and provide theater hospitalization capabilities (commonly referred to as Role III Care) as defined in Joint Publication 4-02 Health Services Support and the EMF ROC and POE. This funding is used to procure investment equipment that supports the standard of care for Casualty Management as determined by the DoD Combat Trauma Surgery Committee.

This line item also includes funding for the Hospital Ships (USNS Comfort (Fleet Forces Command) and USNS MERCY (PACFLT)) major systems replacement. The program is part of the standardization and life cycle management of the MERCY Class Hospital ships sustainability plan.

Funds in this line item will be used to procure medical equipment from the AMAL/ADAL, and for major systems replacement, including:

Direct Radiology System, and CAD CAM Milling Machine (Computer Aided Design and Computer Aided Manufacturing).

Computed Axial Tomography (CAT) Scan system; funding will cover one (1) unit per prepositioned Expeditionary Medical Facility.

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 07: Personnel & Command Support Equip / BSA 2: Command Support Equipment	P-1 Line Item Number / Title: 8109 / Medical Support Equipment	
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A		

Digital X-Ray Shelters; funding will cover one (1) Digital X-Ray Shelter per prepositioned Expeditionary Medical Facility to provide higher resolution diagnostic images, which provide digital storage capability, and alleviates the need for chemical processors.

[P40A / Computerized Axial Tomography Scan Replacement]: Funding provided for the procurement and installation of a Computerized Axial Tomography (CAT) Scan for the USNS COMFORT. The CAT scan is an x-ray procedure that combines many x-ray images with the aid of a computer to generate cross-sectional views and, if needed, three-dimensional images of the internal organs and structures of the body. It is used to define normal and abnormal structures in the body and/or assist in procedures by helping to accurately guide the placement of instruments or treatments. This equipment is required in support of the hospital ship mission and to provide a similar standard of care on the hospital ships to what a patient would receive in other Navy Military Facilities (fixed or expeditionary).

[P40A / Rad Fluoro Replace w/Wireless Digital Imaging Option]: Procure and install Radiographic Fluoroscopy Replacement System with wireless digital radiology imaging option for USNS COMFORT. The system provides digital storage capability of images and alleviates the need for chemical processors. R/F systems are used for diagnostic radiographic and fluoroscopic examinations. Most allow spot filming of an image to produce an x-ray film for later detailed study including those that use contrast media such as gastrointestinal or cardio studies.

[P40A / Oxygen Nitrogen (O2N2) Automated Control System]: Automation upgrade to modernize and make the existing O2N2 plant safer & simpler for the end user to operate while increasing overall reliability. The existing O2N2 producer is outfitted with a legacy control system that makes it difficult for the end user to timely produce liquid oxygen at required purity and volume. The automation will control plant parameters in a more precise manner allowing the plant to produce more high purity liquid oxygen per unit time. It will provide the end user with trending data of all plant parameters that will greatly assist with troubleshooting and diagnostics and will be in compliance with ISO 9001 standards. By allowing the plant to operate more efficiently, less time is needed to achieve purity reducing production run times which results in realized fuel and maintenance savings. This equipment is required in support of the hospital ship mission and to provide a similar standard of care on the hospital ships to what a patient would receive in other Navy Military Facilities (fixed or expeditionary).

[P40A / Anesthesia Units]: Anesthesia Units: Funding will provide anesthesia units aboard the USNS MERCY, which dispense a mixture of gases and vapor and vary the proportions to control a patient's level of consciousness and/or analgesia during surgical procedures.

[P40A / Computerized Axial Tomography (CAT) Scan Replacement]: Computerized Axial Tomography(CAT) Scan Replacement (MLC): Funding provided for the procurement and installation of a Computerized Axial Tomography (CAT) Scan for the USNS MERCY. The CAT scan is an x-ray procedure that combines many x-ray images with the aid of a computer to generate cross-sectional views and, if needed, three-dimensional images of the internal organs and structures of the body.

[P40A / Infusion Pump, Multi-therapy]: Infusion Pump, Multi-therapy Infusion: Funding provides Multi-therapy Infusion pumps for the USNS MERCY, and are used to deliver agents from syringes or collapsible bags and are small enough to be worn or carried by patients. They are used on patients that require repeated or continuous infusions.

[P40A / Radiographic Fluoroscopy w/Wireless Digital Imaging Option]: Radiographic Fluroscopy Replacement with Wireless Digital Imaging Option (MLC): Procure and install Radiographic Fluoroscopy Replacement System with wireless digital radiology imaging option for USNS MERCY. The system is used for diagnostic radiographic and fluoroscopic examinations, and provides digital storage capability of images and alleviates the need for chemical processors.

[P40A / Simulator, Environmental Detector/Monitor]: Procure Simulator, environmental detector/monitor(with Operators Training). Patient simulator is used as an advanced training unit that can display neurological symptoms as well as physiological. It provides realistic patient simulation training to Doctors, Nurses, and Hospital Corpsmen onboard the USNS MERCY during patient casualty drills.

[P40A / Detector/X-Ray Digital Radiography]: Procure and install Detector that is compatible with current Mobile Radiology units onboard the USNS MERCY. Wireless x-ray detectors replaced the radiographic cassettes. It's a digital pad that receives radiographic rays from the X-Ray unit that produces the image for radiological diagnostics.

[P40A / Electrosurgical Unit, Monopolar/Bipolar]: Procure Electrosurgical unit(with Test equipment, Operators Training, and repair and maintenance training). ESU's is a full-featured electrosurgical system that provides electrosurgical cutting and coagulation, bipolar functionality, and vessel sealing during surgical procedures.

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 07: Personnel & Command Support Equip / BSA 2: Command Support Equipment	**P-1 Line Item Number / Title:** 8109 / Medical Support Equipment	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

[P40A / Radiographic System, Digital]: Procure and install Radiographic Replacement System with wireless digital radiology imaging option for USNS MERCY. The system is used for diagnostic radiographic examinations, and provides digital storage capability of images.

[P40A / O2N2 Plant]: Automation upgrade to modernize and make the existing O2N2 plant safer & simpler for the end user to operate while increasing overall reliability. The existing O2N2 producer is outfitted with a legacy control system that makes it difficult for the end user to timely produce liquid oxygen at required purity and volume. The automation will control plant parameters in a more precise manner allowing the plant to produce more high purity liquid oxygen per unit time. It will provide the end user with trending data of all plant parameters that will greatly assist with troubleshooting and diagnostics and will be in compliance with ISO 9001 standards. By allowing the plant to operate more efficiently, less time is needed to achieve purity reducing production run times which results in realized fuel and maintenance savings. This equipment is required in support of the hospital ship mission and to provide a similar standard of care on the hospital ships to what a patient would receive in other Navy Military Facilities (fixed or expeditionary).

Justification:
Funding required to support the healthcare readiness needs of Navy's operating forces.

The Medical Support Equipment (MSE) program funds new medical capability and new technology on naval operating ships. Medical Support Equipment configuration management, spares, technical manuals and installations are also funded through this line item.

PB18 specifically requests:

3 Direct Digital Radiology Systems and installation: The Direct Digital Radiology system is required to keep pace with the advanced nature of diagnostic imaging. It is a form of X-Ray imaging, in which digital X-ray sensors are used instead of traditional photographic film. This provides shipboard medical personnel the capability to digitally process, and store images thereby reducing film development time, maintenance, and storage costs. This also provides seamless integration of digital imaging with other systems used in Telemedicine, creating a more efficient process that bypasses chemical processing and provides the ability to digitally transfer and enhance images. Using an existing DLA-TS IDIQ Contract, NMLC will procure equipment from AGFA Health Care. The installation and related procurement plan for Direct Digital Radiology units reflects ship availability for installation periods (per data from the Navy Data Environment database). Equipment is procured in the year preceding installation. Units will be procured as follows: 3 in FY16; 3 in FY17; 3 in FY18; and 3 per year for FY19-22. Prior year activity reflects procurement of 7 units in FY13, 14 units in FY14, and 4 units in FY15; and installation of 7 units in FY13, 1 in FY14, and 3 in FY15.

1 Computerized Axial Tomography (CAT) Scan Replacement. The Computed Axial Tomography (CAT) Scan system is primarily used for medical imaging that supports or helps establish the diagnosis of a certain type of disease after more primitive diagnostic exams have been performed, like the X-ray and standard ultrasound. The CAT scan provides a critical diagnostic tool in the field of Expeditionary Medicine in that it can help in the emergent diagnosis of brain injuries, bleeding within body cavities, and bone malformations. Funding will cover one (1) unit per prepositioned Expeditionary Medical Facility.

1 Rad Fluoro Replace w/ Wireless Digital Imaging Option: Funds procure and install Radiographic Fluoroscopy Replacement System with wireless digital radiology imaging option for USNS COMFORT. The system provides digital storage capability of images and alleviates the need for chemical processors. R/F systems are used for diagnostic radiographic and fluoroscopic examinations. Most allow spot filming of an image to produce an x-ray film for later detailed study including those that use contrast media such as gastrointestinal or cardio studies.

1 Infusion Pump, Multi-therapy Infusion: Funding provides Multi-therapy Infusion pumps for the USNS MERCY, and are used to deliver agents from syringes or collapsible bags and are small enough to be worn or carried by patients. They are used on patients that require repeated or continuous infusions.

FY 2017 decrease in Medical Support Equipment OPN by $0.174M as required for the Department of the Navy to comply with the Bipartisan Budget Act of 2015.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 07: Personnel & Command Support Equip / BSA 2: Command Support Equipment	**P-1 Line Item Number / Title:** 8114 / Naval MIP Support Equipment
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** 0305192N / **Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A	

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	7.906	4.608	1.925	2.030	0.000	2.030	2.051	2.580	2.123	2.165	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	7.906	4.608	1.925	2.030	0.000	2.030	2.051	2.580	2.123	2.165	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**7.906**	**4.608**	**1.925**	**2.030**	**0.000**	**2.030**	**2.051**	**2.580**	**2.123**	**2.165**	**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:

DRP:
This effort is to procure, install and configure critical Maritime Intelligence applications to include servers and remaining storage systems at the Eastern Disaster Recovery Center (DRC).

Fleet SCI IT:
This effort is to deliver and sustain SCI network access and information technology tools to the Naval Intelligence Community ashore. This includes desktop hardware, software, and peripherals, network equipment, server hardware and software, video teleconferencing devices, secure voice over IP telephones.

Navy SCI IA:
The Navy SCI IA Worldwide program is focused on issuance of Authorities to Operate (ATO's) for all Navy systems that process, store, and/or transmit Sensitive Compartmented Information (SCI), to include tactical capabilities. Utilizes the Intelligence Community Directive 503 (ICD 503) Risk Management Framework (RMF) to ensure Federal Information Security Management Act (FISMA) compliance.

[P40A / SCI IA]: Funding enables Navy tactical SCI program capabilities needed for the establishment of an initial capability and fully operational capability to meet full compliance with ICD 502 and provide active cyber defense and incident response of the information environment for the IC and establishes the framework for risk management and authorization (RMF) across all systems that process, store and/or transmit SCI

Justification:
Decrease to FY17 - Navy SCI IA funding reprogrammed to OMN in order to provide materials necessary for Information Assurance Certification of SCI-level classified networks afloat.

The FY 2017 request was reduced by -$0.082 million as required for the Department of the Navy to comply with the Bipartisan Budget Act of 2015.

The FY 2018 funding enables continued network equipment and storage upgrades for the Naval Intelligence community.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 07: Personnel & Command Support Equip / BSA 2: Command Support Equipment	**P-1 Line Item Number / Title:** 8118 / Operating Forces Supt Equip
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A — **Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A	

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	14.209	6.607	21.033	7.500	15.800	23.300	10.072	10.014	8.787	5.598	-	99.620
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	14.209	6.607	21.033	7.500	15.800	23.300	10.072	10.014	8.787	5.598	-	99.620
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**14.209**	**6.607**	**21.033**	**7.500**	**15.800**	**23.300**	**10.072**	**10.014**	**8.787**	**5.598**	**-**	**99.620**
(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 Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

This budget line item funds procurement of various items of equipment to support the operating forces at Naval Stations and related facilities, including, but not limited to the following:

Mobile Aircraft Fire Training Devices: Procurement of a trailer mounted fully-contained device that allows firefighters to conduct live fire fighting techniques to meet Naval Air Systems Command (NAVAIR) requirements. The device has interior and exterior fire scenario props to fully prepare the firefighters for aircraft firefighting and rescue missions. Combination Interior and Structure Training Device: Procurement of combination confined space, SCBA, Shipboard Sub, and structural fire fighter mobile trainer focused on interior aircraft and structure fire training evolutions to meet NAVAIR, DoN, and National Fire Protection Association (NFPA) requirements. The unit is used for live fire training and practical rescue exercises.

Mobile Aircraft Training Devices are necessary for the Navy's firefighters to meet minimum firefighting requirements and qualifications. Baseline budget replaces dilapidated equipment and procures new systems to ensure that the Navy's firefighters are able to keep up to date on technology and techniques of interior and/or exterior firefighting. Strategic placement of these devices will also minimize travel training costs and maximize our members training opportunities.

Cranes and/or Boat Hoists: Procurement of cranes/hoist of various types and sizes (Davit/Bridge/Portal/Gantry/Mobile Harbor). All are weight handling systems designed/selected to meet the specific requirements of the intended facility.

Fender/Bumper/Separator Systems: Procurement includes various size and shaped energy absorbing cushions placed between a pier and a ship/submarine or between two ships/submarines. Multiple fenders may be used with different size and types of ships. Various types of filling of air or other material may be procured. Standard type is hydro-pneumatic rubber fender made IAW ISO 17357. May be used for both submarine and surface ships.

Composite CVN Camels: Procurement of large floating metal or composite structures designed to maintain the proper distance for CV/CVNs to keep the ships from being damaged or damaging the pier structure. When USN Carriers are placed alongside a pier the hull design dictates the need to use standoff equipment. The camels requested provide the necessary standoff. These composite camels offer considerable reduction in maintenance due to constructed material. As currently utilized ship support equipment ages it becomes necessary to replace that equipment. Equipment procurement budgets are not adequate to keep up with the demand for ship support equipment. As more ships are placed into service the requirement exceeds currently available support equipment.

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 07: Personnel & Command Support Equip / BSA 2: Command Support Equipment	**P-1 Line Item Number / Title:** 8118 / Operating Forces Supt Equip	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

Submarine Deep Draft Camels: Procurement of very large floating metal structures designed to maintain the proper distance for submarines to keep them from being damaged by the pier. These may be for specific submarine classes (e.g. Fast Attack), or universal (i.e. for all submarine classes).

Universal Submarine Composite Camels: Procurement of universal pierside, composite camels used to breast submarines from piers/wharves. They are fabricated of universal composite material with a modular design. Size is approximately 36 ft W x 18 ft H x 17.6 ft D. Made per a standard NAVFAC drawing. Suitable for all classes of submarines.

Utility and Maintenance/Paint Floats and Barges: Procurement of floating assets that are used by Port Operations and Ship's Force personnel to facilitate external ship work (blasting, painting, other maintenance). They can also be used as separators or camels. These can be towed into place, or may even be self-propelled. They may have permanent or movable work platforms installed as needed to assist in reaching work sites. Some may have self-ballasting mechanisms to help maintain stability. They come in various sizes.

Composite Sub camels - as constructed the composite Submarine camels significantly reduce the amount of maintenance required to keep the units serviceable. Older models, reaching the end of serviceability are made of steel and in some cases wood. To overhaul these units requires considerable manpower. The older units do not provide the same level of hull protection the composite units provide. Equipment procurement budgets are not adequate to keep up with the demand for ship support equipment. As more ships are placed into service the requirement exceeds currently available support equipment.

[P40A / DDG Separators]: Large floating metal structures designed to maintain the proper distance for DDG's when nested outboard of another DDG. Also, provides protection from ship-to-ship damage due to vessel maneuvers or where vessel-to-pier contact may occur.

[P40A / Composite Submarine Camels]: CNIC'S phased replacement program for submarine camels has taken significant negative budget marks during the past fiscal years. These reductions have negatively affected CNIC ability to sustain a viable phased replacement program along with reducing funding new purchases. Continued budget reduction will erode CNIC's ability to protect the Navy's platforms (submarines and surface ships) at the waterfront.

[P40A / ESS & IDS NA-283]: Intrusion Detection System (IDS): IDS equipment includes the interior and exterior sensor, surveillance devices and associated communications subsystems that collectively detect intrusion at a specified site, facility, or perimeter.

[P40A / THALES MK-20A Instrument Landing Systems]: Procurement of NAVAIR supported Instrument Landing Systems to provide landing capability in adverse weather conditions

[P40A / CVN Camels]: 6E70 - CVN Camels: Procurement of very large floating composite structures, designed to maintain the proper standoff distance for CVNs to keep the ships from being damaged or damaging the pier structure. This budget request supports the Navy's CVN 21 Future Carrier ship coming online. Currently, there are no viable assets (CVN Camels) to support homeporting for the Navy' new CVN. The cost increase is associated with using composite material vice steel. These CVN camels are designed to last 25 years. The current inventory of steel CVN camel are past their service life and require an overhaul, without which they may only keep afloat for a couple of years.

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 07: Personnel & Command Support Equip / BSA 2: Command Support Equipment	**P-1 Line Item Number / Title:** 8118 / Operating Forces Supt Equip
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A — **Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A	

Exhibits Schedule					Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	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)*
P-40a	Operating Forces Supt Equip				- / 14.209	- / 6.608	- / 21.033	- / 7.499	- / 15.800	- / 23.299
P-40	**Total Gross/Weapon System Cost**				**- / 14.209**	**- / 6.607**	**- / 21.033**	**- / 7.500**	**- / 15.800**	**- / 23.300**

*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 sum exactly due to rounding.

Justification:
Baseline budget procures replacement fenders/bumpers/separator systems to replace current inventory that will be at the end of their service life in FY17. These will be used at locations with heightened traffic and current infrastructure that is incapable of supporting the expanded requirement, specifically Jacksonville, FL and Pearl Harbor, HI.

This budget request supports CVN Camels for the Navy's CVN 21 Future Carrier ship coming online. Currently, there are no viable assets (CVN Camels) to support homeporting for the Navy's new CVN. The cost increase is associated with using composite material vice steel. These CVN camels are designed to last 25 years. The current inventory of steel CVN camel are past their service life and require an overhaul, without which they may only keep afloat for a couple of years.

FY 2017 decrease in Operating Forces Supt Equip OPN by $0.201M as required for the Department of the Navy to comply with the Bipartisan Budget Act of 2015.

The FY 2018 budget request was reduced by $1.221M due to prior year underexecution.

The FY17 amended budget requested $16.256M of additional funds to support approved procurement of operating forces support equipment at Navy Installations worldwide. The equipment consists of ship and submarine separators
as well as different types of maintenance barges that are at the end of their service life. Investment in this area had been deferred due to sequestration and other fiscal constraints and equipment recapitalization is necessary.

Additional Equipment includes:

5 DDG Separators at Navy Regions SW, Hawaii, Japan, and Guam, required to maintain the proper distance of DDGs when nested outboard of another DDG
2 CVN Camels at Midlant and NW respectively, which are very large floating metal structures designed to maintain the proper distance of CV/CVNs
3 Deep Draft Sub Separators at Joint Base Pearl Harbor-Hickam (2) and Midlant (1), designed to maintain proper distance of Fast Attack or Universal Submarines
2 Paint Maintenance Barges at NW and GUAM
1 3-Tier Paint Float Barge at SE used to paint the sides of vessels when in port
1 4.5 meter Hydro Sub Separator at SW which is a hydro-pneumatic rubber fender used for both Subs and Surface Ships
2 4.5 meter Fender-Bumper-Separator Systems at Navy Region Europe, Africa, Southwest Asia (EURAFSWA) and Japan, used as energy absorbing cushions placed between the pier and vessels or between vessels of different size and shapes.
2 Portable Dock/Docking Systems at CNRJ that are moveable docking systems that can be used to berth small Navy boats e.g. harbor security boats, utility and work boats known as the Pontoon Section

OCO:
OCO/OPN for Isa Air Base F18 Live Fire Training Device ($0.700M):

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 07: Personnel & Command Support Equip / BSA 2: Command Support Equipment	P-1 Line Item Number / Title: 8118 / Operating Forces Supt Equip	
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A		

In the past, ISA Air Base's (AB) Fire and Emergency Services (F&ES) personnel were on a six-month rotation and would receive their required NAVAIR live fire training at home station, prior to arrival. This rotation period has changed to allow F&ES personnel to permanently stay in-place on ISA AB. Currently, workarounds are used to acquire required NAVAIR live fire training. ISA AB's Structural and Combination Helicopter/Car live fire trainers are acting as substitute training aids; with minimal realism and effectiveness.

To meet NAVAIR requirements, an on-site, F18 Jet Live Fire Trainer is needed for ISA AB F&ES personnel to: provide training fires and realistic, forcible entry into and rescue from burning aircraft to obtain and maintain the desired standards of proficiency; conduct a minimum of six, semi-annual live fire training evolutions; and obtain the desired realisms by ensuring aircraft mockup is constructed as close to scale and appearance of actual aircraft.

New training device will allow CNIC to meet OPNAVINST, NAVAIR, Department of Defense and National Fire Protection Association standards for Fire Service training requirements. The live fire training device will ensure proficiency of aircraft fire rescue personnel.

Patrol Craft SIGINT Capability:

Persistent Intelligence, Surveillance, and Reconnaissance (ISR) in the Maritime Domain and Choke Points are on the USCENTCOM FY18-22 Integrated Priorities List. Funding is needed to provide a cryptologic capability on all PC units to the USCENTCOM AOR. There are currently two PC units outfitted with a similar capability (PC-SCOUT). The original PC-SCOUT project was funded with FY12 OPN and was executed in 2014 with installations onboard the two PCs in November and December 2014. The original PC-SCOUT initiative filled critical gaps in NAVCENT's collection posture and provided unique access to targets of interest. OCO funding is needed to upgrade existing capability and increase NAVCENT/C5F's Organic Persistent ISR capability and allow NAVCENT/C5F to meet its intelligence requirements in the littorals not accessible by current collection platforms and POR systems.
COMFIFTHFLT has a mission critical operational need to provide ISR in support of Named Operations and other maritime activities in the USCENTCOM area of responsibility. Small littoral vessels (PC) with enhanced collection systems are exceptional platforms (at reduced operating and maintenance costs when compared to DDG and CG program of record systems), due to their operational employment, low electromagnetic interference (EMI) profile, coupled with remote capabilities/resources has resulted in increased awareness of NAVCENT/C5F intelligence priorities. Without adequate OCO funding to support PC SIGINT collection system, NAVCENT/C5F's ability to collect, monitor, and target significant adversarial maritime activity in the littoral area will increase the risk of miscalculation and translate into potential mission failure and loss of life.
Cost Breakdown:

SALVAGE ((Manufacturer: National Security Aagency (NSA) MUSKETEER)), RF Distro, antennas, etc.: $820K X 10 = $8.2M
(U) SALVAGE is a government-off-the-shelf (GOTS) Signal Intelligence (SIGINT) collection, geolocation, and survey software defined radio (SDR) suite, that is a fully automated SIGINT collection and survey capability, which interacts with NSA-standard data flow processes. SALVAGE ensures collected SIGINT is quickly and efficiently handled as a part of the "processing exploitation, and dissemination" (PED) cycle for linguists and analysts. (U) Kathrein Scala Division 742-192V01 Wideband Log-Periodic Antenna (LPA): Broadband LPA designed for professional fixed-station applications (790-2690MHz).
(U) Mobile Mark Antennas PN10-3000 Broadband Panel Antenna (2200-3800 MHz).
RED FALCON (Manufacturer: BIT Systems): $195K X 10 = $1.95M (Description provided via SIPRnet)
DRT 1211C (Manufacturer: Digital Receiver Technology): $360K X 10 = 3.6M
(U) The DRT1211C provides a compact, yet powerful, collection capability against Push-to-Talk (PTT) signals. The system is based on an industry-standard bus format, and uses the latest digital signal processing (DSP), RF, and microprocessor technology. The DRT1211C, a ruggedized system, provides the same functionality as the DRT1201C. The DRT1211C I/O connectors are located on the rear of the chassis adding 1U of height. In addition, the modules are recessed behind a removable panel which contains an air filter. DRT1211C supports a full complement of third generation modules.
NSA Comms package (Manufacturer: NSA Minuteman, includes GAMEWARDEN): $135K X 10 = $1.35M
(U) A virtualized instantiation of NSA analytic capabilities.
Total for 10 platforms: $15.1M

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 07 / 2	**P-1 Line Item Number / Title:** 8118 / Operating Forces Supt Equip	**Aggregated Items Title:** Operating Forces Supt Equip

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
			Unit Cost ($ M)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ M)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ M)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ M)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ M)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ M)	Qty (Each)	Total Cost ($ M)
1) Commander, Navy Installations Command (CNIC)																				
1.1) OCO OPN for ISA AB Live Fire Trng Device	A		-	-	-	-	-	-	-	-	-	-	-	0.000	0.700	1	0.700	0.700	1	0.700
1.2) Mobile Aircraft Training Devices	A		0.758	3	2.274	1.088	1	1.088	1.018	1	1.018	1.080	1	1.080	-	-	-	1.080	1	1.080
1.3) DDG Separators	A		0.378	3	1.133	-	-	-	0.421	6	2.526	-	-	-	-	-	-	-	-	-
1.4) Submarine Deep Draft Camel (N/S Design) (SEAWOLF)	A		-	-	0.770	0.765	3	2.296	0.732	1	0.732	-	-	-	-	-	-	-	-	-
1.5) Submarine Deep Draft Camel (Redesign)	A		0.708	1	0.708	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.6) Paint Maintenance Barge (60 Foot Lift)	A		-	-	-	0.465	2	0.930	0.482	3	1.446	0.512	2	1.024	-	-	-	0.512	2	1.024
1.7) Composite Submarine Camels	A		1.047	6	6.282	-	-	-	-	-	-	1.275	1	1.275	-	-	-	1.275	1	1.275
1.8) Universal Triangular Submarine Separator (Re-Designed)	A		0.342	1	0.342	0.280	3	0.840	-	-	-	-	-	-	-	-	-	-	-	-
1.10) Fenders/ Bumpers P-383	A		2.700	1	2.700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.11) ESS & IDS NA-283	A		-	-	-	1.454	1	1.454	-	-	-	-	-	-	-	-	-	-	-	-
1.12) Hoist P-898	A		-	-	-	-	-	-	0.486	1	0.486	-	-	-	-	-	-	-	-	-
1.13) THALES MK-20A Instrument Landing Systems	A		-	-	-	-	-	-	1.638	1	1.638	-	-	-	-	-	-	-	-	-
1.16) CVN Camels [(1)]	A		-	-	-	-	-	-	4.120	2	8.240	4.120	1	4.120	-	-	-	4.120	1	4.120
1.17) Deep Draft Sub Separators	A		-	-	-	-	-	-	0.870	3	2.610	-	-	-	-	-	-	-	-	-
1.18) 4.5 Meter Sub Separator	A		-	-	-	-	-	-	0.370	2	0.740	-	-	-	-	-	-	-	-	-
1.19) 3 Tier Paint Float	A		-	-	-	-	-	-	0.427	1	0.427	-	-	-	-	-	-	-	-	-
1.20) 4.5 meter Sub HYDRO Sub Separators	A		-	-	-	-	-	-	0.370	1	0.370	-	-	-	-	-	-	-	-	-
1.21) Pontoon Section	A		-	-	-	-	-	-	0.400	2	0.800	-	-	-	-	-	-	-	-	-
Subtotal: 1) Commander, Navy Installations Command (CNIC)			**-**	**-**	***14.209***	**-**	**-**	***6.608***	**-**	**-**	***21.033***	**-**	**-**	***7.499***	**-**	**-**	***0.700***	**-**	**-**	***8.199***
2) Communications and ElectronicReadiness																				

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 07 / 2	**P-1 Line Item Number / Title:** 8118 / Operating Forces Supt Equip	**Aggregated Items Title:** Operating Forces Supt Equip

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
			Unit Cost ($ M)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ M)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ M)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ M)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ M)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ M)	Qty (Each)	Total Cost ($ M)
2.1) Patrol Craft SIGINT Capability	A		-	-	-	-	-	-	-	-	-	-	-	0.000	1.510	10	15.100	1.510	10	15.100
Subtotal: 2) Communications and ElectronicReadiness			**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	***0.000***	**-**	**-**	***15.100***	**-**	**-**	***15.100***
Total			**-**	**-**	**14.209**	**-**	**-**	**6.608**	**-**	**-**	**21.033**	**-**	**-**	**7.499**	**-**	**-**	**15.800**	**-**	**-**	**23.299**

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

Footnotes:

(1) BSO-52: CE line 1.16 CVN Camels (unit cost 4.120 X 2 = 8.240) was misidentified in initial FY17 ABS Budget submit under CE line 1.11 as "Composite Submarine Camels". Correct name should be CVN Camels as identified in this revised BES/PB18 submission. BSO-52: CE line 1.2 Mobile Aircraft Training Device was inadvertently submitted as a quantify of 2 in the previous submission, quantity should in fact be 1. No change to the amount.

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 07: Personnel & Command Support Equip / BSA 2: Command Support Equipment	**P-1 Line Item Number / Title:** 8120 / C4ISR Equipment

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

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	92.931	9.929	9.073	4.010	0.000	4.010	3.670	6.800	3.662	3.835	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	92.931	9.929	9.073	4.010	0.000	4.010	3.670	6.800	3.662	3.835	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**92.931**	**9.929**	**9.073**	**4.010**	**0.000**	**4.010**	**3.670**	**6.800**	**3.662**	**3.835**	**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:

Navy Expeditionary Command, Control, Communications, Computers, & Intelligence (C4I): Provides procurement, integration and initial training of Small, Medium, and Large Scale Communication Systems, that also involves convergence of these systems to a common Expeditionary C4I baseline. Includes the Navy Enterprise Tactical Command and Control (NETC2), Expeditionary Surveillance Control Central (ESCC), Ruggedized Deployable Satellite/Tactical Data Networks (RDSAT/TDN), Portable Radios, Blue Force Tracker and Joint Battle Command - Platform (JBC-P) for tactical vehicles and combatant craft, and Tactical/Command Operations Center in support of outfitting Table of Allowances (TOA) requirements within Expeditionary Forces. Ensures common C4I solutions are being coordinated, tracked, procured and integrated across Navy Expeditionary Forces (NEF).

[P5 / ROTHR Counternarcotics]: The Relocatable Over-The-Horizon Radar (ROTHR) system requires replacement shelters to house electronic equipment in close proximity to the antenna arrays. There are five different configurations of shelters totaling 89 of the various types. This procurement was for 32 of the shelters. Shelters are required to be replaced due to the age and deterioration of the existing shelters at all six ROTHR sites.

Justification:

FY18 funds required for procurement, integration and modernization of Small, Medium and Large Scale Communication Systems for Naval Expeditionary forces. Additionally, program funds procure, integrate and modernize tactical C4I, Satellite Communication-on-the-Move, Sensors, Expeditionary Mine Countermeasure Companies (Ex-MCM), and Blue Force Tracker for tactical vehicles and combatant crafts. FY18 funding to also be used for increased data throughput, Assured C2 posture, SATCOM reliability, and space resiliency via band diversity and redundancy for CBSP/NMT MILSATCOM equipped platforms and facilities.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 07: Personnel & Command Support Equip / BSA 2: Command Support Equipment	**P-1 Line Item Number / Title:** 8126 / Environmental Support Equipment

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

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	66.994	23.009	21.107	23.644	1.000	24.644	24.410	24.999	25.522	26.103	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	66.994	23.009	21.107	23.644	1.000	24.644	24.410	24.999	25.522	26.103	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**66.994**	**23.009**	**21.107**	**23.644**	**1.000**	**24.644**	**24.410**	**24.999**	**25.522**	**26.103**	**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 Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

ACOUSTIC MEASUREMENT SYSTEM Lifecycle replacement and upgrade of digital acoustic measurement systems used to collect data used to build gridded data bases of layered geoacoustic descriptions of the ocean floor and low frequency bottom loss databases, collect fleet anti-submarine warfare support measurements, produce high resolution anti-submarine warfare area assessment products, and serve to provide critical environmental input to fleet acoustic transmission loss models. System consists of multi-channel variable depth buoys, shipboard data acquisition, control, and processing support systems. Buoys acquire the data, provide signal conditioning and gain, and store the data in digital form.

ACOUSTIC POSITIONING SYSTEM (ULTRA SHORT BASELINE (USBL)) The Acoustic Positioning System (APS) is an Ultra Short Baseline (USBL) Acoustic Positioning System used to provide high accuracy navigation and location of towed bodies and Autonomous Underwater Vehicles (AUVs) deployed from T-AGS 60 oceanographic survey vessels. The APS is permanently installed aboard each vessel and supports tracking objects in any direction out to a 5000m radius. In addition, it is used to precisely locate lost vehicles or instrumentation for purposes of recovery. Current navigation techniques can be inaccurate as they rely on approximations resulting in imprecise location data and degraded environmental data. This can lead to a substantially increased processing time and increased risk of missed coverage. With the ability of APS to determine accurate location data, the cost, practicality, and search time to recover a lost vehicle is substantially reduced.

CROSS DOMAIN SOLUTION (CDS) Meteorology and Atmospheric data is a highly perishable, mission-essential element in planning for almost all operational missions performed by the United States Navy. Excessive time delays in dissemination of oceanographic and meteorological products/services may add significant risk to our operational forces. This CDS provides a mechanism by which oceanographic and meteorological products/services can be disseminated to DoD end users on the SIPRNET as it is collected and produced.

DEEP MULTIBEAM INSTALLATION The full ocean multibeam sonar system is the primary ocean mapping tool in greater than 300 meters of water to full ocean. The deep-water multibeam system will be a state-of-the-art commercial one by one degree multibeam having a maximum swath coverage of six times water depth. The survey system includes an integrated deep water sub-bottom profiler system. The system will be installed on all T-AGS 60 class ships as a life-cycle replacement for the existing deep water multibeam system which has exceeded its life expectancy and will no longer be supported by the manufacturer. Multibeam systems collect deep-water bathymetry data required to support special chart production for the Navy.

DIGITAL SIDE SCAN SONAR (SHIP) Additional high-speed, high resolution side scan sonar systems are required to meet fleet requirements supporting mine warfare operations. The intended system procured will be installed aboard USNS HENSON and additional T-AGS 60 class ships to replicate the system aboard USNS HEEZEN. The procurement will facilitate simultaneous collection of high resolution imagery at mine warfare resolutions and frequencies. The imagery data is required to generate products that directly support mine warfare, hydrographic and oceanographic requirements. Side scan sonar data is critical for

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 07: Personnel & Command Support Equip / BSA 2: Command Support Equipment	P-1 Line Item Number / Title: 8126 / Environmental Support Equipment	
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A		

the detection of small mine-like targets as well as hazards-to-navigation (e.g. wrecks) and characterizing the sea-floor over large areas (geoprovincing). This data is fundamental to execute MIW change-detection doctrine comparing historical data to current data to determine mine-threats.

FLEET SURVEY TEAM INTEGRATED SURVEY PLATFORM Purchases transportable hydrographic survey platform systems used for rapid response, contingency, and emergent high-priority survey requirements. The platform is 7-9 meter air-transportable survey boat (Rigid Hull Inflatable Boat (RHIB) type) with installed and fukky-integrated Multibeam Echo-Sounder RESON 7125, Single Beam Echo-Sounder, Digital Side Scan Sonar, Wide-Area Differential Global Positioning System navigation, Inertial Motion sensor system, Data Acquisition Work-Station (PC), Sound Velocity Probe, and Electric winch. The boat and trailer are designed for transport in a C-130 aircraft and rigged for hoisting.

HYDROGRAPHIC SURVEY LAUNCH (HSL) MISSION EQUIPMENT This OPN line item involves the life-cycle replacement of the entire mission equipment suite currently installed aboard the operational fleet of HSL (seven HSLs and the Bertram). The mission equipment suite includes, but is not limited to, shallow water multibeam systems, single beam systems, navigation systems, data collection and storage systems, forward-looking sonar systems, and digital side scan systems. This does not include high-resolution digital side scan systems used for mine warfare. Life-cycle replacement of these systems is critical to ensure state-of-the-art hydrographic surveying capability in littoral areas. Also, due to the harsh environmental conditions encountered by HSLs during typical hydrographic surveys, planned replacement of their mission equipment is necessary to guarantee long-term supportability.

INTEGRATED SUB-BOTTOM PROFILER These systems are life cycle replacements for existing Sub Bottom Profiler systems that have exceeded life expectancy and do not currently provide high resolution digital acoustic data with precision positioning and navigational capability that is required for Mine Warfare missions. Systems will operate in conjunction with the new deep-water multibeam systems that were installed in FY15.

LITTORAL BATTLESPACE SENSING, FUSION, AND INTEGRATION (LBSF&I) supports ocean sensing and data collection and the integration of that data into a common environmental picture. Funding supports procurement of a technology infrastructure capability designed to fuse and integrate data collected under this program with extant static and dynamic data to produce the best available and most accurate battle space environmental characterization used to deliver decision superiority and information dominance to the combatant commander.

LONG TERM AMBIENT NOISE RECORDING AND REPORTING SYSTEM Long Term Ambient Noise Recording and Reporting System is a moored, acoustic buoy system used to support ISR missions. The buoys are four channel Environmental Acoustic Recording System (EARS) units that will record ambient noise for long time periods within an 8kHz bandwidth. The Environmental Acoustic Recording System buoys will have to be recovered for data processing.

MASTER CLOCK SYSTEMS These systems consist of: Rubidium (Rb) Fountain Clocks, which are advanced, non-commercial atomic clocks that are based on laser cooling and trapping of atoms; hydrogen masers; precise time measurement systems; amplifiers; and environmental conditioning systems to maintain precise temperature and humidity controls. These systems will allow for more rapid, robust and autonomous characterization of the Rubidium Fountains and Hydrogen Masers in the timing ensemble at United States Naval Observatory (USNO). Rb fountain clocks deliver the precise time and time interval required to support GPS III requirements and national assets.

OCEANOGRAPHIC INFORMATION SYSTEM (OIS) ARCHITECTURE The Oceanographic Information System (OIS) architecture provides the corporate information technology infrastructure to enable the collection, processing, storage, archival, retrieval, and dissemination of oceanographic data, products, and other scientific information delivering Meteorological and Oceanographic (METOC) superiority to the Fleet. Funds life cycle support and technology refresh to upgrade the end-to-end processing and production systems. Deployment of new state-of-the-art oceanographic sensors, such as high-speed, high-resolution digital side scan sonar systems, collect data volumes far in excess of the current OIS capability to receive, process, store, and archive data. The integration of Fleet through-the-sensor data into OIS production and the collection of remotely sensed data add to the complexity of the technology infrastructure required for OIS. Upgrades to existing corporate storage resources that support the data warehouse and expand the storage area network to meet anticipated data storage requirements are included. The Primary Oceanographic Prediction System (POPS) and Oceanographic Information System (OIS) FY18-22 funding was transferred to SPAWAR.

PNN41 - PORTABLE MULTIBEAM REPLACEMENT Portable Multibeam Sonar System is a roll-on/roll-off life cycle replacement for the RESON 8101 (4 systems) and the RESON 8125 (1 system). These systems provide the means to rapidly deploy a multibeam capability onto a craft of opportunity in order to support emergent naval requirements. Portability is key to enable rapid response to urgent or short-fused

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demands. The new systems provide an increase in survey efficiency, reduced maintenance costs, and an improvement in data quality. The Portable Multibeam Sonar System that replaces the RESON 8125 will provide high-resolution swath bathymetry along with side scan sonar imaging capability. This system will provide bottom imagery to facilitate MIW route surveys and navigation hazard surveys.

PRIMARY OCEAN PREDICTION SYSTEM (POPS) ENHANCEMENTS Primary Oceanographic Prediction System (POPS)-Meteorology (Met) provides the key production engine enabling global Meteorological and Oceanographic Command (METOC) support of the fleet. POPS-Met operates within a 24/7 reachback operations center supporting global fleet operations with weather and ocean prediction products and warfighting applications that are critical to fleet safety and warfighting effectiveness. POPS-Met provides the technology and infrastructure to sustain global operations ashore and afloat by providing timely, relevant, 24/7 METOC data and products to the fleet, Department of Defense, joint, allied, and coalition warfighters at all classification levels. POPS-Met acquires and sustains the operation of high-performance computing (HPC) environments to provide most of the assured METOC forecast products and services for Tier 1 of the Battlespace on Demand, which originate directly from the METOC models, satellite processing software, and applications. Tier 1 also provides input to many of the Battlespace on Demand Tier 2 and Tier 3 Products. Ongoing technology refreshment is required to meet the growing demand for these products, particularly in response to greater emphasis on preparation for and response to regional conflicts, and the greater data volume from the National Polar-orbiting Partnership (NPP) and future remotely sensed environmental data sources. The required technology refreshment includes enhancements of the POPS-Met hardware and software, models suite, observational data ingest capability, data distribution capability, and reachback customer support. Together, these enhancements will provide the Fleet with more accurate and responsive environmental support across all three Tiers of Battlespace on Demand. The Primary Oceanographic Prediction System (POPS) and Oceanographic Information System (OIS)FY18-22 funding was transferred to SPAWAR.

SHARC-REMUS ACOMM SYSTEM The SHARC-REMUS ACOMM System (SRAS) is an Acoustic Positioning System (APS) which provides high accuracy navigation and location of Remote Environmental Monitoring Units (REMUS) Autonomous Underwater Vehicles (AUVs). The APS is installed aboard a Sensor Housing Autonomous Remote Craft (SHARC), a long-duration Unmanned Surface Vehicle (USV) that utilizes wave energy for propulsion and solar panels for energy replenishment of core systems and sensors. The SHARC, equipped with the SRAS, functions as a Communications and Navigation Aid (CNA) to the submerged REMUS AUV by means of acoustic signaling. Working in tandem with the AUV, the SHARC SRAS eliminates the need for the REMUS AUV to come to the surface for routine communications and navigation fix updates. The AUV maintains a submerged posture, while the SRAS provides updates to its navigational position, and allows over-the-horizon communications for sending back AUV position and status messages, snippets of sidescan and bathymetric data and subsequent redirection of the AUV. Current submerged AUV navigation techniques can be inaccurate as they rely on approximations resulting in imprecise location data and degraded environmental data, and require the AUVs to surface for frequent navigational fixes. This can lead to a substantially increased processing time and increased risk of missed coverage.

SHIP MOVING VESSEL PROFILER (MVP)The Shipboard MVP is the larger shipboard complement to the HSL MVP. Intended for use from T-AGS 60 platforms, the system consists of a compact and recoverable probe integrated with a computer controlled over-the-side handling system. It permits the rapid and automated acquisition of sound velocity profile data from an underway vessel and significantly increases multibeam survey efficiency by acquiring highly accurate automated sound velocity profile data in the critical 0- 400m water layer.

SHIP TO SHORE DATA COMMUNICATIONS The Ship to Shore Data Communications system provides high-speed digital data communication between survey ships and the NAVOCEANO Survey Operations Center at Stennis Space Center, Mississippi, using either C-band or Ku-band satellites. Real-time survey data is delivered to Non-classified Internet Protocol Router (NIPR) or Secret Internet Protocol Router (SIPR) computers for rapid processing to produce near real-time products for the war fighter. Data is transmitted from ship to shore at nominal rate of 1,024,000 bits per second and from shore to ship at a nominal rate of 256,000 bits per second. The system also provides the survey ship with classified and unclassified email and Voice-over-IP communication. This is the sole capability which allows rapid turnaround of survey data to support the warfighter in today's highly-compressed warfighting scenarios. Life cycle OPN replacements were programmed starting in FY11.

TIME DISTRIBUTION SYSTEM Time is distributed via telephone, modem, Global Positioning System (GPS), Two Way Satellite Time Transfer (TWSTT). Funding is for distribution systems necessary to transfer and distribute time to users. This consists of receivers systems for M Code receiver systems, Two Way Satellite Time Transfer systems, Precise Time and Time Interval measuring systems, Critical Time Dissemination (CTD), NextGen Secure TWSTT, and other systems to distribute precise time.

VERY LONG BASELINE INTERFEROMETRY SYSTEM Systems to be purchased here are antennas, radio receivers, Radio Frequency to digital conversion systems, wide band communication systems, and correlators to process wide-band data obtained at sites separated by thousands of kilometers. Very Long Baseline Interferometry data monitors variations in the Earth's orientation and form the basis for the fundamental celestial reference frame, and supports DoD and national requirements for Space Situational Awareness.

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AIRBORNE LIDAR SYSTEM The Coastal Zone Mapping and Imaging LIDAR (CZMIL) replaces the Compact Hydrographic Airborne Rapid Total Survey (CHARTS) system. CZMIL is an aircraft mounted LIDAR system used to conduct expeditionary and rapid response hydrographic surveys in near-shore areas and areas inaccessible by ship or survey launch. Routine life cycle replacement maintains technology refresh, precludes obsolescence of equipment and repair parts/maintenance, and maintains survey reliability.

DEEP MULTIBEAM REPLACEMENT The full ocean multibeam sonar system is the primary ship-mounted ocean mapping tool used for surveys in water depths greater than 300 meters to full ocean. The deep-water multibeam system is a state-of-the-art, commercial, one-by-one degree system with a maximum swath coverage of six times water depth. The multibeam survey system includes an integrated deep water sub-bottom profiler system. The system will be installed on all T-AGS 60 class ships as a life-cycle replacement for the existing deep water multibeam system (EM121A). The deep water multibeam system (EM121A) has exceeded its life expectancy and will no longer be supported by the manufacturer. Multibeam systems collect deep-water bathymetry data required to support special chart production for the Navy. If the deep-water multibeam systems are not replaced, the T-AGS 60 ships will lose the capability to support the Navy's requirement for deep and mid-water bathymetry data products.

SHALLOW WATER MULTIBEAM The shallow water multibeam sonar system is the primary sea-floor mapping system in the littoral (50-500 meters of water). Without this data: 1) surface and sub-surface littoral navigation charts would not be updated with accurate, high resolution bathymetry, 2) high-resolution littoral bathymetry required for running ocean (currents, waves, tides) models supporting anti-submarine warfare, naval special warfare and mine warfare applications would not be available and 3) high-resolution littoral bathymetry required for running acoustic models for anti-submarine warfare would not be available.

SHALLOW WATER SEISMIC SYSTEM Lifecycle replacement and upgrades to seismic systems are needed to meet existing requirements for geophysical measurements in shallow to mid-depth water environments. The systems will be roll-on/roll-off systems and consist of a sub-bottom profiler for medium to deep sub-bottom measurements. These systems are designed to meet requirements for geophysical measurements to support geophysical database construction. These databases are an essential part of acoustic prediction systems and support to ASW mission planning, execution, and prosecution.

NAVY PRECISION OPTICAL INTERFEROMETER SYSTEM The Navy Precision Optical Interferometer (NPOI) at Anderson Mesa, Arizona is operationally producing a catalog of the precision positions of stars at a level of 16 Milli-arcseconds (mas) to meet DoD requirements for Celestial Reference Frame maintenance. NASA has transferred to the Navy four 1.8 meter telescopes to be added to the NPOI array in order to extend the catalog to fainter stars of 9th magnitude and expand the size and density of the catalog. OPN systems to be procured include precise optical and electronic equipment and infrastructure equipment used to integrate the 1.8m telescopes into NPOI array.

A2 Enterprise Virtualization GIG-Node Meteorology and Atmospheric data is a highly perishable, mission-essential element in planning for almost all operational missions performed by the United States Navy. Significant time delays in dissemination of oceanographic and meteorological products/services may add significant risk to our operational forces. This Enterprise A2 Virtualized GIG-Node will provide automatic-failover for key oceanographic and meteorological product/services in the event of a significant system/site outage.

TASK FORCE CYBER AWAKENING USNO data architecture allows for distribution and processing of Precise Time, Astrometry, and Earth Orientation parameters across DoD. Funding is for a secure network environment equipment. This consists of switches and servers for a secure scientific network as well as switches and servers for testing of new software and products.

Advanced Weather Interactive Processing System (AWIPS) provides an automated and efficient system capability at both Fleet Weather Centers (FWCs) and the Joint Typhoon Warning Center (JTWC). This system will leverage existing Navy and National Weather Service (NWS)modeling and forecast automation capabilities that will be compatible across government and civilian weather forecasting sectors. This system will analyze, interrogate, and display ensemble/deterministic models, satellite, observations, and automate repetitive forecaster tasks. These capabilities are necessary for the commands to support mission areas including, but that are not limited to, maritime operations, aviation operations, fleet operations, and safety of navigation.

Precise Time and Astrometry Network (PTA Network) (previously funded 10OPNW TASK FORCE CYBER AWAKENING USNO) is the network supporting the Master Clock at the United States Naval Observatory (USNO) and the Alternate Master Clock (AMC) located in Colorado Springs, CO. The time derived from USNO, known as Coordinated Universal Time (UTC (USNO)) is the primary time reference for the Department of Defense. The network also supports USNO's determination of the Celestial Reference Frame (CRF) as well as Earth Orientation Parameters (EOP). Together, this data provides essential mission critical information for navigation, orientation, targeting and weapons guidance, tracking of space-based platforms, and identification of space objects. Task Force Cyber Awakening (TFCA) was established to comprehensively address cyber security across the entire Navy cyber platform. The USNO was funded to remediate critical cyber security vulnerabilities on USNO networks, to include the PTA

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Network. Funding is for equipment modernization necessary to maintain the required security posture and ensure the resiliency of the PTA Network, which is of strategic importance for the execution of tactical operations. The PTA Network is composed of one network unit with ground sites in Washington, D.C., Colorado Springs, CO, and Flagstaff, AZ.

[P40A / Time Distribution System]: Overseas Contingency Operations (OCO) - Time Distribution System: The U.S. Naval Observatory (USNO) provides the common time reference for all of the DOD per CJCSI 6130.01E. USNO's primary site in Washington, DC can provide Two Way Satellite Time Transfer (TWSTT) services to the EUCOM AOR over both Ka- and X-band satellites. USNO's Alternate Master Clock at Schriever AFB, CO cannot reach the EUCOM AOR with TWSTT services. The Navy, through USNO can improve the robustness of EUCOM timing support over SATCOM channels with this one-time upgrade of satellite based timing distribution on the east coast of CONUS.

[P40A / POPS OIS]: OIS12 - Primary Oceanographic Prediction System (POPS)-Meteorology (Met) provides the key production engine enabling global METOC support of the fleet. The required technology refreshment includes enhancements of the POPS-Met hardware and software, models suite, observational data ingest capability, data distribution capability, and reach back customer support. The OIS Architecture OPN funding profile is the result of an IT and non-IT re-capitalization effort led by CNMOC N8 and approved by CNMOC leadership. It has since been used as a basis for planning our IT upgrades through the FYDP.

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Line Item MDAP/MAIS Code: N/A	

Exhibits Schedule					Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	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)*
P-40a	Environmental Support Equipment				- / 66.994	- / 23.004	- / 21.107	- / 23.643	- / 1.000	- / 24.643
P-40	**Total Gross/Weapon System Cost**				**- / 66.994**	**- / 23.009**	**- / 21.107**	**- / 23.644**	**- / 1.000**	**- / 24.644**

*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 sum exactly due to rounding.

Justification:

1.4 Fleet Survey: In FY13 2 boats were funded at a total of $1.680M. The FY18 requests 1 boat for $0.870M. The boats (including survey equipment) are procured based on the life cycle replacement (LCR) plan to ensure they are safe, reliable in OCONUS operating environments, and provide the necessary functionality in order to meet mission requirements at the present time. The optimal replacement time or lifecycle replacement plan is not a precise moment but is used to factor in factory warranty expirations, large maintenance costs, downtime costs, obsolesces of parts, and increased fuel consumption based on changing technologies.

Currently, Fleet Survey Team (FST) maintains four different survey platforms, which are used to conduct shallow water surveys in order to adhere to the Oceanographic, Hydrographic, and Bathymetric (OHB) requirements. Based on FST's lifecycle replacement (LCR) plan, they need to be procured every few years in pairs due to price breaks, equipment deterioration, and other factors used to develop the LCR. FST Platforms provide OHB data in OCONUS littoral waters. The survey mission areas are prioritized and directed by Combatant Commanders annually with subsequent changes based on emergent real world requirements. FST maintains four different survey platforms, which are used to conduct shallow water surveys in order to adhere to the OHB requirements.

1.8 - Master Clock

These systems consist of: Rubidium (Rb) Fountain Clocks, which are advanced, non-commercial atomic clocks that are based on laser cooling and trapping of atoms; hydrogen masers; precise time measurement systems; amplifiers; and environmental conditioning systems to maintain precise temperature and humidity controls. These systems will allow for more rapid, robust and autonomous characterization of the Rubidium Fountains and Hydrogen Masers in the timing ensemble at United States Naval Observatory (USNO). Rb fountain clocks deliver the precise time and time interval required to support GPS III requirements and national assets.

The vast majority of USNO's OPN funding, across all Cost Elements, is used for the life-cycle replacement of aging equipment. Therefore, USNO does not typically buy/replace the same equipment each year. While it may look like the costs are increasing, USNO is actually replacing different underlying components described in the description of each Cost Element description in the P-40. Also, please note that the quantity is also misleading when comparing across FY's.

FY16 - USNO enacted 2 contract options, $617K each. The contract options procured 4 Steerable atomic clocks, replacing old clocks towards the end of their usable lifecycle, at a unit price of approximately $308K using 2 existing contracts actions, 4 Steerable clocks ($308K each) - $1.234M. .

FY17 - USNO will be replacing/upgrading the HVAC unit in the building containing the primary Master Clock System (estimated $1.5M). This would be the major source of growth for this cost element (CE) because the HVAC does not require frequent replacement. Replace 3 Cryogenic Sapphire Oscillators ($308K each) - $924K thus replacing old technology towards the end of its usable lifecycle under 1 contract.

FY18 Replace Environmental Chambers - $775K. The Master Clock building contains individual chambers that precisely control temperature and humidity where the atomic clocks are used operationally. Each chamber contains rubidium atoms that are laser-cooled to about the coldest temperature anything can be. The result is continued accuracy for operational needs and continuously running timepiece.

In each year, USNO is procuring different elements of the master clock system and the cost associated with these elements is different.

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Line Item MDAP/MAIS Code: N/A		

1.10 OIS Architecture: Primary Oceanographic Prediction System

The Primary Oceanographic Prediction System (POPS) and Oceanographic Information System (OIS)FY18-22 funding was transferred to SPAWAR.

(POPS)-Meteorology (Met) provides the key production engine enabling global METOC support of the fleet. The required technology refreshment includes enhancements of the POPS-Met hardware and software, models suite, observational data ingest capability, data distribution capability, and reach back customer support.

Increase is due to cyber security requirements mandated by the Navy, including the implementation of new shipboard missions systems that increases the requirement for computing and storage resources, new technologies that make existing equipment obsolete. The sonar systems aboard TAG-S survey vessels have to be replaced due to equipment age such that the vendor no longer supports the equipment. The new sonar systems have greater resolution than the old systems and there are no new sonar systems available that have the resolution of the legacy equipment and software. This lifecycle replacement of the sonar systems results in increased data volume and the need for increased computational power to process and store the data.

1.12 - The Primary Oceanographic Prediction System (POPS)

The Primary Oceanographic Prediction System (POPS) and Oceanographic Information System (OIS)FY18-22 funding was transferred to SPAWAR.

It was established circa 1996 as an Acquisition Category (ACAT) IA Acquisition Program in order to provide scientific computing capability for oceanography and meteorology. The POPS-Met Deputy Program Manager (DPM) is responsible for that portion of the POPS fielded at the Fleet Numerical Meteorology and Oceanography Center (FLENUMMETOCCEN). In accordance with the POPS-Met System Integration Master Plan (SIMP), the storage, networking, and compute nodes/memory are replaced on a four year cycle. High Performance Computing (HPC) nodes with on-board memory are more expensive and have a higher associated cost in years two and three; network components and storage are replaced in year one and four at a lower overall cost.

Unit price varies year to year because in order to sustain the state-of-the-art High Performance Computing (HPC) environment and support the increasing capabilities of the Numerical Weather Prediction (NWP) model. The below illustrates the need for processors, memory, storage, and networks:

- Replacing End of Life (EoL) HPC servers containing 12 CPUs/32GB RAM with next-generation HPC servers containing 32 CPUs/128GB RAM is more expensive, and it fits in the same rack space. This does not increase server count, but increases system capability to meet NWP operational demands.

- Replacing EoL 120TB or online storage with 600TB of online storage (to account for the improved NWP models being support) is more expensive, and fits in the same rack space.

- Replacing EoL 1Gb network components with next-generation 10Gb network components (to move all that addition NWP data around the system) is more expensive and fits in the same rack space.

- Replacing EoL, and adding additional, system security management components with next-generation, and highly secure, system management components, is required to meet new Cyber Security requirements.

1.15 - Time Distribution System

The vast majority of USNO's OPN funding, across all Cost Elements, is used for the life-cycle replacement of aging equipment. Therefore, USNO does not typically buy/replace the same equipment each year. While it may look like the costs are increasing, USNO is actually replacing different underlying components described in the description of each Cost Element description in the P-40. Also, please note that the quantity is also misleading when comparing across FY's.

FY16 - USNO invested in new GPSIII technology that could improve the distribution of GPS data.

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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A		

FY17 - USNO will be installing and testing the new technology to understand the benefits/shortfalls of the new technology, but will make no new procurements.

FY18 - Based on findings funded with FY17 RDT&E, USNO will commit to the new modem technology or be forced to replace aging modems currently being used.

Increase between FY17 and FY18 is due to USNO implementing new technology to understand the benefits and shortfalls of the newly procured technology from FY16. There is no procurement scheduled for the time distribution system in FY17. In FY18, USNO is procuring a new modem technology to distribute the GPS III signal to keep up with military requirements. The unit price is different because USNO is not procuring any requirements relating to time distribution system in FY17.

1.17 Laser Identification Detection and Ranging (LIDAR):

The Coastal Zone Mapping and Imaging LIDAR replaces the Compact Hydrographic Airborne Rapid Total
Survey (CHARTS) system. CZMIL is an aircraft mounted LIDAR system used to conduct expeditionary and rapid response hydrographic surveys in near-shore areas and areas inaccessible by ship or survey launch. Routine life cycle
replacement maintains technology refresh, precludes obsolescence of equipment and repair parts/maintenance, and maintains survey reliability.

The Airborne Coastal System (ACS) meets COCOM High Priority Safety of Navigation hydrographic requirements. These requirements are validated, vetted and prioritized by COCOMs through the Oceanographic, Hydrographic, Bathymetric survey requirements program (OPNAVINST 3140.55B). LIDAR system is needed to continue the Navy's effort to rapidly and simultaneously collecting hydrographic and topographic data through state-of-the-art sensors installed in a modified DC-3 aircraft (contract aircraft) via ACS. ACS survey capability is well suited for very shallow operational requirements compared to T-AGS survey ships. The ACS supports COCOM and other Naval Component requirements for highly efficient collection capability and Theatre Security Cooperation tool. Funding supports procurement of a Coastal Zone Mapping and Imaging LIDAR (CZMIL) aircraft mounted LIDAR system necessary to conduct expeditionary and rapid response hydrographic surveys in near-shore areas and areas inaccessible by ship or survey launch. Due to the singular nature of the Airborne LIDAR platform, the lifecycle replacement (LCR) plan only occurs every several years, thus requiring a replacement system in FY18. The last system was procured in FY10.

2.1 (formerly 1.23) Precision Time and Astrometry Network (United States Naval Observatory)

FY18 funds (FY17 funds are under TASK FORCE CYBER AWAKENING USNO) are for PTA Network modifications which are necessary to enhance and maintain the required security of the network. The increase in funds from FY17 to FY18 are due to the higher unit cost of the required hardware and software modifications planned in FY18. The PTA Network modernization was initially funded in FY16 with funds from TASK FORCE CYBER AWAKENING due to the Defense Threat Reduction Agency (DTRA) determination that the USNO scientific IT network showed technical obsolescence as well as critical cyber and physical vulnerabilities.

In FY 2017, a decrease in Environmental Support Equipment OPN by $0.891M was required for us to to comply with the Bipartisan Budget Act of 2015.

OCO:
$1M OCO request associated with the European Reassurance Initiative and will support an X-band "hop station" on the east coast of CONUS to relay Two Way Satellite Time Transfer (TWSTT) services from the Alternate Master Clock at Schriever AFB to the EUCOM AOR. This is for Cape Canaveral, where USNO already has TWSTT operations in support of local missions. This will increase the robustness of the highest level timing support into EUCOM by allowing failover to the alternate authoritative timing source for the DOD.

The U.S. Naval Observatory (USNO) provides the common time reference for all of the DOD per CJCSI 6130.01E. USNO's primary site in Washington, DC can provide Two Way Satellite Time Transfer (TWSTT) services to the EUCOM AOR over both Ka- and X-band satellites. USNO's Alternate Master Clock at Schriever AFB, CO cannot reach the EUCOM AOR with TWSTT services. The Navy, through USNO can improve the robustness of EUCOM timing support over SATCOM channels with this one-time upgrade of satellite based timing distribution on the east coast of CONUS.

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy		Date: May 2017
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Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
			Unit Cost ($ M)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ M)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ M)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ M)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ M)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ M)	Qty (Each)	Total Cost ($ M)
1) Environmental Support Equipment [1]																				
1.1) Acoustic Measurement System	A		0.353	2	0.705	0.589	1	0.589	-	-	-	-	-	-	-	-	-	-	-	-
1.2) Acoustic Positioning System (USBL)	A		0.524	5	2.619	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.3) Digital Side Scan Sonar (SHIP) [2]	A		0.792	5	3.961	0.320	1	0.320	0.347	1	0.347	-	-	-	-	-	-	-	-	-
1.4) Fleet Survey Team (FST) Integrated Survey Platform [3]	A		0.840	2	1.680	-	-	-	-	-	-	0.870	1	0.870	-	-	-	0.870	1	0.870
1.5) HSL Mission Equipment (Installation)	A		0.544	6	3.264	0.860	3	2.579	0.825	2	1.650	-	-	-	-	-	-	-	-	-
1.6) Integrated Sub Bottom Profiler [4]	A		0.470	1	0.470	-	-	-	0.642	2	1.284	-	-	-	-	-	-	-	-	-
1.7) Long Term Ambient Noise Recording & Reporting System	A		0.400	1	0.400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.8) Master Clock Systems [5]	A		0.477	5	2.387	0.309	4	1.234	0.607	4	2.428	0.775	1	0.775	-	-	-	0.775	1	0.775
1.9) OIS Architecture	A		1.512	5	7.562	2.507	1	2.507	1.936	1	1.936	-	-	-	-	-	-	-	-	-
1.10) POPS	A		2.487	6	14.919	1.253	1	1.253	1.205	1	1.205	-	-	-	-	-	-	-	-	-
1.11) Portable Multibeam Replacement	A		0.563	1	0.563	0.685	3	2.054	-	-	-	-	-	-	-	-	-	-	-	-
1.12) POPS-MET Enhancements	A		2.834	5	14.172	4.221	1	4.221	4.605	1	4.605	-	-	-	-	-	-	-	-	-
1.13) POPS Enhancements	A		2.240	2	4.480	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.14) Ship Moving Vessel Profiler (MVP)	A		0.610	2	1.220	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.15) Time Distribution System [6]	A		0.788	5	3.942	0.565	1	0.565	-	-	-	0.383	1	0.383	1.000	1	1.000	0.692	2	1.383
1.16) Very Long Baseline Interferometry [7]	A		0.671	4	2.685	-	-	-	0.298	1	0.298	1.125	1	1.125	-	-	-	1.125	1	1.125
1.17) Airborne Lidar System [8]	A		-	-	-	-	-	-	-	-	-	2.470	1	2.470	-	-	-	2.470	1	2.470
1.18) Deep Multibeam Replacement	A		-	-	-	-	-	-	4.140	1	4.140	4.422	1	4.422	-	-	-	4.422	1	4.422

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 07 / 2	**P-1 Line Item Number / Title:** 8126 / Environmental Support Equipment	**Aggregated Items Title:** Environmental Support Equipment

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
			Unit Cost ($ M)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ M)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ M)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ M)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ M)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ M)	Qty (Each)	Total Cost ($ M)
1.19) Near Real-Time Profiling Arrays	A		-	-	-	0.834	1	0.834	-	-	-	-	-	-	-	-	-	-	-	-
1.20) Shallow Water Multibeam	A		-	-	-	-	-	-	1.014	1	1.014	1.118	1	1.118	-	-	-	1.118	1	1.118
1.21) Shallow Water Seismic System	A		0.368	2	0.736	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.22) Navy Precision Optical Interferometer (9)	A		-	-	-	0.780	1	0.780	0.650	2	1.300	0.959	1	0.959	-	-	-	0.959	1	0.959
1.23) Task Force Cyber Awakening (TFCA) - U.S. Naval Observatory (10)	A		-	-	-	6.068	1	6.068	0.900	1	0.900	-	-	-	-	-	-	-	-	-
1.24) Advanced Weather Interactive Processing System (AWIPS)	A		1.229	1	1.229	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.25) Precise Time and Astrometry Network (PTA Network) (11)	A		-	-	-	-	-	-	-	-	-	2.009	1	2.009	-	-	-	2.009	1	2.009
1.26) POPS OIS (12)	A		-	-	-	-	-	-	-	-	-	-	-	9.512	-	-	-	-	-	9.512
Subtotal: 1) Environmental Support Equipment			**-**	**-**	***66.994***	**-**	**-**	***23.004***	**-**	**-**	***21.107***	**-**	**-**	***23.643***	**-**	**-**	***1.000***	**-**	**-**	***24.643***
Total			**-**	**-**	**66.994**	**-**	**-**	**23.004**	**-**	**-**	**21.107**	**-**	**-**	**23.643**	**-**	**-**	**1.000**	**-**	**-**	**24.643**

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

Footnotes:

(1) Variation in costs are due to the fact that the Information Dominance Forces' (IDFOR) OPN Line Items are for entire systems; however, the unit costs are dependent upon whether purchasing an entire brand new system or if purchasing upgrades/lifecycle replacement of software and hardware components of the systems. Installation unit costs are highly dependent on the location of the shipyard.

(2) The digital side scan sonar systems are purchased as needed based on the life cycle replacement schedule. A system is not scheduled to be replaced in FY 18.

(3) In FY13, CNMOC procured 2 boats for total of $1.680M. In FY18 the request is for 1 boat at $870K and in FY19 $870 for one boat. This cost is consistent with inflation.

(4) The Integrated Sub Bottom Profiler are purchased as needed based on the life cycle replacement schedule. A Profiler is not scheduled to be replaced in FY 18.

(5) The vast majority of United States Naval Observatory's (USNO) OPN funding, across all Cost Elements, is used for the life-cycle replacement of aging equipment. Therefore, USNO does not typically buy/replace the same equipment each year. While it may look like the costs are increasing, USNO is actually replacing different underlying components described in the description of each Cost Element description in the P-40. Also, please note that the quantity is also misleading when comparing across FY's. FY16 - USNO enacted 2 contract options, $618K each. The contract options procured 4 Steerable atomic clocks, replacing old clocks towards the end of their usable lifecycle, at a unit price of approximately $309K using 2 existing contracts actions. FY17 - USNO will be replacing/upgrading the HVAC unit in the building containing the primary Master Clock System (estimated $1.5M) and purchase 3 Cryogenic Sapphire Oscillators, replacing old technology towards the end of its usable lifecycle, at a unit price of approximately $308K using 1 contract. FY18 Replace Environmental Chambers - $775K. The Master Clock building contains individual chambers that precisely control temperature and humidity where the atomic clocks are used operationally. Each chamber contains rubidium atoms that are laser-cooled to about the coldest temperature anything can be. The result is continued accuracy for operational needs and continuously running timepiece. In each year, USNO is procuring different elements of the master clock system and the cost associated with these elements is different.

(6) The vast majority of USNO's OPN funding, across all Cost Elements, is used for the life-cycle replacement of aging equipment. Therefore, USNO does not typically buy/replace the same equipment each year. While it may look like the costs are increasing, USNO is actually replacing different underlying components described in the description of each Cost Element description in the P-40. Also, please note that the quantity is also misleading when comparing across FY's. FY16 - USNO invested in new GPSIII technology that could improve the distribution of GPS data. FY17 - USNO will be installing and testing the new technology to understand the benefits/shortfalls of the new technology, but will

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 07 / 2	**P-1 Line Item Number / Title:** 8126 / Environmental Support Equipment	**Aggregated Items Title:** Environmental Support Equipment

make no new procurements. FY18 - In FY18, USNO is procuring a new modem technology to distribute the GPS III signal. Additionally, increase of $1M OCO is associated with the European Reassurance Initiative and will support an X-band "hop station" on the east coast of CONUS to relay Two Way Satellite Time Transfer (TWSTT) services from the Alternate Master Clock at Schriever AFB to the EUCOM AOR. This is for Cape Canaveral, where USNO already has TWSTT operations in support of local missions. This will increase the robustness of the highest level timing support into EUCOM by allowing failover to the alternate authoritative timing source for the DOD.

(7) The vast majority of USNO's OPN funding, across all Cost Elements, is used for the life-cycle replacement of aging equipment. Therefore, USNO does not typically buy/replace the same equipment each year. While it may look like the costs are increasing, USNO is actually replacing different underlying components described in the description of each Cost Element description in the P-40. FY16 - There were no required/scheduled replacements or update in support of this Cost Element FY17 - USNO is scheduled to replace the HVAC which supports our VLBI Software Correlator with a current estimate $.300M. FY18 - USNO is scheduled to replace the VLBI Software Correlator itself with a unit cost of $1.2M.

(8) The Coastal Zone Mapping and Imaging LIDAR (CZMIL) replaces the Compact Hydrographic Airborne Rapid Total Survey (CHARTS) system. CZMIL is an aircraft mounted LIDAR system used to conduct expeditionary and rapid response hydrographic surveys in near-shore areas and areas inaccessible by ship or survey launch. Routine life cycle replacement maintains technology refresh, precludes obsolescence of equipment and repair parts/maintenance, and maintains survey reliability.

(9) Increase from FY17 to FY18 is to support United States Naval Observatory's highly specialized detector system to be installed on a telescope.

(10) Funds realigned to BOS39 starting in FY18.

(11) PTA79 - Precise Time and Astrometry Network (PTA Network) quantity is composed of one network unit with three ground sites (Washington, D.C.; Colorado Springs, CO; and Flagstaff, AZ) undergoing recurring technical refreshes. Reason for Program name and cost element change: ASN (RD&A) signed an Acquisition Decision Memorandum on 4 April 2016 to establish Precise Time and Astrometry Network (PTA Network) as an ACAT III Program of Record (POR) to properly remediate, upgrade and sustain the modernized network.

(12) The eight (8) HPC systems supported by the POPS-Met program, to include NIPRnet-connect Unclassified clusters (Operational, Test/Beta, and Integration/Alpha), SIPRnet-connected Secret clusters (Operational, Test/Beta, and Integration/Alpha), and JWICS-connected Top Secret clusters (Operational and Test/Beta) are comprised of 1500+ servers (11,000+ CPUs), 800+ Terabytes (TBs) of online storage, 100+ Petabytes of offline storage, and 100+ networking components, to include routers, switches, and firewalls. This is a complicated, unique, one-of-a-kind HPC computing infrastructure, owned and operated by the Department of the Navy. In keeping with DoD and POPS guidelines, the OPN budget for lifecycle replacement due to equipment obsolescence, End-of-Life/End-of-Support (EoL/EoS) issues, and new technology insertion, was planned assuming a 3-4 year replacement cycle, with 25-30% of the system components replaced each year without increasing the server footprint. Replacing the E! oL/EoS POPS-Met system components with state-of-the-art HPC computing technology, low-latency data storage required to meet NWP processing needs, and the high-speed (40Gbs expanding to 100Gbs) network connections between the computing and storage components is both complicated and expensive; new generations of HPC equipment and infrastructure components are required to meet the expanding FLENUMMETOCCEN mission while addressing ever more stringent cyber security requirements. In accordance with the POPS-Met System Integration Master Plan (SIMP), the storage, networking, and compute nodes/memory are replaced on a four year cycle. High Performance Computing (HPC) nodes with on-board memory are more expensive and have a higher associated cost in years two and three; network components and storage are replaced in year one and four at a lower overall cost. In order to sustain the state-of-the-art High Performance Computing (HPC) environment and support the increasing capabilities of the Numerical Weather Prediction (NWP) models, the below illustrates the need for processors, memory, storage, and networks: -- Replacing End of Life (EoL) HPC servers containing 12 CPUs/32GB RAM with next-generation HPC servers containing 32 CPUs/128GB RAM is more expensive, and it fits in the same rack space. This does not increase server count, but increases system capability to meet NWP operational demands. -- Replacing EoL 120TB or online storage with 600TB of online storage (to account for the improved NWP models being support) is more expensive, and fits in the same rack space. -- Replacing EoL 1Gb network components with next-generation 10Gb network components (to move all that addition NWP data around the system) is more expensive and fits in the same rack space. -- Replacing EoL, and adding additional, system security management components with next-generation, and highly secure, system management components, is required to meet new Cyber Security requirements.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 07: Personnel & Command Support Equip / BSA 2: Command Support Equipment	**P-1 Line Item Number / Title:** 8128 / Physical Security Equipment

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

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	901.676	93.478	110.203	101.982	15.890	117.872	97.717	121.966	117.286	110.564	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	901.676	93.478	110.203	101.982	15.890	117.872	97.717	121.966	117.286	110.564	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**901.676**	**93.478**	**110.203**	**101.982**	**15.890**	**117.872**	**97.717**	**121.966**	**117.286**	**110.564**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	0.383	0.309	0.119	-	0.119	-	-	-	-	-	0.811
Flyaway Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

This line item procures equipment to support the security and safety for the Department's assets worldwide.

[P40A / MOBILE SECURITY FORCES - NCW ACTIVE COMPONENT]: Active and Reserve Component of the Coastal Riverine Force (CRF) (formerly Naval Coastal Warfare (NCW), Mobile Security Force (MSF), Maritime Expeditionary Security Force (MESF) and Riverine Force). CRF provides seaward surveillance and security forces in amphibious objective areas, harbors and approaches, straits, anchorages, offshore economic assets and other military areas worldwide. CRF fills current warfighting gaps by providing highly trained scalable and sustainable Security Teams capable of defending mission critical assets in the near coast environment. CRF units provide Ground Defense, Afloat Defense, Airfield/Aircraft Security and a wide range of secondary tasks from Detention Operations to Law Enforcement. Funding will provide prioritized initial outfitting for newly established TOA requirements and procurement of centrally managed equipment to meet Required Operational Capabilities/Program Operational Environment (ROC/POE) and Navy Mission Essential Tasks (NMET) including Visual Augmentation Systems (VAS) and Navy Non-Lethal Effects items.

[P40A / NAVAL COASTAL WARFARE FORCES-RES COMP (SEC FOR)]: Active and Reserve Component of the Coastal Riverine Force (CRF) (formerly Naval Coastal Warfare (NCW), Mobile Security Force (MSF), Maritime Expeditionary Security Force (MESF) and Riverine Force). CRF provides seaward surveillance and security forces in amphibious objective areas, harbors and approaches, straits, anchorages, offshore economic assets and other military areas worldwide. CRF fills current warfighting gaps by providing highly trained scalable and sustainable Security Teams capable of defending mission critical assets in the near coast environment. CRF units provide Ground Defense, Afloat Defense, Airfield/Aircraft Security and a wide range of secondary tasks from Detention Operations to Law Enforcement. Funding will provide prioritized initial outfitting for newly established TOA requirements and procurement of centrally managed equipment to meet Required Operational Capabilities/Program Operational Environment (ROC/POE) and Navy Mission Essential Tasks (NMET) including Visual Augmentation Systems (VAS) and Navy Non-Lethal Effects items.

[P40A / SSBN WATERFRONT RESTRICTED AREA SECURITY (WRAS)]: (X7001) SSBN WATERFRONT RESTRICTED AREA SECURITY (WRAS) This category provides for the security equipment required to guard and protect the TRIDENT II (D5) missile while the missile is in storage, being handled, or in a movement convoy to and from the waterfront at the Strategic Weapons Facility, Atlantic (SWFLANT) in Kings Bay, GA and the Strategic Weapons Facility, Pacific (SWFPAC) in Bangor, WA. Funding supports the Limited Area Electronic Security Systems (ESS) refreshes, the Transit Protection System, Vehicle Barriers, the Command, Control, Communication, Computers, and Intelligence (C4I) system that provides security system, communication network, computers, security force command and control function as well as the Water Detection System and other equipment necessary to meet Nuclear Security requirements per DOD S-5210.41M (Nuclear Weapons Security Manual).

[P40A / ANTI-TERRORISM/FORCE PROTECTION AFLOAT PHYSICAL SECURITY EQUIPMENT (ATFP PSE)]: Anti-terrorism/Force Protection (AT/FP) Physical Security Equipment (PSE) and Vessel Boarding Search and Seizure (VBSS) material are a compilation of specific security and AT related items intended for use by Ship's company aligned with Chief of Naval Operations (CNO's) objective for operation

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 07: Personnel & Command Support Equip / BSA 2: Command Support Equipment	P-1 Line Item Number / Title: 8128 / Physical Security Equipment	
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A		

watch standers at pier side and perimeter posts. AT/FP PSE material is used to assist shipboard security forces in thwarting potential terrorist attacks and forms the base of security for shipboard personnel. VBSS PSE material enables surface forces to reach full MIO capability including interception, boarding, searching, diverting and /or seizing suspect vessels. AT/FP Laser Dazzlers provide non-lethal means to incapacitate suspected terrorists.

[P40A / BIOMETRICS]: Introduces biometrics capabilities for surface ships during Visit, Board, Search and Seizure (VBSS) Enhanced Maritime Interception Operations (EMIO) by providing a new Maritime Domain Awareness (MDA) capability to download fused terrorism intelligence to Counter Terrorism Centers, Terrorism Screening Centers and other Intelligence Community databases to support a Common intelligence picture in a Naval/Joint/Coalition operational environment. Funding will provide Navy developed Identity Dominance Systems (IDS) which will provide required biometrics capability to the fleet. The Program of Record achieved MS C in October 2012, FRP in June 2013, FOC in December 2016, and will be procuring additional systems to meet fleet needs.

[P40A / ENHANCED MARITIME INTERCEPTION OPERATIONS (EMIO)]: In response to JCS tasking, implemented Level II MIO Initial Operational Capability May 2005. The new MIO capability expands the operational spectrum for the Navy Overseas Contingency Operations ranging from compliant only to non-compliant boarding of threat vessels. MIO teams will be trained on new equipment, which will allow them to board vessels that refuse to comply with orders to stop and be searched for terrorists and terrorist. Funding will provide Allowance Equipage List (AEL) items such as individual protective equipment and training weapons.

[P40A / NAVY EXPEDITIONARY LOGISTICS SUPPORT GROUP]: Navy Expeditionary Logistics Support Group will deliver worldwide expeditionary logistics with active and reserve personnel to conduct port and air cargo handling missions, customs inspections, contingency contracting capabilities, fuels distribution, freight terminal and warehouse operations, postal services, and ordnance reporting and handling. Funding will provide prioritized initial outfitting for newly established TOA requirements and procurement of centrally managed mission equipment to meet Required Operational Capabilities/Program Operational Environment (ROC/POE) and Navy Mission Essential Tasks (NMET) to include Visual Augmentation Systems (VAS).

[P40A / MOBILE DIVING SALVAGE UNIT (MDSU) OUTFITTING EQUIPMENT]: Provides prioritized initial outfitting for newly established Mobile Diving and Salvage Unit Table of Allowances (TOA) requirements and procurement of centrally managed diving and salvage systems. MDSU TOA equipment includes diving, salvage and Combat Support Equipment to meet Required Operational Capabilities/Program Operational Environment
(ROC/POE) and Navy Mission Essential Tasks (NMET) to include Visual Augmentation Systems (VAS).

[P40A / NAVAL SPECIAL WARFARE]: Naval Special Warfare (NSW) service-common funding provides mission critical commodities to US Navy SEAL combat operations in forward deployed contingency locations. These investments include but are not limited to, weapon laser range finders, optics and illuminators. In addition funding supports EO/IR sensors and SEAL night vision googles. This materiel supports NSW core mission requirements and is essential to the readiness and battlefield effectiveness of NSW in winning the current fight against ISIS and other extremist elements.

[P40A / ANTI-TERRORISM FORCE PROTECTION ASHORE]: This program provides centrally procured equipment to improve the physical security posture of Navy installations worldwide. The program applies the Commander Navy Installations Command (CNIC) Risk-based investment strategy, ensuring appropriate Anti-terrorism and Force Protection (ATFP) solutions are fielded. The Physical Security Equipment (PSE) program procures equipment that supports and improves 15 specific Navy capabilities to detect, defer and defeat terrorist and criminal activity targeted against Navy personnel, government property and facilities ashore/afloat. The program provides funds to procure equipment for Navy Military Construction (MILCON) projects, including Intrusion Detection System(s) (IDS) and other Electronic Security System(s) (ESS) before building occupancy. The funds support the following six categories: Electronic Harbor Security Systems (EHSS) and Barriers; Physical Security/Access Control (Gates Automation & Perimeter Security); MILCON IDS; Command, Control, Computer, Communications & Intelligence (C4I) and Other Physical Security Equipment (PSE).

[P40A / VACIS]: Ports of Jebel Ali and Fujairah lack capability to screen cargo for explosives or contraband, an identified Force Protection vulnerability. The Vehicle and Contraband Inspection Systems (VACIS) GT is a rugged, highly mobile scanning system. Capable of detecting explosives and illegal contraband in vehicles and cargo containers. Typically used to scan large commercial vehicles during entry control point operations by combat forces in austere environments.

[P40A / ZBV Military Trailer]: 2 x ZBV Military Trailer - ZBV-MIL-TRAILER-01 (Z Backscatter Van Military Mobile Trailer) gamma ray imager. Capable of detecting explosives and illegal contraband in vehicles and cargo containers. Typically used to scan large commercial vehicles during entry control point operations by combat forces in austere environments.

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 07: Personnel & Command Support Equip / BSA 2: Command Support Equipment	**P-1 Line Item Number / Title:** 8128 / Physical Security Equipment	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

[P40A / Counter UAS Technology]: The Corian Unmanned Aircraft Systems (UAS) solution is a precision system designed to protect high value assets and support public safety against threats posed by the inadvertent or unlawful misuse of Unmanned Aerial Vehicles (UAV). Corian accurately and reliable detects, identifies, tracks, and mitigates UAV threats and is widely applicable to protecting Naval infrastructure and installations. The system provides continuous, automated monitoring, 24x7, in all weather conditions, and it has the unique ability to identify and locate both the UAV and its ground controller operator. Corian's passive UAV detection capability creates an electronic perimeter boundary around sensitive locations to protect Navy's high value, high interest infrastructures. This UAS detection, identification, and tracking system uses UAS radio links to precisely identify and locate systems flying in banned or protected airspace, i.e. sensitive Navy installation areas. This funding is required to procure hardware, perform site engineering studies, provide system design, deploy and install the system, and provide operator training, to include Tier 1 maintenance.

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 07: Personnel & Command Support Equip / BSA 2: Command Support Equipment	**P-1 Line Item Number / Title:** 8128 / Physical Security Equipment
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A — **Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A	

Exhibits Schedule					Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	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)*
P-40a	Physical Security Equipment				- / 901.676	- / 93.478	- / 110.203	- / 101.982	- / 15.890	- / 117.872
P-40	**Total Gross/Weapon System Cost**				**- / 901.676**	**- / 93.478**	**- / 110.203**	**- / 101.982**	**- / 15.890**	**- / 117.872**

*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 sum exactly due to rounding.

Justification:

Mobile Security Force-Active
Increase for procurement of Hailing Acoustic Laser and Light Tactical System (HALLTS) and Long Range Ocular Interrupter (LROI) for Coastal Riverine Forces (CRF) and procurement of Combatant Craft Forward-Looking Infrared (CCFLIR) sensors for the MK VI Patrol Boat.

Mobile Security Force-Reserve
Increase is to update AN/PVS-15 (night vision binoculars) with Wide Field of View (WFOV) goggle system and procurement of M2WS Thermal Weapons Sights that will provide increased situational awareness for low light/night time small boat and tactical convoy operations.

SSBN Waterfront Restricted Area Security (WRAS)
The decrease is attributable to the last year of procurement for; Common Limited Area (LA) Electronic Security System (ESS) Refresh Security Designs (SD) at Strategic Weapons Facility Atlantic (SWFLANT), Kings Bay, Georgia and Strategic Weapons Facility Pacific (SWFPAC), Bangor, Washington, Limited Area Production and Storage Complex (LAPSC) ESS Refresh SD at SWFPAC, and Land Water Interface (LWI) ESS procurements, installations and testing at SWFLANT. The FY 2018 funding request will support the Land Water Interface (LWI) ESS procurements, installations and testing at SWFPAC and the procurement and installation of the Waterfront Restricted Area (WRA) Card Readers. These projects are critical to protecting the Strategic Weapons Facilities and ensuring there is no unauthorized access to nuclear weapons.

Enhanced Maritime Interception Operations (EMIO)
Increase is for procurement of next generation Hand-Held Explosive Detector (HHED) for Anti-Terrorism and Force Protection (ATFP) and Visit, Board, Search, and Seizure (VBSS) platforms.

Naval Special Warfare
Increase reflects establishment, approval and funding of NSW service-common Table Of Allowance to begin correcting shortfalls and bring NSW forces into alignment with required outfitting standards in accordance with SOCOM-USN Memorandum of Agreement. The FY18 increase is based on the development, review, validation, and approval of NSW Service-Common Table of Allowance (TOA). The increase in OPN accounts for costs related to the transition of RQ-20 PUMA Unmanned Aerial Systems (UAS) from MFP-11 to MFP-2 funding. The transition is required in accordance with the US Navy / SOCOM MOA and ensures compliance with Anti-deficiency Act (ADA) provisions.

Anti-Terrorism Force Protection Ashore
Increase due to the replacement of Mass Notification Systems that are at end of life. This capability was directed via legislative mandate resulting from the SECDEF Fort Hood working group.

FY 2018 C4I funding will provide for:

Regional Dispatch Center ($10.8M):

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 07: Personnel & Command Support Equip / BSA 2: Command Support Equipment	**P-1 Line Item Number / Title:** 8128 / Physical Security Equipment	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

Provides Regionalized/Consolidated emergency call receipt, alarm monitoring, and 1st responder dispatching, Utilize centrally-hosted and supported Computer Aided Dispatch, Mobile Data Computers, Records Management Systems, Geographic Information System (GIS), Enterprise Land Mobile Radio (ELMR), and Alarm Automation to optimize emergency communication and response times.

Giant Voice / Indoor Voice ($10.3M):
Provides Voice Alerts and Notifications during Emergency Events affecting an installation.

Navy Munitions Alarm System ($3.6M):
Equipment and components for Conventional Arms, Ammunitions & Explosives (AA&E) systems supporting Category I/II munitions.

Cost Elements 13.1 - 13.4 Counter UAS Technology addresses JEON:
C-sUAS JEON is in response to the U.S. Strategic Command Joint Emergent Operational Need Statement, ST-0008, dtd 25Jul16. The rapid deployment capability (RDC) plan is to deploy CORIAN C-UAS systems at both NB Kitsap-Bangor and NSB King's Bay. Recent UAV sightings over several Naval installations comes at a time when the U.S. military is scrambling to improve defenses against the rapidly evolving capabilities of remote-controlled devices. With UAVs increasingly becoming more readily available and affordable, the threat of inadvertent or unlawful flight over restricted spaces multiplies infinitely raising concern that these UAVs could be used as tools for surveillance, espionage, or hostile actions at critical Navy installations. The RDC effort also extends to the blocking vessels that escort submarines to the 100-fathom dive point and justifies the procurement of the mobile sites. Request includes funding for required for Program Management support, systems engineering, operational and safety testing to include targets and facility costs including electrical upgrades, new towers and network management.

Cost Element 13.5 Counter Small Unmanned Aircraft Systems (C-sUAS) (+$10M) is a follow-on effort to procure systems for critical Naval installations. More details available at a higher classification level.

FY 2017 decrease in Physical Security Equipment OPN by $4.240M as required for the Department of the Navy to comply with the Bipartisan Budget Act of 2015.

OCO:
OCO: Mobile Security Force-Active - $15.2M OCO request
NECC has identified Visual Augmentation Systems (VAS) capability gaps encountered during missions in combat zones while in theater which are causing degradation of mission effectiveness. Funding will provide the warfighter the ability to achieve and maintain situational awareness in extreme low-light and no light environments while performing combat operations. VAS is necessary to avoid incidental engagement of non-combatants while maintaining the greatest possible distance from threats. Funding provides the warfighter the necessary VAS equipment to maintain battle dominance and avoid risk of fratricide.

OCO request will procure (210) Wide Field of View goggles ($9K per unit, $1.9M total), (198) M2WS Thermal Weapon Sights ($50K per unit, $9.9M total), (50) Handheld Thermal Video Recorders ($20K per unit, $1M total), and (10) Combatant Craft Forward-Looking Infrared System (Next Generation) ($240K per unit, $2.4M total) for Coastal Riverine Force and Maritime Expeditionary Security Force units.

OCO: Biometrics - $0.69M OCO request
OCO OPN funding is required procure and field (20) Identity Dominance System (IDS) tactical kits and supporting equipment ($32K per unit, $640K total plus $50K equipment fielding and training) to Indian Head Explosive Ordnance Disposal Technical Division's (IHEODTD) Expeditionary Exploitation Unit 1 (EXU-1) for deploying with operational units.

The Identity Dominance System (IDS) is the US Navy's biometrics program. Naval Surface Warfare Center (NSWC) Indian Head Explosive Ordnance Disposal Technical Division's (IHEODTD) Expeditionary Exploitation Unit 1 (EXU-1) requires biometrics collection equipment to perform their mission.

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 07 / 2	P-1 Line Item Number / Title: 8128 / Physical Security Equipment	Aggregated Items Title: Physical Security Equipment

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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) MOBILE SECURITY FORCES - NCW ACTIVE COMPONENT																				
1.1) MOBILE SECURITY FORCE ACTIVE COMPONENT	A		-	-	60.230	-	-	-	-	-	7.903	-	-	8.509	-	-	15.200	-	-	23.709
Subtotal: 1) MOBILE SECURITY FORCES - NCW ACTIVE COMPONENT			**-**	**-**	***60.230***	**-**	**-**	**-**	**-**	**-**	***7.903***	**-**	**-**	***8.509***	**-**	**-**	***15.200***	**-**	**-**	***23.709***
2) NAVAL COASTAL WARFARE FORCES-RES COMP (SEC FOR)																				
2.1) MOBILE SECURITY FORCE RESERVE COMPONENT	A		-	-	13.542	-	-	1.293	-	-	3.676	-	-	5.317	-	-	-	-	-	5.317
Subtotal: 2) NAVAL COASTAL WARFARE FORCES-RES COMP (SEC FOR)			**-**	**-**	***13.542***	**-**	**-**	***1.293***	**-**	**-**	***3.676***	**-**	**-**	***5.317***	**-**	**-**	**-**	**-**	**-**	***5.317***
3) SSBN WATERFRONT RESTRICTED AREA SECURITY (WRAS)																				
3.1) SSBN WATERFRONT RESTRICTED AREA SECURITY (WRAS)	A		-	-	354.077	-	-	32.971	-	-	38.164	-	-	28.250	-	-	-	-	-	28.250
Subtotal: 3) SSBN WATERFRONT RESTRICTED AREA SECURITY (WRAS)			**-**	**-**	***354.077***	**-**	**-**	***32.971***	**-**	**-**	***38.164***	**-**	**-**	***28.250***	**-**	**-**	**-**	**-**	**-**	***28.250***
4) ANTI-TERRORISM/FORCE PROTECTION AFLOAT PHYSICAL SECURITY EQUIPMENT (ATFP PSE)																				
4.1) ATFP PHYSICAL SECURITY EQUIPMENT (PSE)	A		-	-	20.665	-	-	2.380	-	-	2.837	-	-	3.106	-	-	-	-	-	3.106
Subtotal: 4) ANTI-TERRORISM/ FORCE PROTECTION AFLOAT PHYSICAL SECURITY EQUIPMENT (ATFP PSE)			**-**	**-**	***20.665***	**-**	**-**	***2.380***	**-**	**-**	***2.837***	**-**	**-**	***3.106***	**-**	**-**	**-**	**-**	**-**	***3.106***
5) BIOMETRICS																				
5.1) BIOMETRICS	A		-	-	14.665	-	-	1.800	-	-	0.394	-	-	0.250	-	-	0.690	-	-	0.940
Subtotal: 5) BIOMETRICS			**-**	**-**	***14.665***	**-**	**-**	***1.800***	**-**	**-**	***0.394***	**-**	**-**	***0.250***	**-**	**-**	***0.690***	**-**	**-**	***0.940***
6) ENHANCED MARITIME INTERCEPTION OPERATIONS (EMIO)																				
6.1) ENHANCED MARITIME INTERCEPTION OPERATIONS (EMIO)	A		-	-	34.087	-	-	3.280	-	-	3.649	-	-	3.939	-	-	-	-	-	3.939
Subtotal: 6) ENHANCED MARITIME INTERCEPTION OPERATIONS (EMIO)			**-**	**-**	***34.087***	**-**	**-**	***3.280***	**-**	**-**	***3.649***	**-**	**-**	***3.939***	**-**	**-**	**-**	**-**	**-**	***3.939***
7) NAVY EXPEDITIONARY LOGISTICS SUPPORT GROUP																				
7.1) NAVY EXPEDITIONARY	A		-	-	10.452	-	-	0.695	-	-	0.881	-	-	0.263	-	-	-	-	-	0.263

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 07 / 2	**P-1 Line Item Number / Title:** 8128 / Physical Security Equipment	**Aggregated Items Title:** Physical Security Equipment

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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)
LOGISTICS SUPPORT GROUP																				
Subtotal: 7) NAVY EXPEDITIONARY LOGISTICS SUPPORT GROUP			**-**	**-**	***10.452***	**-**	**-**	***0.695***	**-**	**-**	***0.881***	**-**	**-**	***0.263***	**-**	**-**	**-**	**-**	**-**	***0.263***
8) MOBILE DIVING SALVAGE UNIT (MDSU) OUTFITTING EQUIPMENT																				
8.1) MOBILE DIVING AND SALVAGE UNIT OUTFITTING EQUIPMENT	A		-	-	6.510	-	-	0.717	-	-	2.889	-	-	0.324	-	-	-	-	-	0.324
Subtotal: 8) MOBILE DIVING SALVAGE UNIT (MDSU) OUTFITTING EQUIPMENT			**-**	**-**	***6.510***	**-**	**-**	***0.717***	**-**	**-**	***2.889***	**-**	**-**	***0.324***	**-**	**-**	**-**	**-**	**-**	***0.324***
9) NAVAL SPECIAL WARFARE																				
9.1) NAVAL SPECIAL WARFARE FORCES	A		-	-	26.940	-	-	2.524	-	-	3.222	-	-	4.302	-	-	-	-	-	4.302
Subtotal: 9) NAVAL SPECIAL WARFARE			**-**	**-**	***26.940***	**-**	**-**	***2.524***	**-**	**-**	***3.222***	**-**	**-**	***4.302***	**-**	**-**	**-**	**-**	**-**	***4.302***
10) ANTI-TERRORISM FORCE PROTECTION ASHORE																				
10.1) ELECTRONIC HARBOR SECURITY SYSTEMS (EHSS)/ BARRIERS	A		-	-	56.899	-	-	3.024	-	-	3.084	-	-	3.146	-	-	-	-	-	3.146
10.2) PHYSICAL SECURITY/ACCESS CONTROL - GATES AUTOMATION	A		-	-	96.260	-	-	6.400	-	-	-	-	-	-	-	-	-	-	-	-
10.3) MILITARY CONSTRUCTION INTRUSION DETECTION SYSTEMS (MILCON IDS)	A		-	-	73.663	-	-	9.600	-	-	9.763	-	-	9.923	-	-	-	-	-	9.923
10.4) COMMAND, CONTROL, COMPUTER, COMMUNICATIONS AND INTELLIGENCE (C4I)	A		-	-	126.944	-	-	19.294	-	-	22.216	-	-	24.653	-	-	-	-	-	24.653
10.5) AEGIS ASHORE	A		-	-	4.500	-	-	4.500	-	-	2.228	-	-	-	-	-	-	-	-	-
Subtotal: 10) ANTI-TERRORISM FORCE PROTECTION ASHORE			**-**	**-**	***358.266***	**-**	**-**	***42.818***	**-**	**-**	***37.291***	**-**	**-**	***37.722***	**-**	**-**	**-**	**-**	**-**	***37.722***
11) VACIS																				
11.1) ZBV Military Trailer	A		1,121K	2	2.242	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 11) VACIS			**-**	**-**	***2.242***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 07 / 2	**P-1 Line Item Number / Title:** 8128 / Physical Security Equipment	**Aggregated Items Title:** Physical Security Equipment

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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) Counter UAS Technology [1]																				
12.1) Fixed Site (JEON) [2]	A		-	-	-	5,000K	1	5.000	2,684K	1	2.684	-	-	-	-	-	-	-	-	-
12.2) Mobile Sites (JEON) [3]	A		-	-	-	-	-	-	1,950K	2	3.900	-	-	-	-	-	-	-	-	-
12.3) Program Support (JEON) [4]	A		-	-	-	-	-	-	-	-	1.493	-	-	-	-	-	-	-	-	-
12.4) Integration (JEON) [5]	A		-	-	-	-	-	-	-	-	1.220	-	-	-	-	-	-	-	-	-
12.5) Counter Small Unmanned Aircraft Systems (C-sUAS) [6]	A		-	-	-	-	-	-	-	-	-	-	-	10.000	-	-	-	-	-	10.000
Subtotal: 12) Counter UAS Technology			**-**	**-**	***0.000***	**-**	**-**	***5.000***	**-**	**-**	***9.297***	**-**	**-**	***10.000***	**-**	**-**	**-**	**-**	**-**	***10.000***
Total			**-**	**-**	**901.676**	**-**	**-**	**93.478**	**-**	**-**	**110.203**	**-**	**-**	**101.982**	**-**	**-**	**15.890**	**-**	**-**	**117.872**

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

Footnotes:

[1] COUNTER UAS TECHNOLOGY Recent UAV sightings over several Naval installations comes at a time when the U.S. military is scrambling to improve defenses against the rapidly evolving capabilities of remote-controlled devices. With UAVs increasingly becoming more readily available and affordable, the threat of inadvertent or unlawful flight over restricted spaces multiplies infinitely raising concern that these UAVs could be used as tools for surveillance, espionage, or hostile actions at critical Navy installations.

[2] Procures fixed site CORIAN system for NSB Kings Bay (FY17); NB Kitsap-Bangor previously funded (FY16). NB Kitsap-Bangor was more expensive due to the procurement of additional sensors to account for the more extreme topography compared to NSB Kings Bay.

[3] Procures two mobile sites to protect assets while in transit to and from sea.

[4] Funds system engineering, test and evaluation, and certification for fixed and mobile sites.

[5] Funds fixed site and mobile integration.

[6] Follow-on effort to procure systems for critical Naval installations. More details available at a higher classification level.

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 07: Personnel & Command Support Equip / BSA 2: Command Support Equipment	**P-1 Line Item Number / Title:** 8161 / Enterprise Information Technology

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

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	274.274	95.094	67.544	19.789	0.000	19.789	22.300	19.130	18.547	18.947	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	274.274	95.094	67.544	19.789	0.000	19.789	22.300	19.130	18.547	18.947	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**274.274**	**95.094**	**67.544**	**19.789**	**0.000**	**19.789**	**22.300**	**19.130**	**18.547**	**18.947**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	2.097	0.172	1.111	-	1.111	0.154	0.186	0.175	0.315	Continuing	Continuing
Flyaway Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Distance Support: A Navy Enterprise effort that combines people, processes and technology into a collaborative infrastructure without regard to geographic location. Distance Support (DS) is comprised of the following three components: Infrastructure, Content and Customer Relationship Management (CRM). Infrastructure provides the "transport" of DS applications and data to and from operating units and shore installations in support of various processes. Technology infrastructure also includes the data replication and shipboard IT servers that bring the DS functionality to the sailor. Content includes specific applications, systems and processes produced by various Navy communities of Interest. Customer Relationship Management (CRM) capabilities include the "Navy 311" Website, BMC Remedy Software, Shared Data Environment, Business Intelligence and Predictive Modeling software, Avaya telephony and Call Management System, and the Navy 311 Support Center, which is the hub of Distance Support, providing the single point of entry for support requests for fleet customers on a 24 hours per day, 7 days per week, 365 days per year basis (24/7/365). The Navy Information Application Product Suite (NIAPS) is comprised of integrated hardware and GOTS software that coalesce various workstations, storage, servers, applications and content into a common environment for shipboard deployment. NIAPS provides data compression and replication capability and is designed to re-host typically shore/web-based applications afloat to minimize bandwidth and provide maximum capability. NIAPS is comprised of nearly 40 applications and databases launched from a single Distance Support (DS) Portal on NIAPS server. NIAPS runs applications specifically tailored to individual afloat units for training, career management, maintenance, technical drawings, logistics, human resources, as well as morale and welfare support (Quality of life) which are produced by various Navy functional organizations. NIAPS gives a ship access to critical applications and data using internal shipboard networks, which is faster and cheaper than using external bandwidth and satellite time.

Risk Management Information: RMI program initiates transition of existing legacy and core safety programs and risk management systems, applications and data into a single Program of Record (POR). RMI capability consists of four distinct safety capabilities: Streamlined Incident Reporting (SIR), Single Point of Entry (SPOE), Safety Program Management(SPM) and Analysis & Dissemination (A&D).

Data Center Consolidation (DCC): DCC procures and installs data center hardware, software, and licenses for established Navy Enterprise Data Centers (NEDCs) and other approved hosting locations as part of the Department of Defense's Information Technology efficiency to consolidate and standardize the Navy's Data Center footprint. DCC utilizes architecture, standards, and data strategy for enterprise solutions that leverage economies of scale for the consolidation of Navy Data Centers across the Department of the Navy. Oversight and execution of all DCC efforts are under the direction of Data Center and Application Optimization (DCAO) under Program Executive Office - Enterprise Information Systems (PEO EIS).

Telephony Suite Replacement and Modernization:
The Department of Defense (DoD), Chief Information Officer (CIO) Memorandum of 5 November 2015 "DoD CIO Capability Priorities for Fiscal Years 2018-2022" lists as a priority, the modernization of network infrastructure to be regionally based, centrally managed and cyber secure. This includes migrating existing infrastructure from Time Division Multiplexing (TDM) to Internet Protocol (IP) based communications to enable Unified Capabilities (UC). Telephony procures and integrates Commercial-Off-The-Shelf (COTS) hardware and software to meet the DoD-CIO TDM to IP mandate for the Navy. All efforts are performed

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 07: Personnel & Command Support Equip / BSA 2: Command Support Equipment	P-1 Line Item Number / Title: 8161 / Enterprise Information Technology	
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A		

in accordance with policy and procedures set forth in Department of Defense Instruction (DoDI) 8100.03, Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 6212.01 and CJCSI 6215.01D and DoD Unified Capabilities Requirement 2013. Program requirements include: Voice over Internet Protocol (VoIP), Voice over Secure Internet Protocol (VoSIP), Video Teleconferencing over Secure Internet Protocol (VTCoSIP), Telephony Unified Messaging System (TUMS), Regional Telephony Management System (RTMS), Navy Video Conferencing System (NVCS), NVCS Coalition (NVCS-C), Internet Protocol (IP) Trunking, Aegis Ashore, and Telephony systems infrastructure (e.g. cable plant). Telephony system installations and/or upgrades occur at facilities in accordance with requirements as identified by Navy Information Forces (NAVIFOR), Office of the Chief of Naval Operations (OPNAV), and Missile Defense Agency (MDA) (i.e. FLTNOCs, Fleet Telecommunications sites, and Aegis Ashore Sites).

Justification:

The Base Level Information Infrastructure (BLII) nomenclature will be called Navy/Marine Corps Intranet (NMCI) OCONUS in FY18. NMCI OCONUS, along with related US Navy pier side infrastructure, will transition to the NGEN business model upon the award of the NGEN follow-on contract and will be executed out of LI 8164. Funding for NMCI OCONUS has been transferred to LI 8164 beginning in FY18. This will allow the Naval Enterprise Networks (NEN) to function as common global network, through the institution of a single approved service operating model.

Distance Support: In FY18, Distance Support Customer Relationship Management (DS-CRM) funds the procurement of new BMC Remedy Licenses (to support growth and use of Remedy and Shared Data Environment) for both NIPR and SIPR, Optimal Identity Management Licenses (Centralized and automated CAC authentication and authorization for all NAVY 311 applications), Hardware costs (for increased storage capacity at NEDC NOLA in support of growth of the Shared Data Environment caused by increased NAVY partnering and usage), and all the associated labor for the implementation, optimization, configuration, and integration of the listed software and hardware in environment. FY18 also funds the procurement of Microsoft Windows 2012 and SQL Server 2012 licenses to support installation of NIAPS V3.0. NIAPS V3.0 replaces NIAPS 2.4.X, which utilizes end-of-life software that is not PKI compliant, and meets newly established cybersecurity requirements to include renewal of ATOs within the RMF.

Data Center Consolidation (DCC): In FY18, OPN funding will procure servers (encompassing both hardware and software components), ancillary equipment associated with the servers (racks, cables, switches, etc.), and integration and installation efforts as needed to meet additional hosting requirements as consolidated applications are hosted in approved hosting locations, and as a part of regular data center technical refresh. Regular technical refresh is required to maintain cyber security readiness and accreditation at the data centers under DCAO's purview.

Telephony Suite Replacement and Modernization: In FY18, the program will continue procurement and installation of Internet Protocol (IP)- based equipment in support of DoD's Everything over IP (EoIP) mandate and Telephony requirements including: Voice over Internet Protocol (VoIP), Voice over Secure Internet Protocol (VoSIP), Video Teleconferencing over Secure Internet Protocol (VTCoSIP), Telephony Unified Messaging System (TUMS), Regional Telephony Management System (RTMS), Navy Video Conferencing System (NVCS), NVCS Coalition (NVCS-C), Internet Protocol (IP) Trunking, Aegis Ashore, and Telephony systems infrastructure (e.g. cable plant). Telephony system installations and/or upgrades occur at facilities in accordance with requirements as identified by Navy Information Forces (NAVIFOR), Office of the Chief of Naval Operations (OPNAV), and Missile Defense Agency (MDA) (i.e. FLTNOCs, Fleet Telecommunications sites, and Aegis Ashore Sites).

FY18-FY22 procurement and installation unit cost variances are based on the location of the region/site (CONUS,OCONUS), number of sites in the region, the various site architectures and requirements, the age and type of systems modernized, and user density (number of users).

Telephony quantities represent the number of regions that are being replaced/modernized in the given Fiscal Year (FY). Each region has numerous sites with unit and installation costs varying based on the location of the region/site (CONUS,OCONUS), number of sites in the region, the various site architectures and requirements, the age and type of systems modernized, and user density (number of users). Regions: CONUS: Southwest, Pacific Northwest, Southeast, Northeast, Mid-Atlantic. OCONUS: Western Pacific, Guantanamo, Europe, Middle East - Installation schedule reflects 6 months of integration and PITCO after delivery and prior to installation.

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 07: Personnel & Command Support Equip / BSA 5: Other	**P-1 Line Item Number / Title:** 8150 / Cancelled Account Adjustments
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A — **Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A	

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	0.017
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	0.017
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.017**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**-**	**0.017**
(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:

Funding is to reimburse the Department of Treasury for cancelled account liabilities.

Justification:

Funding is to reimburse the Department of Treasury for cancelled account liabilities.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 07: Personnel & Command Support Equip / BSA 5: Other	**P-1 Line Item Number / Title:** 8164 / Next Generation Enterprise Service

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A		

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	104.642	98.216	104.584	0.000	104.584	144.208	133.638	148.425	151.400	-	885.113
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	104.642	98.216	104.584	0.000	104.584	144.208	133.638	148.425	151.400	-	885.113
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**104.642**	**98.216**	**104.584**	**0.000**	**104.584**	**144.208**	**133.638**	**148.425**	**151.400**	**-**	**885.113**
(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:

Next Generation Enterprise Network (NGEN) is the acquisition approach and contract vehicle used to manage the Navy Marine Corps Intranet (NMCI) enterprise network which will provide secure, net-centric data and services to Navy and Marine Corps personnel and represents the continuous evolution of information technology at the Department of Navy (DoN). Additionally NGEN provides security for the non-classified Internet Protocol (IP) Router Network (known as NIPRNET) and the classified Secret Internet Protocol Router Network (SIPRNET). NIPRNET is a private IP network used to exchange unclassified information, including information subject to controls on distribution, among the private network's users. SIPRNET is a system of interconnected computer networks used to transmit classified information (up to and including information classified SECRET) by packet switching over the "completely secure environment." NGEN forms the foundation for the DoN's future Naval Network Environment that will be interoperable with and leverage other Department of Defense-provided Net-Centric Enterprise Services.

The Base Level Information Infrastructure (BLII) nomenclature will be called the Navy/Marine Corps Intranet (NMCI) OCONUS beginning in FY18, realigning funding from 8161 to 8164. NMCI OCONUS, along with related US Navy pier side infrastructure, will transition to the NGEN business model upon the award of the NGEN follow-on contract. This will allow the Naval Enterprise Networks (NEN) to function as common global network, through the institution of a single approved service operating model.

[P5 / NGEN - Technical Refresh and Modernization Plan (TRMP)]: Technology Refresh and Modernization Plan (TRMP): TRMP is a requirement performed by Naval Enterprise Networks (NEN) which focuses on upgrading the existing Hardware and or Software to mitigate End of Life, End of Support and End of Software Support issues in order to maintain network performance, Architecture/Solution Accreditations and network security. TRMP also allows the NEN program to insert and or augment new technology solutions (H/W and/or S/W) to meet evolving requirements (e.g. JRSS and ORT) and keep closer pace with industry advancements.

The Base Level Information Infrastructure (BLII) nomenclature will be called Navy/Marine Corps Intranet (NMCI) OCONUS in FY18. NMCI OCONUS is a DoN initiative to deliver comprehensive, end-to-end information and telecommunication services to OCONUS Navy shore commands by using a common computing environment for both the NIPRNet and SIPRNet. NMCI OCONUS will provide the infrastructure and cyber security measures to support the OCONUS Navy Enterprise Network (ONE-Net), and the operations of ONE-Net. NMCI OCONUS also includes ONE-Net installations supporting the presidential directed initiative for Ballistic Missile Defense Aegis Ashore capability in designated countries (e.g. Romania, Poland), as well as Piers IT infrastructure to support connectivity for Naval ships world-wide at pier side (CONUS and OCONUS). ONE-Net will continue operating under the government owned/government operated (GO/GO) business model and will transition to the NGEN GO/CO support structure and operating model upon the award of the NGEN follow-on contract in FY18. Consequently, the NGEN TRMP funding will be used to refresh the common global Naval Enterprise Network (combined NGEN CONUS and OCONUS).

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 07: Personnel & Command Support Equip / BSA 5: Other	**P-1 Line Item Number / Title:** 8164 / Next Generation Enterprise Service	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

[P5 / NGEN - Operation Rolling Tide / Cyber Resiliency]: Operation Rolling Tide (ORT) is an initiative developed in response to the on-going improvement of the Navy Marine Corps Intranet security posture through the following mechanisms: Account Hardening, Server/Workstation Hardening, Network Compartmentalization, Network Management Enhancements, Application Protection Enhancements, Security Analysis and Fusion Capabilities, Cyber Situational Awareness (Cyber Sensor Grid) Improvements, Cyber Terrain Mapping, and Cyber Terrain Hardening. The ORT projects will result in a more robust and secure network with the goal of better real time detection and response to any malicious activity. In FY18 and beyond, ORT will be integrated into the ongoing Cyber Resiliency program and will compliment key Cyber initiatives such as CYBERSAFE, Risk Management Framework (RMF), Navy Cyber Situational Awareness (NCSA) and the Joint Information Environment (JIE) as the network migrates toward a Cloud operating model, as well as refreshed as a part of TRMP.

[P5 / NGEN- Joint Regional Security Stack (JRSS)]: The Joint Regional Security Stack (JRSS) is a Joint Information Environment (JIE) initiative that consolidates Cybersecurity control points for the Department of Defense (DoD) and mission support organizations. JRSS will replace the existing Navy cyber protection boundaries allowing for a common and operable cyber defense network across all of the DoD.

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 07: Personnel & Command Support Equip / BSA 5: Other	**P-1 Line Item Number / Title:** 8164 / Next Generation Enterprise Service

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

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	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)
P-5	1 / Next Generation Enterprise Service				- / 0.000	- / 104.642	- / 98.216	- / 104.584	- / 0.000	- / 104.584
P-40	**Total Gross/Weapon System Cost**				**- / 0.000**	**- / 104.642**	**- / 98.216**	**- / 104.584**	**- / 0.000**	**- / 104.584**

*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 sum exactly due to rounding.

Justification:
NMCI OCONUS (BLII) funding was realigned from LI 8161 to 8164 beginning in FY18 and incorporated into the Technology Refresh and Modernization Plan (TRMP) line.

The Base Level Information Infrastructure (BLII) nomenclature from LI 8161, will be called the Navy/Marine Corps Intranet (NMCI) OCONUS.

NMCI OCONUS, along with related US Navy Pier side infrastructure, will transition to the NGEN business model upon the award of the NGEN follow-on contract. This will allow the Naval Enterprise Networks (NEN) to function as common global network, through the institution of a single approved service operating model in conjunction with the current Navy Marine Corps Intranet (NMCI) network. In essence, the CONUS and OCONUS networks are intended to merge into a single allocated baseline as part of the NGEN Re-compete contract.

NMCI OCONUS funding will provide technical refresh of existing antiquated network equipment allowing for the refresh of 2,000+ network devices that have reached end of life/support and now present security risks to the network, along with 9,000+ antiquated PCs which will be at the end of their warranty. It will also provide the required systems/security engineering and integration, production, installation and implementation of hardware and software in support of the transition of ONE-NET into NMCI. This will result in a fully integrated, navy network with NIPR (unclassified) and SIPR (classified) enclaves operated via a controlled common operational approach. Additionally FY18 funding will be used to upgrade existing End of Life (EOL) infrastructure (routers, switches, servers, etc.) for one CONUS PIERS region (Atlantic Southeast) and two OCONUS PIERS locations (Korea and Singapore). This technical refresh will also allow for the transition of the OCONUS Enterprise Pier Connectivity Architecture, into a single global network under the next NGEN contract.

Technology Refresh and Modernization Plan (TRMP) involves the modernization and periodic replacement of NMCI hardware/software and assigned non-IT assets identified in the NGEN TRMP plan required to support network performance. The objective of TRMP is to improve and maintain network performance, increase network capacity based on project demand, improve security posture from vulnerabilities and integrate DoD and/or DoN mandates. NGEN assets are Government Owned/Contractor Operated (GO/CO). A significant amount of those assets have reached End-of-Life and are no longer supported by the vendors, which makes our infrastructure vulnerable to external cyber-attacks; and diminishes enterprise solutions performance and optimization. Our current infrastructure is aged and modernization is essential to improve storage capabilities to accommodate new emerging workforce requirements; maintain network performance, architecture/solution accreditations, and network security. The procurement of these assets will continue in FY18 and beyond. TRMP also allows the NEN program to insert and or augment new technology solutions (H/W and/or S/W) to meet evolving requirements (e.g. JRSS and ORT) and keep closer pace with industry advancements.Hence, future TRMP funding will be utilized to transition to 10GB networks. The final phase of ORT cybersecurity enhancements were procured in FY16 for deployment in FY17. Therefore, beginning in FY18, previously deployed ORT components that become obsolete will be refreshed as part of TRMP to maintain the security posture of the network, which will become part of the baseline for the follow-on NGEN contract. New and advanced cyber security efforts, not included in the NGEN Re-compete baseline, will leverage Cyber Resiliency funding.

The Joint Information Environment (JIE) scope which included JRSS was laid out broadly in a series of Joint Chiefs of Staff Tank and Deputy Secretary Management Action Group (DMAG) decisions in 2012. DoD CIO, via the JIE EXCOM, has further refined the priorities of those tasks, consistent with the implementation strategy. JRSS is DoD's near term modernization priority, and is fielded as an Enterprise Service, as designated by the DoD CIO in November 2015. With the designation of JRSS as an Enterprise Service, the DoD CIO required JRSS be separately identified within the DoD FY17 President's IT Budget submission.

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 07: Personnel & Command Support Equip / BSA 5: Other	**P-1 Line Item Number / Title:** 8164 / Next Generation Enterprise Service	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

The funding supports the planning, engineering and movement of Navy Networks behind the Joint Regional Security Stack (JRSS) through firewall functionality, intrusion detection and prevention, enterprise management, virtual routing and forwarding (VRF), and other network security capabilities. This OSD JRSS initiative comprises several critical Joint Information Environment capabilities including network modernization, initial implementation of a single security architecture, joint management of DoD IT security, and improvements to cyber-security situational awareness. JRSS transforms the network security, aligning the DoD Components to a common capability, which significantly improves DoD mission effectiveness through situational awareness visibility for all echelons within DoD.

Exhibit P-5, Cost Analysis: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 07 / 5	**P-1 Line Item Number / Title:** 8164 / Next Generation Enterprise Service	**Item Number / Title [DODIC]:** 1 / Next Generation Enterprise Service
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	104.642	98.216	104.584	0.000	104.584
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	104.642	98.216	104.584	0.000	104.584
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**104.642**	**98.216**	**104.584**	**0.000**	**104.584**
(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)*	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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 - Hardware NGEN - R Cost																		
Recurring Cost																		
1.1.1) NGEN - Technical Refresh and Modernization Plan (TRMP)	-	-	-	-	-	72.642	-	-	73.088	-	-	103.899	-	-	-	-	-	103.899
1.1.2) NGEN - Operation Rolling Tide / Cyber Resiliency	-	-	-	-	-	32.000	-	-	0.500	-	-	-	-	-	-	-	-	-
1.1.3) NGEN- Joint Regional Security Stack (JRSS)	-	-	-	-	-	-	-	-	24.628	-	-	0.685	-	-	-	-	-	0.685
Subtotal: Recurring Cost	-	-	-	-	-	*104.642*	-	-	*98.216*	-	-	*104.584*	-	-	-	-	-	*104.584*
Subtotal: Hardware - Hardware NGEN - R Cost	**-**	**-**	**-**	**-**	**-**	***104.642***	**-**	**-**	***98.216***	**-**	**-**	***104.584***	**-**	**-**	**-**	**-**	**-**	***104.584***
Gross/Weapon System Cost	**-**	**-**	**0.000**	**-**	**-**	**104.642**	**-**	**-**	**98.216**	**-**	**-**	**104.584**	**-**	**-**	**0.000**	**-**	**-**	**104.584**

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Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 08: Spares and Repair Parts / BSA 1: Spares And Repair Parts	**P-1 Line Item Number / Title:** 9020 / Spares and Repair Parts

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: 000		

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	276.333	199.660	278.565	1.178	279.743	279.312	317.532	326.580	254.036	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	276.333	199.660	278.565	1.178	279.743	279.312	317.532	326.580	254.036	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**276.333**	**199.660**	**278.565**	**1.178**	**279.743**	**279.312**	**317.532**	**326.580**	**254.036**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	0.454	0.264	-	0.264	0.522	0.626	0.650	0.528	Continuing	Continuing
Flyaway Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

OPN-8 Budget Activity (BA-08) funds Spares and Repair parts identified in Budget Activities (BA 01-07), which are required during the Interim pre-MSD period in support of Initial and Vendor Direct spares requirements, and Outfitting Spares requirements during the post MSD period. The interim period accounts for the initial material support requirements, i.e Installation and Check-Out Initial (INCO-I), Installation and Check-Out Replenishment (INCO-R), On board Repair Parts (OBRPs), and Maintenance Assistance Modules (MAMs). These spares funds procure repairable and consumable items to be provided to active ships, shore sites and expeditionary units for installation and maintenance of new equipment/capabilities and modernization /upgrades financed in OPN BAs 1-7. Vendor Direct material requirements acquired in the interim period supports the Depot turn-a-round, and Depot through put capabilities for Appropriation Procurement Accounts. The Outfitting period funds and supports authorized Allowance Change Requests (ACRs), Range and Depth increases, Modernization to support new/upgraded equipment installs, Maintenance Changes to previously Installed equipment, as well as CNO directed availabilities and RCOH efforts.

OPN-8 funding additionally provides for the Initial lay in of Shore Based support requirements in support of Expeditionary Combat Forces and EOD units approved by OPNAV as appropriate.

The DoN has instituted numerous initiatives to better equip the Fleet and improve the execution of this line. Flag and SES level Spares Summits or Executive Spares Reviews are now held on monthly basis. In addition, integrated product teams were formed to deep dive estimation models and schedules of program requirements. Bi-weekly Spares Execution Working Group Updates are held between Resource Sponsors, BSO's and other Navy leadership.

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 08: Spares and Repair Parts / BSA 1: Spares And Repair Parts	**P-1 Line Item Number / Title:** 9020 / Spares and Repair Parts
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A / **Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: 000	

Exhibits Schedule					Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	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)*
P-18	OPN spares				- / -	- / 276.333	- / 199.660	- / 278.565	- / 1.178	- / 279.743
P-40	**Total Gross/Weapon System Cost**				**- / 0.000**	**- / 276.333**	**- / 199.660**	**- / 278.565**	**- / 1.178**	**- / 279.743**

Title represents the P-18 Title for Spares.

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

Justification:
Increase Justifications

Initial Spares

0840 / Sub Periscope, Imaging and Supt Equip Prog - (Combined narrative for initial and replenishment) (Initial) Increase in spares line is as a result of the new Low Profile Photonics Mast (LPPM). The design of the mast is modular to enable it to be taken apart if a sub section does not pass all testing during the installation. Spare subsections of the new mast need to be available as INCO items if there is a failure so the subsection can be replaced. There are also a small QTY of parts that will be ordered to repair the failed subsection. (

0945 / Submarine Batteries - Increase supports the introduction and installation of new Valve Regulated Lead Acid (VRLA) batteries across the submarine fleet.

0977 / Underwater EOD Systems - Increase due to support the increased inventory of end items for Expeditionary MCM companies. There has been a significant increase in end items [MK18 Mod 1, Mod 2 unmanned undersea vehicles (UUV) and MK19 remotely operated vehicle (ROV)] procured that require spares support.

1602 / LCS ASW Mission Modules - The ASW Mission Modules is an incremental acquisition for new capability. The increase is associated with required initial spares associated with the fielding of new initial capability for the ASW Mission Modules.

1603 / LCS SUW Mission Modules - The SUW Mission Modules is an incremental acquisition for new capability. The increase is associated with required initial spares associated for fielding of the new missile capability added to the SUW Mission Modules.

2150 / SSN Acoustic Equipment - Funding line 2150 / SSN Acoustic Equipment (initial spares) was created for PB17 to consolidate lines 2147 and 2181 into one line (2147 and 2181 requirements are zero in DON 18 starting in 2017).

2210 / Submarine Acoustic Warfare System - Additional funding to procure spares to support additional countermeasure system acoustic conversion kits.

2237 / SURTASS (Combined narrative) - SURTASS Initial (JC2VG) and Replenishment (JCRVG) have an increase between PB17 to PB18 due to the requirement to support a high interest CNO Theater ASW Program where the end items have a long lead time and require funding during the constrained years.

2312/ AN/SLQ-32 - Funding increase due to a higher demand of spares requirements for SEWIP Block 1B3 and SEWIP Block
2. Increased spares requirement is due to the incorporation of the actual failure data for these systems, which was not available in the model that was used to determine spares requirement for PB17 budget submission. SEWIP Block 1B3 and SEWIP Block 2 have experienced higher than anticipated failures and failures in different components than originally predicted.

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 08: Spares and Repair Parts / BSA 1: Spares And Repair Parts	P-1 Line Item Number / Title: 9020 / Spares and Repair Parts	
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: 000		

2360 / Shipboard IW Exploit - Increase supports spares for additional Paragon-Graywing kits.

2614 / Adv Tact Data Link Sys (ATDLS) - Increase funds spares to support increased command and control processor (C2P) tech refresh production and Link 16 MIDS on Ship upgrades.

2618 / Navy Command and Control System (NCCS) - Increase funds ashore technology refresh spares.

2820 / Ashore ATC Equipment - Increase for support spares in support of additional TACAN Antenna upgrades.

2830 / Afloat ATC Equipment - Increase for support spares in support of additional TPX-46 upgrades.

2876 / Naval Mission Planning System - OCO spares for Joint Mission Planning System Maritime (JMPS-M) support equipment increase. Base year spares increase to support Hardware seat tech refresh.

2906 / Tactical/Mobile C4I Systems - Increase supports C4I upgrades at 3 MTOC sites, system enhancements to 6 DJC2 core sites, and 22 TOC and MTOC site interface compatibility upgrades.

2915 / CANES - Increase funds afloat and ashore CANES procurements and installations with spares required to operate and maintain deployed network and enterprise services infrastructure, which increase in complexity in comparison to prior year installations.

2925 / CANES Intell - Funding procures spares for classified information processing shipboard network equipment.

3010 / Shipboard Tactical Comms. - Increase provides spares for digital modular radio (DMR) MUOS IW waveform compatibility upgrades.

3050 / Ship Communications Automation - Increase funds spares for Tech insertion and engineering changes for automated digital network system (ADNS).

3130 / Submarine Communication Equipment - Increase supports additional OE-538/BRC INC II antennas.

3216 / Navy Multiband Terminal - Increase supports spares for one ship and one shore site system installation.

3415 / Info Systems Security Program (ISSP) - Increase supports initial spares for SHARKCAGE Defensive Cyber Operations (DCO) enclave to detect emerging threats in the tactical environment.

4204 / Weapons Range Support Equipment - Increase supports spares for Fallon Range virtual construct.

5253 / Tomahawk Support Equipment - Funds spares to support Tactical TOMAHAWK Weapon Control Systems (TTWCS) hardware updates.

5420 / SSN Combat Control Systems - Spares increase to support technology upgrades funded under end item line 5420. This will provide the submarine the latest COTS-based upgrades to the Combat Control and the Tactical Control systems hardware and software.

5509 / Explosive Ordnance Disposal Equip - Spares previously funded out of end item program line. Moved to 9020 line for process standardization.

5661 / Submarine Training Device Mods - Increase supports spares for Submarine Multi-Mission Team Trainer (SMMTT) modernization

8161 / Enterprise Information Technology - Increase funds OCONUS peers IT upgrades spares.

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 08: Spares and Repair Parts / BSA 1: Spares And Repair Parts	P-1 Line Item Number / Title: 9020 / Spares and Repair Parts	
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: 000		

Replenishment Spares

0840 - Sub Periscope, Imaging and Supt Equip Prog - (The current MASTs that are in the fleet are aging and are failing at a faster rate. This increase will allow us to order the parts to repair and return the MASTs to the fleet. As the old mast will be in the fleet longer and side by side the new LPPM. To date as a result of past cuts to this budget line have not allowed us to order parts needed to fix the now 10 masts that are in need of repair. This item is always presented at the TMA/TMI as a fleet concern.

0942 / Virginia Class Support Equipment - Funding increase due to a higher demand of operational Virginia Class submarines utilizing the advanced equipment replacement program (AERP), driving an increase in the size of the rotatable pool.

2130 / Surface Sonar Support Equipment - Increase is result of increased availabilities for DDG and CG modernization providing opportunity for AN/SQS-53C cable replenishment.

2136 / AN/SQQ 89 Surf ASW Cmbt Sys - Depot spares for the AN/SQQ-89 increased to support depot maintenance repair actions.

2145 / AN/BQQ-5 - Increase funds the SYSCOM managed spares required to support a higher demand in maintenance of towed arrays, which send data to AN/BQQ - 5 and related systems for processing and analysis.

2237 - SURTASS (Combined narrative) - funding is increasing due to the TwinLine 29A Passive Sonar Array requirements to provide support past the planned five year module life. Refurbishment of module helps fill the gaps but a higher amount of modules are becoming not economical to repair and require replacement.

2622 / Minesweeping System Replacement - Reflects an increase in population of fielded systems supported to include LCS and additional components as technology insertion updates are incorporated into equipment.

4226 / Meteorological Equipment - increase procures Littoral Battlespace Sensors; Glider and AUV modules for Restorations of Units to ready for issue for Planned Service Life.

5111 / Ship Gun Systems Equipment - Increase procures 2J equipment for the MK20 Electro-Optical Sensor System (EOSS) and MK46 Optical Sight System (OSS) to provide available assets to support Fleet casualties.

5358 / Strategic Missile Systems Equip - Increase to support spare due to higher usage rate.

5420 / SSN Combat Control Systems - Increase to support spare due to higher usage rate.

OCO:
2876 / Naval Mission Planning System - OCO spares for Common Munitions BIT and Reprogramming Equipment (CMBRE) support equipment increase.

Exhibit P-18, Initial and Replenishment Spare and Repair Parts Justification: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 08 / 1	**P-1 Line Item Number / Title:** 9020 / Spares and Repair Parts	**Title:** OPN spares

End Item Line Item Number / Name [MDAP/MAIS]	Prior Years ($ M)	FY 2016 ($ M)	FY 2017 ($ M)	FY 2018 Base ($ M)	FY 2018 OCO ($ M)	FY 2018 Total ($ M)
Initial						
BA 01 - Ships Support Equipment						
0140 / Hybrid Electric Drive (HED)	-	0.581	0.468	0.000	-	0.000
0200 / Surface Combatant HM&E	-	0.188	0.157	0.000	-	0.000
0831 / Sub Periscopes & Imaging Equip	-	5.797	-	0.000	-	0.000
0840 / Sub Periscope, Imaging and Supt Equip Prog	-	-	2.377	5.665	-	5.665
0900 / DDG Mod	-	18.313	12.862	15.672	-	15.672
0920 / Outfitting-COSAL	-	90.328	76.602	58.141	-	58.141
0934 / LCC 19/20 Extended Service Life Program	-	0.022	-	0.000	-	0.000
0935 / Pollution Control Equipment	-	0.206	0.078	0.129	-	0.129
0942 / Virginia Class Support Equipment	-	1.856	1.894	2.124	-	2.124
0944 / LCS Class Support Equipment	-	2.693	1.823	1.492	-	1.492
0960 / CG Modernization	-	-	3.588	0.680	-	0.680
0977 / Underwater EOD Programs	-	6.075	1.786	5.355	-	5.355
0981 / Items less than $5 Million	-	0.183	-	0.000	-	0.000
1600 / LCS Common Mission Modules Equipment	-	2.173	0.061	0.118	-	0.118
1601 / LCS MCM Mission Modules	-	0.966	3.964	4.304	-	4.304
1602 / LCS ASW Mission Modules	-	0.954	0.080	0.506	-	0.506
1603 / LCS SUW Mission Modules	-	2.242	-	1.984	-	1.984
BA 02 - Communications & Electronics Equip						
2026 / SPQ-9B Radar	-	0.503	0.550	0.287	-	0.287
2040 / Radar Support	-	13.827	-	0.000	-	0.000
2136 / AN/SQQ-89 Surf ASW Cmbt Sys	-	2.927	2.058	0.869	-	0.869
2147 / SSN Acoustics	-	15.391	-	0.000	-	0.000
2150 / SSN Acoustic Equipment	-	-	8.178	22.381	-	22.381
2176 / Undersea Warfare Support Equipment	-	0.052	-	0.000	-	0.000
2181 / Sonar Switches and Transducers	-	0.517	-	0.000	-	0.000
2210 / Submarine Acoustic Warfare System	-	0.401	0.366	2.023	-	2.023
2213 / Surface Ship Torpedo Def (SSTD)	-	0.753	0.535	0.853	-	0.853
2237 / SURTASS	-	0.795	-	2.111	-	2.111
2246 / Maritime Patrol and Reconnaisance Force	-	0.722	0.357	0.000	-	0.000
2312 / AN/SLQ-32	-	4.228	1.002	11.976	-	11.976

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End Item Line Item Number / Name [MDAP/MAIS]	Prior Years ($ M)	FY 2016 ($ M)	FY 2017 ($ M)	FY 2018 Base ($ M)	FY 2018 OCO ($ M)	FY 2018 Total ($ M)
2360 / Shipboard IW Exploit	-	4.126	1.375	6.513	-	6.513
2361 / Automatic Identification System (AIS)	-	-	-	0.010	-	0.010
2560 / Submarine Supt Equip Prog	-	1.972	-	0.000	-	0.000
2606 / Cooperative Engagement Capability	-	1.413	1.078	1.492	-	1.492
2608 / Trusted Information System (TIS)	-	0.008	0.004	0.000	-	0.000
2611 / Naval Tact Cmd Supt Sys (NTCSS)	-	0.219	0.122	0.204	-	0.204
2614 / Adv Tact Data Link Sys (ATDLS)	-	1.225	0.824	5.647	-	5.647
2618 / Navy Command and Control System (NCCS)	-	0.182	0.029	0.150	-	0.150
2622 / Minesweeping System Replacement	-	0.498	0.830	1.202	-	1.202
2624 / Shallow Water Mine CM Ship	-	1.925	0.523	0.073	-	0.073
2657 / NAVSTAR GPS Receivers (Space)	-	0.263	0.062	0.061	-	0.061
2676 / Strategic Platform Support Equip	-	0.989	1.224	1.641	-	1.641
2762 / Other Training Equipment	-	0.232	-	0.000	-	0.000
2804 / Depl JT Cmd & Control (DJC2)	-	0.293	-	0.000	-	0.000
2815 / MATCALS	-	0.821	-	0.000	-	0.000
2820 / Ashore ATC Equipment	-	-	4.847	9.157	-	9.157
2830 / Afloat ATC Equipment	-	-	0.099	0.606	-	0.606
2831 / Shipboard Air Traffic Control	-	0.128	-	0.000	-	0.000
2832 / Automatic Carrier Landing System	-	2.382	-	0.000	-	0.000
2840 / National Air Space System	-	1.169	-	0.000	-	0.000
2845 / Fleet Air Traffic Control Systems	-	0.699	-	0.000	-	0.000
2851 / ID Systems	-	0.140	0.076	0.146	-	0.146
2876 / Naval Mission Planning Systems	-	0.408	0.377	1.505	1.178	2.683
2906 / Tactical/Mobile C4I Systems	-	0.495	0.277	2.189	-	2.189
2914 / Distributed Common Ground System-Navy (DCGS-N)	-	2.319	0.403	0.511	-	0.511
2915 / CANES	-	9.000	3.573	11.645	-	11.645
2925 / CANES Intell	-	-	-	0.896	-	0.896
2960 / Integ Combat System Test Facility	-	0.498	0.195	0.250	-	0.250
2980 / Items less than $5 Million	-	1.348	0.598	0.627	-	0.627
3010 / Shipboard Tactical Comms	-	0.113	0.004	0.567	-	0.567
3050 / Ship Communications Automation	-	0.176	0.023	0.665	-	0.665
3057 / Communications Items under $5M	-	0.513	0.024	0.000	-	0.000

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End Item Line Item Number / Name [MDAP/MAIS]	Prior Years ($ M)	FY 2016 ($ M)	FY 2017 ($ M)	FY 2018 Base ($ M)	FY 2018 OCO ($ M)	FY 2018 Total ($ M)
3107 / Submarine Broadcast Support	-	0.453	0.030	0.064	-	0.064
3130 / Submarine Communication Equipment	-	1.048	0.305	0.701	-	0.701
3215 / Satellite Communications Systems	-	1.213	0.056	0.021	-	0.021
3216 / Navy Multiband Terminal (NMT)	-	0.143	0.040	0.126	-	0.126
3415 / Info Systems Security Program (ISSP)	-	1.520	0.163	0.951	-	0.951
BA 03 - Aviation Support Equipment						
4204 / Weapons Range Support Equipment	-	3.180	3.000	5.329	-	5.329
4213 / Aircraft Support Equipment	-	4.323	3.329	4.387	-	4.387
4226 / Meteorological Equipment	-	0.267	0.169	0.001	-	0.001
4242 / DCRS/DPL	-	0.069	0.155	0.090	-	0.090
4248 / Aviation Mine Countermeasures	-	1.368	0.486	0.733	-	0.733
4268 / Aviation Support Equipment	-	1.063	0.768	0.000	-	0.000
BA 04 - Ordnance Support Equipment						
5111 / Ship Gun Systems Equipment	-	0.007	0.007	0.000	-	0.000
5231 / Ship Missile Support Equipment	-	5.307	8.192	4.299	-	4.299
5253 / Tomahawk Support Equipment	-	0.147	0.177	0.311	-	0.311
5358 / Strategic Missile Systems Equip	-	-	0.140	0.000	-	0.000
5420 / SSN Combat Control Systems	-	2.667	1.771	4.744	-	4.744
5509 / Explosive Ordnance Disposal Equip	-	-	-	0.127	-	0.127
5661 / Submarine Training Device Mods	-	0.112	0.367	0.769	-	0.769
5662 / Training Device Mods	-	0.133	0.119	0.000	-	0.000
BA 05 - Civil Engineering Support Equip						
6033 / Amphibious Equipment	-	0.213	-	0.000	-	0.000
6060 / Items under $5 million	-	-	0.033	0.000	-	0.000
9501 / Spares for Rolling Stock	-	0.179	0.124	0.057	-	0.057
BA 07 - Personnel & Command Support Equip						
8106 / Command Support Equipment	-	0.168	0.005	0.022	-	0.022
8128 / Physical Security Equipment	-	0.383	0.309	0.119	-	0.119
8161 / Enterprise Information Technology	-	2.097	0.172	1.111	-	1.111
BA 08 - Spares and Repair Parts						
9020 / Spares and Repair Parts	-	-	0.454	0.264	-	0.264
Subtotal: Initial	**-**	***232.307***	***155.724***	***206.653***	***1.178***	***207.831***

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End Item Line Item Number / Name [MDAP/MAIS]	Prior Years ($ M)	FY 2016 ($ M)	FY 2017 ($ M)	FY 2018 Base ($ M)	FY 2018 OCO ($ M)	FY 2018 Total ($ M)
Replenishment						
BA 01 - Ships Support Equipment						
0831 / Sub Periscopes & Imaging Equip	-	1.941	-	0.000	-	0.000
0840 / Sub Periscope, Imaging and Supt Equip Prog	-	-	2.796	4.860	-	4.860
0942 / Virginia Class Support Equipment	-	6.343	1.483	6.522	-	6.522
0950 / Strategic Platform Support Equip	-	2.823	12.473	16.237	-	16.237
1600 / LCS Common Mission Modules Equipment	-	0.832	0.882	1.340	-	1.340
BA 02 - Communications & Electronics Equip						
2130 / Surface Sonar Support Equipment	-	3.403	0.976	3.094	-	3.094
2136 / AN/SQQ-89 Surf ASW Cmbt Sys	-	3.712	4.734	0.411	-	0.411
2145 / AN/BQQ-5	-	5.037	4.769	8.449	-	8.449
2210 / Submarine Acoustic Warfare System	-	1.057	0.847	1.347	-	1.347
2213 / Surface Ship Torpedo Def (SSTD)	-	0.276	0.247	0.385	-	0.385
2237 / SURTASS	-	3.804	3.102	9.282	-	9.282
2622 / Minesweeping System Replacement	-	0.956	0.995	2.117	-	2.117
2624 / Shallow Water Mine CM Ship	-	-	0.038	0.077	-	0.077
BA 03 - Aviation Support Equipment						
4226 / Meteorological Equipment	-	-	-	2.264	-	2.264
4248 / Aviation Mine Countermeasures	-	2.007	1.825	2.800	-	2.800
BA 04 - Ordnance Support Equipment						
5111 / Ship Gun Systems Equipment	-	5.973	3.911	4.218	-	4.218
5253 / Tomahawk Support Equipment	-	-	0.289	0.505	-	0.505
5358 / Strategic Missile Systems Equip	-	3.452	2.961	5.529	-	5.529
5420 / SSN Combat Control Systems	-	0.512	0.339	0.653	-	0.653
5429 / ASW Support Equipment	-	1.426	1.269	1.822	-	1.822
BA 08 - Spares and Repair Parts						
9999 / All Other OPN	-	0.472	-	0.000	-	0.000
Subtotal: Replenishment	**-**	***44.026***	***43.936***	***71.912***	**-**	***71.912***
Total Cost (Initial + Replenishment)	**-**	**276.333**	**199.660**	**278.565**	**1.178**	**279.743**