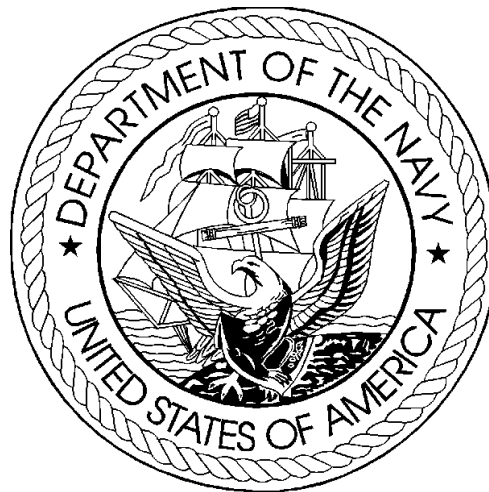


DEPARTMENT OF THE NAVY  
FISCAL YEAR (FY) 2011  
BUDGET ESTIMATES



JUSTIFICATION OF ESTIMATES  
FEBRUARY 2010

OTHER PROCUREMENT, NAVY  
BUDGET ACTIVITY 3

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## **Department of Defense Appropriations Act, 2011**

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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); expansion of public and private plants, including the land necessary therefore, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to approval of title; and procurement and installation of equipment, appliances, and machine tools in public and private plants; reserve plant and Government and contractor-owned equipment layaway, \$6,450,208,000, to remain available for obligation until September 30, 2013.

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## UNCLASSIFIED

Department of the Navy  
 FY 2011 President's Budget  
 Exhibit P-1 FY 2011 Base and Overseas Contingency Operations (OCO) Request  
 Summary  
 (Dollars in Thousands)

19 Jan 2010

Appropriation: Other Procurement, Navy

Budget Activity -----	FY 2009 (Base & OCO) -----	FY 2010 Base & OCO Enacted -----	FY 2010 Supplemental Request -----	FY 2010 Total -----
03. Aviation Support Equipment	374,524	434,022		434,022
Total Other Procurement, Navy	374,524	434,022		434,022

## UNCLASSIFIED

Department of the Navy  
FY 2011 President's Budget  
Exhibit P-1 FY 2011 Base and Overseas Contingency Operations (OCO) Request  
Summary  
(Dollars in Thousands)

19 Jan 2010

Appropriation: Other Procurement, Navy

Budget Activity -----	FY 2011 Base -----	FY 2011 OCO -----	FY 2011 Total Request -----
03. Aviation Support Equipment	345,411	26,024	371,435
Total Other Procurement, Navy	345,411	26,024	371,435

## UNCLASSIFIED

Department of the Navy  
 FY 2011 President's Budget  
 Exhibit P-1 FY 2011 Base and Overseas Contingency Operations (OCO) Request  
 (Dollars in Thousands)

Appropriation: 1810N Other Procurement, Navy

Date: 19 Jan 2010

Line No	Item Nomenclature	Ident Code	FY 2009 (Base & OCO) Quantity Cost	FY 2010 Base & OCO Enacted Quantity Cost	FY 2010 Supplemental Request Quantity Cost	FY 2010 Total Quantity Cost	S e c
----	-----	-----	-----	-----	-----	-----	-
Budget Activity 03: Aviation Support Equipment							
-----							
Sonobuoys							
92	Sonobuoys - All Types	A	112,271	89,699		89,699	U
Aircraft Support Equipment							
93	Weapons Range Support Equipment	A	73,459	88,656		88,656	U
94	Expeditionary Airfields	A	8,283	45,662		45,662	U
95	Aircraft Rearming Equipment	A	12,723	12,810		12,810	U
96	Aircraft Launch & Recovery Equipment	A	46,225	39,683		39,683	U
97	Meteorological Equipment	A	21,169	14,514		14,514	U
98	Other Photographic Equipment	A	1,598	1,577		1,577	U
99	Aviation Life Support	A	21,609	48,157		48,157	U
100	Airborne Mine Countermeasures	A	28,878	51,250		51,250	U
101	Lamps MK III Shipboard Equipment	A	35,013	23,621		23,621	U
102	Portable Electronic Maintenance Aids			4,895		4,895	U
103	Other Aviation Support Equipment	A	13,296	13,498		13,498	U
			-----	-----	-----	-----	
Total Aviation Support Equipment			374,524	434,022		434,022	
			-----	-----	-----	-----	
Total Other Procurement, Navy			374,524	434,022		434,022	

## UNCLASSIFIED

Department of the Navy  
 FY 2011 President's Budget  
 Exhibit P-1 FY 2011 Base and Overseas Contingency Operations (OCO) Request  
 (Dollars in Thousands)

Appropriation: 1810N Other Procurement, Navy

Date: 19 Jan 2010

Line No	Item Nomenclature	Ident Code	FY 2011 Base Quantity	Cost	FY 2011 OCO Quantity	Cost	FY 2011 Total Request Quantity	Cost	S e c
----	-----	-----	-----	----	-----	----	-----	----	-
Budget Activity 03: Aviation Support Equipment									
-----									
Sonobuoys									
92	Sonobuoys - All Types	A		87,846			87,846		U
Aircraft Support Equipment									
93	Weapons Range Support Equipment	A		51,742			51,742		U
94	Expeditionary Airfields	A		8,429			8,429		U
95	Aircraft Rearming Equipment	A		11,134			11,134		U
96	Aircraft Launch & Recovery Equipment	A		37,063			37,063		U
97	Meteorological Equipment	A		25,581			25,581		U
98	Other Photographic Equipment	A		1,573			1,573		U
99	Aviation Life Support	A		40,696		26,024	66,720		U
100	Airborne Mine Countermeasures	A		35,855			35,855		U
101	Lamps MK III Shipboard Equipment	A		20,662			20,662		U
102	Portable Electronic Maintenance Aids			12,812			12,812		U
103	Other Aviation Support Equipment	A		12,018			12,018		U
			-----		-----		-----		
Total Aviation Support Equipment				345,411		26,024	371,435		
			-----		-----		-----		
Total Other Procurement, Navy				345,411		26,024	371,435		



**BUDGET ITEM JUSTIFICATION SHEET****P-40**

DATE:

**February 2010**

APPROPRIATION/BUDGET ACTIVITY

**Other Procurement, Navy/BA-3 Aviation Support Equipment**

P-1 ITEM NOMENCLATURE

**404800, SONOBUOYS - ALL TYPES**

Program Element for Code B Items:

Other Related Program Elements

	Prior Years	ID Code	FY 2009	FY 2010	Base FY 2011	OCO FY 2011	Total FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
Quantity													
Cost (\$M)	<b>507.0</b>		<b>112.3</b>	<b>89.7</b>	<b>87.8</b>	<b>0.0</b>	<b>87.8</b>	<b>96.8</b>	<b>100.2</b>	<b>159.5</b>	<b>170.2</b>	<b>Cont</b>	<b>Cont</b>

## DESCRIPTION:

The AN/SSQ-36 is a bathythermograph sonobuoy used to provide a vertical temperature profile of the ocean with respect to depth. The data is transmitted to aircraft to assist in the selection of hydrophone depths and tactics for localizing and tracking submarines and long-range forecasts of acoustic conditions in the ocean.

The AN/SSQ-53 (DIFAR) is a passive directional sonobuoy which provides acoustic target localization.

The AN/SSQ-62 (DICASS) is an active acoustic directional sonobuoy that provides target bearing and range information.

The AN/SSQ-101 Air Deployable Active Receiver (ADAR) is a command able, passive acoustic sonobuoy with a horizontal planar array. It is part of the family of multi-static active sensor systems.

The AN/SSQ-110 is an active source buoy to be used in conjunction with the family of multi-static active sensor systems.

The AN/SSQ-125 is a coherent active search sensor. It is part of the family of multi-static active sensor systems. R&D testing commences 3rd quarter FY10.

The AN/SSQ-XX (Dropsonde) is a new sonobuoy sensor used to provide continuous environmental measurements to the water's surface. The data is transmitted to aircraft to assist the tactical deployment of sonobuoys, ASW (Anti-Submarine Warfare) weapons, and non-acoustic sensors. R&D testing commences 1st quarter FY12.

The MK84 Signal, Underwater Sound (SUS) device is an expendable, non-explosive, electro-acoustic device which transmits acoustic tones. The MK84 SUS is used for training and exercise signaling to submarines.

Hardware funds may be realigned to support necessary Engineering Investigations and production Engineering Change Proposals.

Totals may not add due to rounding

OTHER PROCUREMENT COST ANALYSIS P-5										DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy/BA-3 Aviation Support Equipment							ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD 404800, SONOBUOYS, ALL TYPES/U3QZ				
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS									
			Prior Years	FY 2009			FY 2010			FY 2011		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
QZ001	HARDWARE AN/SSQ-36	A		4,150	0.406	1,685	2,060	0.327	674	2,060	0.463	954
QZ002	HARDWARE AN/SSQ-53	A		62,047	0.671	41,664	45,320	0.724	32,797	41,200	0.792	32,635
QZ004	HARDWARE AN/SSQ-62	A		17,350	1.410	24,456	5,150	1.994	10,268	6,953	1.910	13,277
QZ006	HARDWARE AN/SSQ-101	A		7,640	4.188	32,000	9,064	3.998	36,239	2,472	5.802	14,342
QZ010	HARDWARE AN/SSQ-125	B								1,957	5.573	10,906
QZ011	HARDWARE AN/SSQ-XX (DROPSONDE)	B										
QZ012	HARDWARE SUS MK84	A										
QZ830	PRODUCTION ENGINEERING					8,449			6,005			10,617
QZ860	ACCEPTANCE TEST & EVALUATION					4,017			3,715			5,115
TOTAL			506,970			112,271			89,699			87,846

Totals may not add due to rounding

PROCUREMENT HISTORY AND PLANNING P-5A									A. DATE February 2010		
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy/BA-3 Aviation Support Equipment					C. P-1 ITEM NOMENCLATURE 404800, Sonobuoys, All Types					SUBHEAD U3QZ	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	TECH DATA AVAILABLE NOW ?	DATE REVISIONS AVAILABLE	
QZ001 HARDWARE AN/SSQ-36											
2009	4,150	0.406	NAWCAD PAX	10/2008	C-FFP	UNDERSEA SENSOR SYSTEMS INC, COLUMBIA CITY, IN	02/2009	05/2010	YES		
2010	2,060	0.327	NAWCAD PAX	10/2009	TBD	TBD	02/2010	05/2011	YES		
2011	2,060	0.463	NAWCAD PAX	04/2010	TBD	TBD	01/2011	04/2012	YES		
QZ002 HARDWARE AN/SSQ-53											
2008	25,066	0.658	NSWC, CRANE	10/2007	C-FFP	SPARTON ELECTRONICS FLORIDA, INC., DE LEON SPRINGS, FL	01/2008	04/2009	YES		
2008	16,955	0.775	NSWC, CRANE	10/2007	C-FFP	UNDERSEA SENSOR SYSTEMS INC, COLUMBIA CITY, IN	01/2008	04/2009	YES		
2008	4,329	0.693	NSWC, CRANE	10/2007	C-FFP	SPARTON ELECTRONICS FLORIDA, INC., DE LEON SPRINGS, FL / UNDERSEA SENSOR SYSTEMS INC, COLUMBIA CITY, IN	08/2008	11/2009	YES		
2009	62,047	0.671	NAWCAD PAX	10/2008	C-FFP	SPARTON ELECTRONICS FLORIDA, INC., DE LEON SPRINGS, FL / UNDERSEA SENSOR SYSTEMS INC, COLUMBIA CITY, IN	02/2009	05/2010	YES		
2010	45,320	0.724	NAWCAD PAX	10/2009	TBD	TBD	02/2010	05/2011	YES		
2011	41,200	0.792	NAWCAD PAX	04/2010	TBD	TBD	01/2011	04/2012	YES		
QZ004 HARDWARE AN/SSQ-62											
2008	1,500	2.239	NSWC, CRANE	10/2007	C-FFP	SPARTON ELECTRONICS FLORIDA, INC., DE LEON SPRINGS, FL	01/2008	04/2009	YES		
2008	6,211	1.570	NSWC, CRANE	10/2007	C-FFP	UNDERSEA SENSOR SYSTEMS INC, COLUMBIA CITY, IN	01/2008	04/2009	YES		
2009	17,350	1.410	NAWCAD PAX	10/2008	C-FFP	SPARTON ELECTRONICS FLORIDA, INC., DE LEON SPRINGS, FL / UNDERSEA SENSOR SYSTEMS INC, COLUMBIA CITY, IN	02/2009	05/2010	YES		
2010	5,150	1.994	NAWCAD PAX	10/2009	TBD	TBD	02/2010	05/2011	YES		
2011	6,953	1.910	NAWCAD PAX	04/2010	TBD	TBD	01/2011	04/2012	YES		
QZ006 HARDWARE AN/SSQ-101											
2008	2,090	5.982	NSWC, CRANE	10/2007	SS-FFP	ERAPSCO, COLUMBIA CITY, IN	08/2008	11/2009	YES		
2009	7,640	4.188	NAWCAD PAX	10/2008	SS-FFP	ERAPSCO, COLUMBIA CITY, IN	05/2009	08/2010	YES		
2010*	9,064	3.998	NAWCAD PAX	08/2009	TBD	ERAPSCO, COLUMBIA CITY, IN	02/2010	05/2011	YES		
2011*	2,472	5.802	NAWCAD PAX	08/2009	TBD	ERAPSCO, COLUMBIA CITY, IN	01/2011	04/2012	YES		
QZ010 HARDWARE AN/SSQ-125											
2011	1,957	5.573	NAWCAD PAX	10/2010	SS-FFP	ERAPSCO, COLUMBIA CITY, IN	01/2011	04/2012	YES		
D. REMARKS : CHANGE IN LOCATION OF PCO FOR ALL SONOBUOY TYPES IN FY09. FFP=FIRM FIXED PRICE * FY10 AND FY11 AN/SSQ-101 AWARD WILL BE A MULTIPLE YEAR CONTRACT.											

Totals may not add due to rounding

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Totals may not add due to rounding

**Exhibit P-21, Production Schedule**

P-1 Line Item No. 92  
(Page 4 of 9)

DD Form 2445, JUL 87

CLASSIFICATION:  
**UNCLASSIFIED**

BUDGET PRODUCTION SCHEDULE P-21											DATE <b>February 2010</b>			
APPROPRIATION/BUDGET ACTIVITY <b>Other Procurement, Navy/BA-3 Aviation Support Equipment</b>						Weapon System <b>Sonobuoys, All Types</b>		P-1 ITEM NOMENCLATURE <b>404800, SONOBUOYS, ALL TYPES/U3QZ</b>						
		Production Rate**			Procurement Leadtimes									
Item	Manufacturer's Name and Location					MSR	ECON	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
AN/SSQ-53 FY09	SPARTON, FL; USSI, IN					0.75	4.0	8.0*		5	15	15	20	K
AN/SSQ-62 FY09	SPARTON, FL; USSI, IN					0.25	1.5	3.0*		5	15	15	20	K
AN/SSQ-101 (ADAR) FY09	ERAPSCO, IN					0.25	1.5	3.0*		8	15	15	23	K

ITEM / MANUFACTURER	F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2008												FISCAL YEAR 2009												B A L			
						2007			CALENDAR YEAR 2008												CALENDAR YEAR 2009												
						O C T	N O V	D E C	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S				
									A N	E B	A R	P R	A Y	U N	U L	U G	E P	C T	O V	E C	A N	E B	A R	P R	A Y	U N	U L	U G	E P				
AN/SSQ-53 - SPARTON/USSI (K)	09	N	62.0	0.0	62.0																							62.0					
AN/SSQ-62 - SPARTON/USSI (K)	09	N	17.4	0.0	17.4																							17.4					
AN/SSQ-101- ERAPSCO, IN (K)	09	N	7.6	0.0	7.6																							7.6					

ITEM / MANUFACTURER	F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2010												FISCAL YEAR 2011												B A L			
						2009			CALENDAR YEAR 2010												CALENDAR YEAR 2011												
						O C T	N O V	D E C	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S				
									A N	E B	A R	P R	A Y	U N	U L	U G	E P	C T	O V	E C	A N	E B	A R	P R	A Y	U N	U L	U G	E P				
AN/SSQ-53 - SPARTON/USSI (K)	09	N	62.0	0.0	62.0																							0.0					
AN/SSQ-62 - SPARTON/USSI (K)	09	N	17.4	0.0	17.4																							0.0					
AN/SSQ-101- ERAPSCO, IN (K)	09	N	7.6	0.0	7.6																							0.0					

Remarks: \* If mobilization is for multiple buoy types then the maximum quantity should be reduced by 30%-50%.  
 \*\* Production Rates are per vendor.

Totals may not add due to rounding

Exhibit P-21, Production Schedule

CLASSIFICATION: **UNCLASSIFIED**

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Totals may not add due to rounding

**Exhibit P-21, Production Schedule**

CLASSIFICATION:

**UNCLASSIFIED**

P-1 Line Item No. 92  
(Page 6 of 9)

BUDGET PRODUCTION SCHEDULE P-21										DATE <b>February 2010</b>																					
APPROPRIATION/BUDGET ACTIVITY <b>Other Procurement, Navy/BA-3 Aviation Support Equipment</b>						Weapon System <b>Sonobuoys, All Types</b>						P-1 ITEM NOMENCLATURE <b>404800, SONOBUOYS, ALL TYPES/U3QZ</b>																			
						Production Rate			Procurement Leadtimes																						
Item		Manufacturer's Name and Location				MSR	ECON	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure																	
AN/SSQ-53 FY10		TBD				0.75	4.0	8.0*		4	15	15	19	K																	
AN/SSQ-62 FY10		TBD				0.25	1.5	3.0*		4	15	15	19	K																	
AN/SSQ-101 (ADAR) FY10		ERAPSCO, IN				0.25	1.5	3.0*		4	15	15	19	K																	
ITEM / MANUFACTURER		F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2012												FISCAL YEAR 2013												B A L
							2011			CALENDAR YEAR 2012									CALENDAR YEAR 2013												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
AN/SSQ-53 - NOT SELECTED (K)		10	N	45.3	28.8	16.5	5.5	4.5	3.5	3.0																			0.0		
AN/SSQ-62 - NOT SELECTED (K)		10	N	5.2	3.5	1.7	0.5	0.4	0.4	0.4																			0.0		
AN/SSQ-101- ERAPSCO, IN (K)		10	N	9.1	5.6	3.5	1.1	1.0	0.8	0.6																			0.0		
ITEM / MANUFACTURER		F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2014												FISCAL YEAR 2015												B A L
							2013			CALENDAR YEAR 2014									CALENDAR YEAR 2015												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

CLASSIFICATION: **UNCLASSIFIED**

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Totals may not add due to rounding

**Exhibit P-21, Production Schedule**

CLASSIFICATION:

**UNCLASSIFIED**

P-1 Line Item No. 92  
(Page 8 of 9)



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Totals may not add due to rounding

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<b>BUDGET ITEM JUSTIFICATION SHEET P-40</b>								DATE: <b>February 2010</b>					
APPROPRIATION/BUDGET ACTIVITY <b>OTHER PROCUREMENT, NAVY BA 3 - AVIATION SUPPORT EQUIPMENT</b>								P-1 ITEM NOMENCLATURE <b>420400, WEAPONS RANGE SUPPORT EQUIPMENT</b>					
Program Element for Code B Items:								Other Related Program Elements					
	Prior Years*	ID Code	FY 2009	FY 2010	Base FY 2011	OCO FY 2011	Total FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
Quantity													
Cost (\$M)	251.2	A	73.5	88.7	51.7		51.7	51.3	50.5	46.8	45.7	CONT	CONT
Initial Spares (\$M)			4.9	4.2	3.8		3.8	3.9	3.9	4.0	4.1	CONT	CONT
<p>Description: This budget line item provides the resources to implement the Navy Fleet Training Range (FTR) Instrumentation Program Plan. These FTRs provide the primary means of fleet combat readiness training. The plan addresses the following major procurement areas: Electronic Warfare (EW) simulators, Systems Replacement and Modernization (SRAM), and generic systems such as range computer systems, simulation, surveillance systems, Fleet Readiness Program (FRP), Test and Training Enabling Architecture (TENA), Targets/ Smart Targets, Tactical Combat Training System (TCTS), Undersea Warfare Training Range/ Pacific Fleet Portable ASW Range. The integral parts of these major range programs include but are not limited to the following: voice communications, weapons scoring systems, display consoles, radars, tracking subsystems, control/ computation subsystems, display/ debriefing subsystems, processors, HF/ VHF/ UHF receivers, transmitters/ transceivers, multiplexers, intercom circuits, encoding devices, frequency interface control systems, and other specialized equipment.</p> <p>Justification: Operational forces of the Navy's air, surface, and subsurface units are being equipped with the latest complex and sophisticated weapon systems to achieve and maintain high standards of fleet readiness. The FTRs must be furnished with training equipment capable of simulating, tracking, displaying, and debriefing the latest combat environments (e.g. electronic warfare). This equipment provides the Navy with the capability to: conduct safe fleet training exercises; achieve a high state of readiness; objectively evaluate training effectiveness as well as the strategy and tactics employed; evaluate the performance of equipment; and measure reliability and accuracy of operational systems.</p> <p>Note: *Prior Year Total Costs do not include Elements of Cost that are no longer funded in the FYDP.</p>													

<b>BUDGET ITEM JUSTIFICATION SHEET</b> <b>P-40</b>		DATE: <b>February 2010</b>
APPROPRIATION/BUDGET ACTIVITY <b>OTHER PROCUREMENT, NAVY BA 3 - AVIATION SUPPORT EQUIPMENT</b>		P-1 ITEM NOMENCLATURE <b>420400, WEAPONS RANGE SUPPORT EQUIPMENT</b>
Program Element for Code B Items:		Other Related Program Elements
<p><b>SYSTEMS REPLACEMENT AND MODERNIZATION (SRAM) (SC004)</b>  The SRAM program provides for the procurement of numerous non-recurring range equipment replacement and modernization efforts, based on Fleet Forces Command prioritization that are needed at all Navy training ranges. SRAM procurements replace and modernize economically unmaintainable systems and equipment in order to increase range efficiency. Funding for installation of minor equipment is required in all years for all ranges. Some procurements include antenna replacement, datalink replacement, electrical generators, and range safety lighting equipment.</p> <p><b>OCEAN SYSTEMS (SC012)</b>  Funds the procurement and upgrade of fixed underwater training ranges and procurement of a portable underwater range. The fixed ranges are located at the Southern California Off Shore Range (SCORE) in San Diego, California and at the Pacific Missile Range Facility (PMRF) in Kauai, Hawaii. The fixed underwater ranges are used to provide individual and unit level training for basic antisubmarine warfare (ASW) skills. Large exercises such as Composite Training Unit Exercises (COMTUEX), Fleet Exercises (FLEETEX), and Joint Task Force Exercises (JTFX) are conducted in the vicinity of the fixed underwater training ranges. SCORE and PMRF have reached the end of their design life, and are beginning to fail, critically impacting this training. The Shallow Water Training Range (SWTR) will provide realistic shallow water ASW training against the diesel submarine threat. When units deploy overseas there are very few instrumented training facilities available for honing skills to maintain a high state of readiness. The Portable Underwater Training Range (PUTR) will support ASW training for Forward Deployed Naval Forces (FDNF) in the Pacific. PUTR and SCORE efforts will be completed in FY10. Items procured under this cost element include hydrophones, undersea cable, and shore system electronics. End result of WC USWTR program is a single in-water training range.</p> <p><b>TACTICAL COMBAT TRAINING SYSTEM (TCTS) (SC037/SC038/SC039/SC133/SC138/SC139/SC140)</b>  The Tactical Combat Training System (TCTS) will procure fixed, transportable, and mobile range instrumentation equipment for both shore-based (aircrew training) and deployable (ship/sub/aircrew training) applications. TCTS instrumentation will transmit exercise scenarios; simulate/stimulate all exercise participants sensors/weapons with the exercise scenario; track all exercise participants and events, e.g., weapons engagements; and provide accurate, realistic, and timely feedback. TCTS is building on technology developed for existing tactical training range systems. The system will be interoperable with the USAF P5 CTS system. The TCTS consists of airborne instrumentation called Participant Subsystems and Ground Subsystems. The Ground Subsystem has 4 configurations: Transportable, Portable, Shipboard and Fixed Ground Subsystem.</p> <p><b>TARGETS/ SMART TARGETS (SC041)</b>  Targets represent a variety of mobile and stationary targets, shapes, and visual cues that are required to support aviation and surface training of the Naval Forces. Smart Targets represent Electronic Warfare simulators and legacy system upgrades that present range participants with systems that provide capabilities such as reactivity, mobility, realistic radar cross-section, infrared signature, and realistic threat fidelity.</p> <p><b>THREAT PRESENTATION (SC105)</b>  Threat Presentation includes all the necessary components and elements associated with presenting friendly training event participants with an opposing force (OPFOR) operating environment that replicates the expected enemy order of battle. The capability of a range to recreate any Electronic Combat electronic order of battle (EOB) requires a range to simulate or emulate basic elements of Electronic Combat such as search, acquisition and tracking radars, anti-aircraft artillery (AAA) systems, surface-to-air missile (SAM) systems, infrared (IR) systems, jammers, coastal threats, airborne simulators, and information warfare/ command and control systems.</p>		

<b>BUDGET ITEM JUSTIFICATION SHEET</b>		DATE:
<b>P-40</b>		<b>February 2010</b>
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	
<b>OTHER PROCUREMENT, NAVY BA 3 - AVIATION SUPPORT EQUIPMENT</b>	<b>420400, WEAPONS RANGE SUPPORT EQUIPMENT</b>	
Program Element for Code B Items:	Other Related Program Elements	
<p><b>FRP RADAR EMISSION STIMULATING SET (SC145)</b>  The Fleet Readiness Program (FRP) supports the Navy's transition of fleet training from Vieques, Puerto Rico to various locations along the East Coast and Gulf of Mexico. The Radar Emission Stimulating Set (RESS) is a component of the Opposing Force operating environment that replicates the expected electronic order of battle. The RESS provides the range the capability to simulate or emulate basic elements of Electronic Combat systems. Beginning in FY10 FRP RESS funds have been moved to SC105 Threat Presentation. This realignment assembles disparate Electronic Warfare programs into a functional capability, allowing the fleet to control and allocate threat presentation resources within the existing budget to ensure procurement efforts are best aligned to the electronic order of battle threat requirements.</p> <p><b>FRP TARGETS (SC151)</b>  The Moving Land Target (MLT) will provide Naval Forces with a fast and highly maneuverable surrogate for the threat vehicles currently encountered in combat operations. The MLT will operate primarily on unpaved roads, support Close Air Support (CAS) and Time-Sensitive Targeting (TST) training, and enable Joint Terminal Air Controllers (JTACs) and aircrews to identify and engage moving targets not normally associated with traditional enemy forces.</p> <p><b>BSURE REPLACEMENT (SC160)</b>  The Barking Sands Underwater Range (BSURE) has reached its intended design life and requires refurbishment and modernization to ensure that it is capable of meeting fleet antisubmarine warfare training requirements in the future. FY06 and FY07 Congressional Adds provided funding for a portion of the required necessary components and elements associated with the modernization. Refurbishment includes replacement of both in-water and shore side hardware and modernization of software systems. Appropriated funds beginning in FY07 fund the remainder of the requirement to extend the operational life of the range.</p> <p><b>EAST COAST UNDERSEA WARFARE TRAINING RANGE (SC161)</b>  The purpose of the East Coast USWTR is to establish a shallow-water training range capability on the East Coast. The primary USWTR mission will be to support Fleet readiness through training and tactical development of submarine, surface ship, and aircraft undersea warfare (USW), surface warfare (SUW), and mine warfare (MIW). Secondary missions will include training in shallow water, regional conflict operations involving the naval special warfare (NSW), electronic warfare (EW), and amphibious warfare (AMW) mission/ operational capability areas. Additionally, joint mission areas that may be supported include joint littoral warfare and joint surveillance and warning. Previously subsumed within Ocean Systems, East Coast USWTR has been broken out separately in accordance with the FY 2007 Defense Appropriations Act. Items procured under this cost element include hydrophones, undersea cable, and shore system electronics for EC USWTR. End result is a single in-water training range.</p> <p><b>WEAPONS IMPACT SCORING SYSTEMS (SC163)</b>  Weapons Impact Scoring System (WISS) is an electro-optical system that provides real-time scoring of ordnance impacts. There are 23 systems installed at 10 Navy training ranges. Improved Remote Strafe Scoring System (IRSSS) is an electro-acoustical system that provides real-time scoring of strafe impacts (supersonic). At present there are nine (9) Navy systems at six (6) Navy training ranges. These funds will be used for major service life extensions, technology refreshment, and system replacement.</p> <p><b>LASER SCORING SYSTEMS (SC164)</b>  Laser training system instrumentation is used to provide a ground-based source of laser energy for weapon terminal guidance (ground designation) or to provide an independent confirmation of the laser spot position for airborne or ground designation. These funds will be used for major service life extensions, technology refreshment, and system replacement.</p>		

<b>BUDGET ITEM JUSTIFICATION SHEET</b>		DATE:
<b>P-40</b>		<b>February 2010</b>
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	
<b>OTHER PROCUREMENT, NAVY BA 3 - AVIATION SUPPORT EQUIPMENT</b>	<b>420400, WEAPONS RANGE SUPPORT EQUIPMENT</b>	
Program Element for Code B Items:	Other Related Program Elements	
<p><b>ADVANCED GROUND TARGET THREAT SIMULATORS CONGRESSIONAL ADD (SC705)</b>  The AGTTS is a multi-spectral ground target EW threat. AGTTS can visually represent the mechanical structure of the opposing force (OPFOR) threat systems. AGTTS can represent search, acquisition and tracking radars; anti-aircraft artillery; surface-to-air missile systems; and infrared systems. Systems can be located at various Tactical Training Range electronic warfare ranges.</p> <p><b>TRAINING RANGE ENHANCEMENTS CONGRESSIONAL ADD (SC706)</b>  Funds provided to support acquisition and deployment of Navy Fleet Training Range instrumentation. Training range instrumentation includes but is not limited to: tracking instrumentation (both fixed-site and movable), instrumentation capabilities to exchange and process data with the combat systems, instrumentation designed to provide a realistic electronic warfare environment, equipment for impact scoring of practice weapons, and support instrumentation to include communications, surveillance, and data transmission systems necessary for the effective operation of the training ranges.</p> <p><b>RANGE SUPPORT ENHANCEMENTS CONGRESSIONAL ADD (SC707)</b>  FY10 Congressional funds provided to support acquisition and deployment of Navy Fleet Training Range instrumentation. Training range instrumentation includes but is not limited to: tracking instrumentation (both fixed-site and movable), instrumentation capabilities to exchange and process data with the combat systems, instrumentation designed to provide a realistic electronic warfare environment, equipment for impact scoring of practice weapons, and support instrumentation to include communications, surveillance, and data transmission systems necessary for the effective operation of the training ranges.</p> <p><b>HAWAIIAN RANGE COMPLEX CONGRESSIONAL ADD (SC708)</b>  FY10 Congressional funds provided for training range instrumentation at the Hawaii Range Complex.</p>		

OTHER PROCUREMENT COST ANALYSIS										DATE:		
P-5										February 2010		
APPROPRIATION/BUDGET ACTIVITY				ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD							
OTHER PROCUREMENT, NAVY/BA 3				A	420400, WEAPONS RANGE SUPPORT EQUIPMENT/ 43SC & J3SC							
AVIATION SUPPORT EQUIPMENT				A								
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS									
			Prior Years	FY 2009			FY 2010			FY 2011		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
SC004	SYS REPLACE & MODS (SRAM)	A	96,259			7,348			8,574			8,763
SC012*	OCEAN SYSTEMS	A	41,151			2,700			3,141			10,268
SC037	TCTS - JTRS RETROFIT KITS	A								11	67.091	738
SC038	TCTS - SHIPBOARD GROUND SUBSYSTEM	A								4	287.250	1,149
SC039	TCTS - TRANSPORTABLE UNIT	A										
SC041	TARGETS / SMART TARGETS	A	7,532	2	238.500	477	1	237.000	237	1	242.000	242
SC105	THREAT PRESENTATION	A	19,337	1	8,734.000	8,734	1	7,560.000	7,560	1	1,637.000	1,637
SC133	TCTS - SHIPBOARD TRACKING SUBSYSTEM	A								10	78.200	782
SC138	TCTS - PORTABLE GROUND UNIT	A		19	25.020	475	16	25.438	407	16	25.438	407
SC139	TCTS - FIXED GROUND UNIT	A		2	241.957	484						
SC140	TCTS - REMOTE RANGE UNIT	A		4	82.946	332						
SC145	FRP - RADAR EMISSION STIMULATING SET	A	15,302	7	531.286	3,719						
SC151	FRP - TARGETS	A	2,961	65	29.954	1,947	80	25.275	2,022	80	24.175	1,934
SC160	BSURE REPLACEMENT	A	16,146			5,900			4,015			
SC161	EAST COAST UNDERSEA WAR TRN RNG	A				1,646			4,704			8,542
SC163	WEAPONS IMPACT SCORING SYSTEM	A					23	42.522	978			
SC164	LASER SCORING SYSTEM	A					2	489.000	978	7	428.571	3,000
SC705	ADV GROUND TARGET THREAT SIM CONG ADD	A				1,280						
SC706	TRAINING RANGE ENHANCEMENTS CONG ADD	A				8,000						
SC707	RANGE SUPPORT ENHANCEMENTS CONG ADD	A							13,000			
SC708	HAWAIIAN RANGE COMPLEX CONG ADD	A							1,600			
SC800	INTEGRATED LOGISTICS SUPPORT		6,027			3,290			2,998			1,236
SC831	PRODUCTION ENGINEERING SUPPORT PMA205		37,907			20,565			36,641			12,348
SC832	PRODUCTION ENGINEERING SUPPORT PMA208					180			44			40
SC860	ACCEPTANCE TEST AND EVALUATION		2,187			1,356			593			403
SC900	NON-FMP INSTALLATION		6,399			5,026			1,164			253
	PMA208 Adjust											
TOTAL			251,208			73,459			88,656			51,742

\*Note: Cost growth from FY10 to FY11 is due to ramp-up of West Coast Undersea Warfare Training Range

PROCUREMENT HISTORY AND PLANNING P-5A								A. DATE February 2010		
B. APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA 3 AVIATION SUPPORT EQUIPMENT					C. P-1 ITEM NOMENCLATURE 420400, WEAPONS RANGE SUPPORT EQUIPMENT				SUBHEAD 43SC/J3SC	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	TECH DATA AVAILABLE NOW ?	DATE REVISIONS AVAILABLE
SC041 TARGETS / SMART TARGETS										
2008	1	230.000	NAWCWD PT MUGU, CA	01/2008	C-FFP	ARGON ST, CAMARILLO, CA	04/2008	04/2010	YES	
2009	2	238.500	NAWCWD PT MUGU, CA	01/2009	C-FFP	ARGON ST, CAMARILLO, CA	04/2009	04/2011	YES	
2010	1	237.000	NAWCWD PT MUGU, CA	01/2010	C-FFP	ARGON ST, CAMARILLO, CA	04/2010	04/2012	YES	
2011	1	242.000	NAWCWD PT MUGU, CA	01/2011	C-FFP	ARGON ST, CAMARILLO, CA	04/2011	04/2013	YES	
SC105 THREAT PRESENTATION										
2008	1	10,638.999	NAWCWD, CHINA LAKE, CA	01/2008	C-FFP	DTI, HUNTSVILLE, ALABAMA	06/2008	04/2010	YES	
2009	1	8,734.000	NAWCWD, CHINA LAKE, CA	01/2009	C-FFP	DTI, HUNTSVILLE, ALABAMA	09/2009	09/2011	YES	
2010	1	7,560.000	NAWCWD, CHINA LAKE, CA	01/2010	TBD	TBD	04/2010	04/2012	YES	
2011	1	1,637.000	NAWCWD, CHINA LAKE, CA	01/2011	TBD	TBD	04/2011	04/2013	NO	01/2011
SC133 TCTS - SHIPBOARD TRACKING SUBSYSTEM										
2011	10	78.200	ACC/WMR EGLIN AFB, FL	10/2010	C-FFP	CUBIC DEFENSE APPLICATIONS, INC, SAN DIEGO, CA	01/2011	09/2011	YES	
SC138 TCTS - PORTABLE GROUND UNIT										
2009	19	25.020	ACC/WMR EGLIN	10/2008	C-FFP	CUBIC DEFENSE APPLICATIONS, INC, SAN DIEGO, CA	01/2009	09/2009	YES	
2010	16	25.438	ACC/WMR EGLIN AFB, FL	10/2009	C-FFP	CUBIC DEFENSE APPLICATIONS, INC, SAN DIEGO, CA	01/2010	09/2010	YES	
2011	16	25.438	ACC/WMR EGLIN AFB, FL	10/2010	C-FFP	CUBIC DEFENSE APPLICATIONS, INC, SAN DIEGO, CA	01/2011	09/2011	YES	



PROCUREMENT HISTORY AND PLANNING P-5A								A. DATE February 2010		
B. APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA 3 AVIATION SUPPORT EQUIPMENT					C. P-1 ITEM NOMENCLATURE 420400, WEAPONS RANGE SUPPORT EQUIPMENT				SUBHEAD 43SC/J3SC	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	TECH DATA AVAILABLE NOW ?	DATE REVISIONS AVAILABLE
SC139 TCTS - FIXED GROUND UNIT										
2009	2	241.957	ACC/WMR EGLIN AFB, FL	10/2008	C-FFP	CUBIC DEFENSE APPLICATIONS, INC, SAN DIEGO, CA	01/2009	09/2009	YES	
SC140 TCTS - REMOTE RANGE UNIT										
2009	4	82.946	ACC/WMR EGLIN AFB, FL	10/2008	C-FFP	CUBIC DEFENSE APPLICATIONS, INC, SAN DIEGO, CA	01/2009	09/2009	YES	
SC145 FRP-RADAR EMISSION SIMULATING SET										
2009	7	531.286	NAWCWD, PT MUGU, CA	10/2008	VARIOUS	ARGON ST, CAMARILLO, CA	12/2008	06/2010	YES	
SC151 FRP-TARGETS										
2009	65	29.954	VAR	05/2009	VARIOUS	VARIOUS	09/2010	02/2011	YES	
2010	80	25.275	VAR	11/2009	VARIOUS	VARIOUS	09/2010	02/2011	YES	
2011	80	24.175	VAR	11/2010	VARIOUS	VARIOUS	02/2011	07/2011	YES	
SC163 WEAPONS IMPACT SCORING SYSTEM										
2010	23	42.522	NSWC, CORONA, CA	02/2010	TBD	TBD	04/2010	09/2010	YES	
SC164 LASER SCORING SYSTEM										
2010	2	489.000	NAWCWD PT MUGU, CA	04/2010	TBD	TBD	06/2010	06/2011	YES	
2011	7	428.571	NAWCWD PT MUGU, CA	04/2011	TBD	TBD	06/2011	06/2012	YES	
D. REMARKS										
SRAM and TARGETS consist of a variety of projects each FY with award dates starting when funds are released.										

P3A <span style="float: right;">INDIVIDUAL MODIFICATION</span>																				
MODELS OF SYSTEM AFFECTED: <u>Weapons Ranges</u>										TYPE MODIFICATION: <u>Added Capability</u>					MODIFICATION TITLE: <u>SC105 Threat Presentation</u>					
DESCRIPTION/JUSTIFICATION:																				
Threat Presentation includes all the necessary components and elements associated with presenting friendly training event participants with an opposing force operating environment that replicates the expected enemy order of battle. The capability of a range to recreate any electronic combat electronic order of battle (EOB) requires a range to simulate or emulate basic elements of electronic combat such as search, acquisition and tracking radars, anti-aircraft artillery (AAA) systems, surface-to-air missile (SAM) systems, infrared (IR) systems, jammers, coastal threats, airborne simulators, and information warfare/ command and control systems.																				
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: _____																				
	<u>Prior Years</u>		<u>FY 2009</u>		<u>FY 2010</u>		<u>FY 2011</u>		<u>FY 2012</u>		<u>FY 2013</u>		<u>FY 2014</u>		<u>FY 2015</u>		<u>TC</u>		<u>TOTAL</u>	
	<u>QTY</u>	<u>\$</u>	<u>QTY</u>	<u>\$</u>	<u>QTY</u>	<u>\$</u>	<u>QTY</u>	<u>\$</u>	<u>QTY</u>	<u>\$</u>	<u>QTY</u>	<u>\$</u>	<u>QTY</u>	<u>\$</u>	<u>QTY</u>	<u>\$</u>	<u>QTY</u>	<u>\$</u>	<u>QTY</u>	<u>\$</u>
<u>FINANCIAL PLAN (IN MILLIONS)</u>																				
<u>RDT&amp;E</u>																				
<u>PROCUREMENT</u>																				
INSTALLATION KITS																				
INSTALLATION KITS NRE																				
EQUIPMENT NRE																				
EQUIPMENT																				
Foreign Military Air Defense Radar *	1	19.3	1	8.7	1	7.6	1	1.6			1	9.6					CONT	CONT	CONT	CONT
Air Defense Threat Simulator *									1	10.5			1	4.8	1	2.8	CONT	CONT	CONT	CONT
ECP 1 Grp "A"																				
DATA																				
TRAINING EQUIPMENT																				
SUPPORT EQUIPMENT																				
PE		1.9		1.6		1.9												CONT		CONT
ILS		0.2		0.2		0.2		0.2		0.2								CONT		CONT
ACCEPTANCE TEST		0.1		0.2														CONT		CONT
OTHER																				
INTERIM CONTRACTOR SUPPORT																				
INSTALL COST																				
TOTAL PROCUREMENT		21.5		10.7		9.7		1.8		10.7		9.6		4.8		2.8		CONT		CONT

\* The Foreign Military Air Defense Radar and Air Defense Threat Simulator are similar but not identical installations.

P3A (Continued)

MODELS OF SYSTEMS AFFECTED: Weapons Ranges MODIFICATION TITLE: SC105 Threat Presentation

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Organic installationADMINISTRATIVE LEADTIME: 7 Months PRODUCTION LEADTIME: 24 Months

CONTRACT DATES: FY 2009: September 2009 FY 2010: April 2010 FY 2011: April 2011  
 DELIVERY DATE: FY 2009: September 2011 FY 2010: April 2012 FY 2011: April 2013

(\$ in Millions)

Cost:	*	Prior Years				FY 2009		FY 2010		FY 2011		FY 2012		FY 2013		FY 2014		FY 2015		To Complete		Total	
		Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS																							
FY 2009 EQUIPMENT																						-	-
FY 2010 EQUIPMENT																						-	-
FY 2011 EQUIPMENT																						-	-
FY 2012 EQUIPMENT																						-	-
FY 2013 EQUIPMENT																						-	-
FY 2014 EQUIPMENT																						-	-
FY 2015 EQUIPMENT																						-	-
TO COMPLETE																						-	-
TOTAL INSTALL COST		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

INSTALLATION SCHEDULE:

	FY 2005 & Prior	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				TC	TOTAL
In	-	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	-	-
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

\*Organic install therefore no install cost.

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**BUDGET ITEM JUSTIFICATION SHEET****P-40**

DATE:

**February 2010**

APPROPRIATION/BUDGET ACTIVITY

**OTHER PROCUREMENT, NAVY/BA-3 Aviation Support Equipment**

P-1 ITEM NOMENCLATURE

**420800 Expeditionary Airfields**

Program Element for Code B Items:

Other Related Program Elements

	Prior Years	ID Code	FY 2009	FY 2010	Base FY 2011	OCO FY 2011	Total FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
Quantity													
Cost (\$M)	<b>127.9</b>	<b>A</b>	<b>8.3</b>	<b>45.7</b>	<b>8.4</b>	<b>0.0</b>	<b>8.4</b>	<b>8.6</b>	<b>8.8</b>	<b>8.9</b>	<b>9.1</b>	<b>continuing</b>	<b>continuing</b>
Initial Spares (\$M)													

**EXPEDITIONARY AIRFIELDS (EAF)**

This program provides for procurement of aircraft recovery equipment, landing mat and accessories, airfield lighting and Visual Landing Aids for Naval Aviation Expeditionary Airfields (EAF). EAF recovery equipment consists of the M31 arresting gear and its accessories. This equipment is used to stop aircraft in less than 1000 ft, thus allowing EAFs to be shorter. EAF landing mats and accessories are used to construct airfields of varying configurations such as, 5000+ ft conventional airport runways and taxiways, Forward Arming and Refueling Points (FARPs), Forward Operating Bases (FOBs), Landing Zones (LZs) and Helo Pads. EAF Lighting equipment augments the many types of EAFs that can be constructed with Lighting of the runways, taxiways, LZs, FARPs, FOBs and Helo pads. Much of the EAF Lighting utilizes Infra Red Lighting for use with Night Vision Devices for night operations by all Type / Model / Series aircraft. Forward Looking Optical Landing Systems and Precision Approach Path Indicator systems are used to guide aircraft to the proper landing or arresting gear area of the EAF.

This core funding level directly supports the procurement and fielding of operational expeditionary airfield systems in the three active duty Marine Aircraft Wings and one Reserve Marine Aircraft Wing, testing and training installations, and provides assets for use by the Marine Expeditionary Forces during contingency operations.

Basis for FY 2009 and 2010, Budget Request: The FY 2009 and 2010 baseline budget requests consist of procurement of various composites of surfacing equipment, such as AM-2 matting, lightweight and ultra light weight matting. The quantities vary depending on quantities for each type of matting and service change requirements each year. This is also true for quantities of lighting equipment procured. The equipment, accessories, and service changes are procured and fielded with these funds. Equipment procurements are based on inventory shortfalls, product improvements to fill or correct known deficiencies, modernizing EAF equipment to improve maintainability, reliability, and safety-of-flight, and to keep pace with new aircraft and aircraft systems. Additionally, equipment procurements will facilitate forward deployment of EAF systems aboard Rapid Deployment Force/Maritime Prepositioning Force ships which is an operational requirement under the Maritime Corps Master Plan, the Enhanced Maritime Prepositioning Squadron (EMPS) requirement, and the EAF 2000 concept. FY2010 budget also consists of procurement EAF replacement equipment that is not recoverable. This equipment includes accessories that are required to support air operations such as: war operations, medivac landing zones and logistic resupply points for weapons, ammunition, food and general supplies at various airfields, FARPs and FOBs. Specific items addressed in this budget are AM-2 Matting, F-87 & F-88 Light Weight Matting, AM-2 Shipping Container (Flatrack), AM-2 Accessory Packs, and Man-Portable Lighting Packs.

Basis for FY 2011 Baseline Budget Request: The FY 2011 baseline budget requests consists of procurement of various composites of surfacing equipment, such as AM-2 matting, lightweight and ultra-light weight matting. The quantities vary depending on quantities for each type of matting and service change requirements each year. This is also true for quantities of lighting equipment procured. The equipment, accessories, and service changes are procured and fielded with these funds. Equipment procurements are based on inventory shortfalls, product improvements to fill or correct known deficiencies, modernizing EAF equipment to improve maintainability, reliability and safety-of-flight, and to keep pace with new aircraft and aircraft systems

## OTHER PROCUREMENT COST ANALYSIS

P-5

DATE:

February 2010

APPROPRIATION/BUDGET ACTIVITY

Other Procurement, Navy/BA 3 Aviation Support Equipment

ID Code

A

P-1 ITEM NOMENCLATURE/SUBHEAD

420800, Expeditionary Airfields

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS									
			Prior Years	FY 2009			FY 2010			FY 2011		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
SE010	<u>EAF Surfacing Equipment</u>	A										
	AM-2 Matting Baseline	A	77,920	various	various	3,696	1,810	17	30,906	various	various	3,809
	F-87 Light Weight Matting Baseline	A					150	16	2,400			
	F-88 Light Weight Matting Baseline	A					150	16	2,400			
	AM-2 Shipping Containers (Flatrack) Baseline	A					28	7	196			
	AM-2 Accessory Packs Baseline (note 1)	A					various	various	2,076			
SE010	<u>EAF Lighting Equipment</u>	A										
	Man Portable Lights Baseline (note 1)	A	22,844	various	various	3,422	various	various	5,535	various	various	3,540
SE210	<u>EAF Arresting Gear Baseline (note 1)</u>	A	8,094	various	various	832	various	various	848	various	various	848
	<u>Other Costs</u>	A										
SE800	Integrated Logistics Support Baseline	A	6,108			105			305			80
SE830	Production Engineering Baseline	A	7,145			125			570			78
SE860	Acceptance Test & Evaluation baseline	A	5,810			103			426			74
<b>TOTAL</b>			<b>127,921</b>			<b>8,283</b>			<b>45,662</b>			<b>8,429</b>

Note 1: AM-2 Accessory Packs and manportable Light Packs are made up of hundreds low priced items. Multiple different Pack configurations are procured each year. Therefore, individual quantities are not provided for some EAF equipment.

PROCUREMENT HISTORY AND PLANNING P-5A							A. DATE <b>February 2010</b>			
B. APPROPRIATION/BUDGET ACTIVITY <b>Other Procurement, Navy/BA 3 Aviation Support Equipment</b>					C. P-1 ITEM NOMENCLATURE <b>420800 Expeditionary Airfields</b>				SUBHEAD <b>Y3SE</b>	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	TECH DATA AVAILABLE NOW ?	DATE REVISIONS AVAILABLE
FY 2010										
<u>SE010 EAF Surfacing Equip</u>										
AM-2 Matting	1810	17	NAWCAD Lakehurst,NJ	Oct-07	C/Option	ALFAB, Mountgomery,AL	Dec-09	Jun-10	Yes	
F-87 Light Weight Matting	150	16	NAWCAD Lakehurst,NJ	Feb-07	C/Options	Dechamps- Angouleme, FR	Dec-09	Apr-10	Yes	
F-88 Light Weight Matting	150	16	NAWCAD Lakehurst,NJ	Feb-07	C/Option	CGEAR-Melbourne, Australia	Dec-09	Apr-10	Yes	
AM-2 Shipping Containers(1)	28	7	NAWCAD Lakehurst,NJ	N/A	C/Option	US Army	Dec-09	May-10	Yes	
AM- Accessory Packs	various	various	NAWCAD Lakehurst,NJ	Feb-06	C/Option	ACG Systems Corp Annapolis, MD	Dec-09	Jan-10	Yes	
<u>SE010 EAF Lighting Equip</u>									Yes	
Man Portable Lights	various	various	NAWCAD Lakehurst,NJ	Feb-06	C/Option	RMC Distribution, Virgina Beach, VA	Dec-09	Jun-10	Yes	
D. REMARKS										
Note 1. Containers are requisitioned from US Army. Award date is contingent on the receipt of funds.										

[illegible]



**BUDGET ITEM JUSTIFICATION SHEET****P-40**

DATE:

**February 2010**

APPROPRIATION/BUDGET ACTIVITY

**OTHER PROCUREMENT, NAVY BA 3- AVIATION SUPPORT EQUIPMENT**

P-1 ITEM NOMENCLATURE

**421400, AIRCRAFT REARMING EQUIPMENT**

Program Element for Code B Items:

**0205633N**

Other Related Program Elements

	Prior Years	ID Code	FY 2009	FY 2010	Base FY 2011	OCO FY 2011	Total FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
Quantity													
Cost (\$M)	<b>336.0</b>		12.7	12.8	11.1	<b>0.0</b>	<b>11.1</b>	11.9	11.5	11.8	12.6	Cont	Cont
Initial Spares (\$M)			0.1	0.1	0.0	<b>0.0</b>	<b>0.0</b>	0.0	0.1	0.0	0.0	Cont	Cont

This program funds the procurement of common Armament Support Equipment (ASE), and Weapons Support Equipment (WSE) under the procurement and inventory control of the Naval Inventory Control Point and the Naval Air Systems Command. This budget line supports: (a) initial outfitting for all in-production weapons systems; (b) procurement of new Support Equipment, and (c) procurement of Armament Weapon Support Equipment. These items support sustained operations and surge deployments of the CV battle groups. Shipboard/Shorebased WSE is utilized by weapons departments to handle, transport, and maintain weapons. Shipboard/Shorebased ASE is utilized by squadrons and supporting activities to load and service aircraft weapons and guns.

FY09 provides funding to procure: ADU-514A/E Missile Adapter, AERO-51B Trailer, LALS II Loader, A/M32K-4A Munitions Trailer Replacement, A/M32U-21 Ordnance Trailer, LGB Weapons Adapter, MHU-228/E Sling, MC Weapons Assembly Station and associated support cost.

FY10 provides funding to procure: AERO-51B Trailer, LALS II Loader, A/M32K-4A Munitions Trailer Replacement, LALS Power Drive Tool, A/M32U-21 Ordnance Trailer, LGB Weapons Adapter, MC Weapons Assembly Station and associated support cost.

FY11 provides funding to procure: A/M32K-4A Munitions Trailer Replacement, Next Generation Handler, LALS Power Drive Tool, A/M32U-21 Ordnance Trailer, LGB Weapons Adapter, MC Weapons Assembly Station, MHU-191/M CILOP, OHE Test Stand Replacement and associated support cost.

Note: \* Elements of Cost that are not currently funded in the FYDP are no longer included in the "Prior Year" column.

OTHER PROCUREMENT COST ANALYSIS P-5										DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy/BA 3 - Aviation Support Equipment							ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD 421400, AIRCRAFT REARMING EQUIPMENT / 43SH				
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS									
			Prior Years	FY 2009			FY 2010			FY 2011		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
SH010	ECPS		247,904			1,642			1,113			952
SH024	ADU-514A/E MISSILE ADAPTER	A	2,900	210	3.94	827						
SH030	AERO-51B (MHU-227/M) TRAILER	A	3,739	112	14.48	1,622	76	13.43	1,021			
SH033	LALS II LOADER	A	30,530	40	144.55	5,782						
SH034	LALS II REPLENISHER	A	3,100									
SH036	A/M32K-4A MUN TRLR REPLACEMENT	B	650				274	20.10	5,507	173	20.00	3,460
SH037	NEXT GENERATION HANDLER (SHIP)	B								61	20.00	1,220
SH038	LALS POWER DRIVE TOOL	B					25	10.00	250	50	10.00	500
SH039	A/M32U-21 ORDNANCE TRAILER	B					12	100.00	1,200	10	100.00	1,000
SH040	LGB WEAPONS ADAPTER	B		50	5.00	250	150	5.00	750	150	5.00	750
SH041	MHU-228/E SLING	B		60	2.00	120						
SH042	MC WEAPONS ASSEMBLY STATION	B					6	85.00	510	6	85.00	510
SH043	MHU-191/M CILOP	B								48	5.00	240
SH044	A/F48T-6 OHE TEST STAND REPLACEMENT	B								2	50.00	100
SH045	MHU-126/202 TRLR REPLACEMENT	B										
SH830	PRODUCTION ENGINEERING		39,515			1,889			1,867			1,872
SH860	ACCEPTANCE TEST AND EVALUATION		7,622			591			592			530
			335,960			12,723			12,810			11,134

PROCUREMENT HISTORY AND PLANNING P-5A										DATE: February 2010	
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy/BA 3 - AVIATION SUPPORT EQUIPMENT					C. P-1 ITEM NOMENCLATURE 421400, AIRCRAFT REARMING EQUIPMENT					SUBHEAD 43SH	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	TECH DATA AVAILABLE NOW ?	DATE REVISIONS AVAILABLE	
SH024 ADU-514A/E MISSILE ADAPTER	2009	210	3.942	NAWCADLKE	11/2007	C-FFP / OPTION	DACVAL CORPORATION, PHILADELPHIA, PA	03/2009	09/2009	YES	
SH030 AERO-51B (MHU-227/M) TRAILER	2009	112	14.480	NAWCADLKE	05/2006	C-FFP / OPTION	DEVAL CORPORATION, PHILADELPHIA, PA	12/2008	07/2009	YES	
SH033 LALS II LOADER **	2010	76	13.434	NAWCADLKE	05/2006	C-FFP / OPTION	DEVAL CORPORATION, PHILADELPHIA, PA	01/2010	08/2010	YES	
	2009	40	144.550	NAWCADLKE	06/2007	C-FFP / OPTION	HYDRAULICS INTERNATIONAL INC., CHATSWORTH, CA	01/2010	07/2010	YES	
SH036 A/M32K-4A MUN TRLR REPLACEMENT	2010	274	20.103	NAWCADLKE	02/2007	C-FFP / OPTION	GENERAL SCIENTIFIC MANUFACTURING INCORPORATED, PANAMA CITY, FL	07/2010	03/2011	YES	
	2011	173	20.000	NAWCADLKE	02/2007	C-FFP / OPTION	GENERAL SCIENTIFIC MANUFACTURING INCORPORATED, PANAMA CITY, FL	12/2010	07/2011	YES	
SHO37 NEXT GENERATION HANDLER (SHIP)	2011	61	20.000	NAWCADLKE	09/2010	C-FFP*	TBD	03/2011	08/2011	NO 06/2010	
SH038 LALS POWER DRIVE TOOL ***	2010	25	10.000	NAWCADLKE	12/2009	C-FFP*	TBD	06/2010	12/2010	NO 11/2009	
	2011	50	10.000	NAWCADLKE	12/2009	C-FFP / OPTION	TBD	12/2010	07/2011	NO 11/2009	
SH039 A/M32U-21 ORDNANCE TRAILER ***	2010	12	100.000	NAWCADLKE	09/2009	C-FFP / OPTION	TBD	07/2010	03/2011	NO 09/2009	
	2011	10	100.000	NAWCADLKE	09/2009	C-FFP / OPTION	TBD	12/2010	07/2011	NO 09/2009	
SH040 LGB WEAPONS ADAPTER ***	2009	50	5.000	NAWCADLKE	08/2009	C-FFP*	TBD	02/2010	08/2010	YES	
	2010	150	5.000	NAWCADLKE	08/2009	C-FFP / OPTION	TBD	03/2010	06/2010	YES	
	2011	150	5.000	NAWCADLKE	08/2009	C-FFP / OPTION	TBD	12/2010	07/2011	YES	
SH041 MHU-228/E SLING	2009	60	2.000	NAWCADLKE	10/2009	8A / FFP*	TBD	02/2010	09/2010	YES	
SH042 MC WEAPONS ASSY STATION ***	2010	6	85.000	NAWCADLKE	08/2009	C-FFP / OPTION	TBD	06/2010	02/2011	YES	
	2011	6	85.000	NAWCADLKE	08/2009	C-FFP / OPTION	TBD	01/2011	07/2011	YES	
SH043 MHU-191/M CILOP	2011	48	5.000	NAWCADLKE	09/2010	C-FFP*	TBD	03/2011	08/2011	NO 06/2010	
SH044 A/F48T-6 OHE TEST STAND REPLACEMENT	2011	2	50.000	NAWCADLKE	09/2010	C-FFP*	TBD	03/2011	08/2011	NO 06/2010	
D. REMARKS: * FFP - FIRM FIXED PRICE **SH033 - Corrected Contract Award and First Delivery Date errors find in PRES Budget 10 submission. ***SH038/039/040/042 - Testing is taking longer than anticipated, delaying RFP Releases and Contract Awards.											

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BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: <b>February 2010</b>					
APPROPRIATION/BUDGET ACTIVITY  <b>OTHER PROCUREMENT, NAVY/ BA-3 AVIATION SUPPORT EQUIPMENT</b>						P-1 ITEM NOMENCLATURE  <b>421600, AIRCRAFT LAUNCH AND RECOVERY EQUIPMENT (ALRE)</b>							
Program Element for Code B Items: <b>0204112N</b>								Other Related Program Elements <b>RDT&amp;E 0604512N, 0603512N</b>					
	Prior Years	ID Code	FY 2009	FY 2010	Base FY 2011	OCO FY 2011	Total FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
Quantity													
Cost (\$M)	<b>\$115.6</b>		<b>\$46.2</b>	<b>\$39.7</b>	<b>\$37.1</b>	<b>\$0.0</b>	<b>\$37.1</b>	<b>\$19.3</b>	<b>\$73.9</b>	<b>\$80.1</b>	<b>\$68.0</b>	<b>CONTINUING</b>	<b>CONTINUING</b>
Initial Spares (\$M)			<b>\$0.4</b>	<b>\$0.3</b>	<b>\$0.6</b>	<b>\$0.0</b>	<b>\$0.6</b>	<b>\$3.3</b>	<b>\$1.7</b>	<b>\$2.6</b>	<b>\$2.9</b>	<b>CONTINUING</b>	<b>CONTINUING</b>
<p>This program provides for procurement of major aircraft Launch, Recovery, and Visual Landing Aids (VLA) equipment as well as ancillary items required for installation aboard aircraft carriers, air capable combatant vessels, amphibious assault ships, and shore stations. Most procurements are initiated due to one of the following reasons:</p> <ul style="list-style-type: none"> <li>(1) urgent fleet problems associated with the safe and reliable operation of existing equipment;</li> <li>(2) expanding responsibilities in support of helicopter operations on Air Capable Ships (ACS) and Vertical / Short Take-Off and Landing (V/STOL) aircraft, and;</li> <li>(3) the demand for increased launch and recovery equipment reliability, availability, and maintainability (RAM); capability; and margin of safety.</li> </ul> <p>Shipboard installed items procured under this program are for operational fleet aircraft carriers, air capable combatant vessels, and amphibious assault ships. Major equipment and service changes procured in support of the Fleet Modernization Program (FMP) are generally installed by shipyard personnel during routine or restricted availabilities and regular overhauls. Non-FMP installations include minor equipments and service changes that are installed by Alteration Installation Teams (AIT) or Voyage Repair Teams (VRT) from the Naval Aviation Depots (NADEPs) under the direction of Fleet Type Commanders and the Naval Air Warfare Center, Aircraft Division (NAWCAD), Lakehurst, NJ. Type Commanders determine shorebased installed item requirements.</p> <p><u>Launcher Service Change Kits</u> Launcher Service Change Kits is used to support the procurement of product improvements recently identified thru the metrics rack and stack process with the TYCOMs. Launcher service change kit programs will reduce catapult down-time, increase availability, and reduce total ownership costs.</p> <p><u>Visual Landing Aids Service Change Kits</u> Visual Landing Aids (VLA) Service Change Kits is used to support the procurement of corrective actions for product deficiencies related to changing operating conditions, obsolescence and product improvements identified thru the metrics rack and stack process with the TYCOMs. The various VLA programs that will reduce system down-time, increase availability, and reduce total ownership costs.</p> <p><u>Recovery Service Change Kits</u> Recovery Service Change Kits will be used to procure hardware which will improve arresting gear maintainability and availability. Recovery service change kits will also include procuring aircraft firefighting thermal imager initial outfitting of CV/CVN class ships. The programs have been identified through a review of fleet metrics data, identifying components or maintenance actions with high ownership costs.</p>													

CLASSIFICATION: **UNCLASSIFIED**

<b>BUDGET ITEM JUSTIFICATION SHEET</b>		DATE:
<b>P-40</b>		<b>February 2010</b>
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	
<b>OTHER PROCUREMENT, NAVY/ BA-3 AVIATION SUPPORT EQUIPMENT</b>	<b>421600, AIRCRAFT LAUNCH AND RECOVERY EQUIPMENT (ALRE)</b>	
<p><u>Moriah Wind System</u>  Moriah Wind System (MWS) provides digital wind speed and direction information, including crosswind and headwind, to support decision-making for air operations, combat, navigation, tactical planning, weapons employment and firefighting. MWS replaces the Type F Wind Measuring and Indicating System. In addition, MWS displays Aircraft Recovery Bulletins (ARBs), Launch and Recovery Envelopes (LREs) and Vertical Short Take-off and Landing (VSTOL) Bulletin Data. MWS consists of wind sensor units (WSU), a redundant wind processor unit (WPU), high-end displays (HED) and low-end displays (LED).</p> <p><u>Advance Recovery Control System</u>  The Advanced Recovery Control (ARC) system provides a recovery control and monitoring function. The ARC system replaces the Mark 7 arresting gear Constant Runout Valve mechanical actuator components and chain drive system with a computer controlled hydraulic operator. The ARC system also replaces the manually operated retract levers at the arresting gear deck edge station and associated cable system with an electronically controlled electro-hydrostatic actuator system for each engine. The new ARC / Cross Check system, provides the aircraft type selected for recovery, arresting gear engine status, Improved Fresnel Lens Optical Landing System (IFLOLS) status, the targeted arresting gear wire, Clear deck / Foul deck status, Headwind / Crosswind advisory, arresting gear and IFLOLS crosscheck indication.</p> <p><u>Advanced Arresting Gear</u>  Advanced Arresting Gear (AAG) replaces the MK7 arresting gear, which has reached the limits of its operating capability. The AAG system will provide the U.S. Navy with the ability to recover existing and projected aircraft carrier based air vehicles well into the 21st century. The AAG will provide increased operational availability, while reducing manning, maintenance, and support costs. The AAG will be back-fit during Refueling Complex Overhaul (RCOH) on CVN 68-class aircraft carriers and forward fit on CVN 21-class ships. Milestone C is scheduled for 4th quarter FY2012. Extended Reliability Testing 1 was completed during 1st through 3rd quarter of FY2009. Development Test Report (DTR) 1 is projected for 3rd quarter FY2011 and DTR 2 is projected for 4th quarter FY2012.</p>		

CLASSIFICATION: **UNCLASSIFIED**

<b>BUDGET ITEM JUSTIFICATION SHEET</b> <b>P-40</b>		DATE: <b>February 2010</b>
APPROPRIATION/BUDGET ACTIVITY <b>OTHER PROCUREMENT, NAVY/ BA-3 AVIATION SUPPORT EQUIPMENT</b>	P-1 ITEM NOMENCLATURE <b>421600, AIRCRAFT LAUNCH AND RECOVERY EQUIPMENT (ALRE)</b>	
<p><u>ADMACS</u> The Aviation Data Management and Control System (ADMACS) grew out of the Aviation Weapons Information Management System (AWIMS) initiative. ADMACS is an integrated, network-centric, shipboard aviation operations information management system, which will provide data required for CVN aviation operations planning, execution, and readiness assessment. ADMACS communicates aviation and command related data elements across the ADMACS Local Area Network (LAN) and Integrated Shipboard Network System (ISNS) that electronically displays position and location of aircraft on the flight and hangar decks, status of aircraft; aircraft launch and recovery equipment; fuel, weapons types and quantity as well as a wide variety of other aviation related and ship information. Block 2 is the third incremental development in this integration program. Block 2 is currently in System Design &amp; Development (SDD) with a Milestone C date of 2nd quarter FY2010. Design &amp; Development testing and Environmental Effect testing is being conducted from 1st quarter through 4th quarter of FY2009. Developmental Test report was completed during 3rd quarter of FY2009. Operational Test Evaluation is projected for 3rd quarter FY2011. Follow-on Test &amp; Evaluation is scheduled for 1st quarter FY2012. Full Rate Production is projected in 4th quarter FY2011.</p>		

OTHER PROCUREMENT COST ANALYSIS P-5										DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/ BA-3 AVIATION SUPPORT EQUIPMENT							ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD 421600, AIRCRAFT LAUNCH AND RECOVERY EQUIPMENT (ALRE)				
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS									
			Prior Years	FY 2009			FY 2010			FY 2011		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
SJ040	<u>Service Change Kits</u>											
	LAUNCHER Catapults - CVN		2.888			0.146			3.779			2.425
	VISUAL LANDING AIDS Visual Landing Aids - CVN		4.775			1.157			2.345			0.276
	Visual Landing Aids - ACS		0.827			0.898			1.138			0.576
	RECOVERY Arresting Gear - CVN		3.419			0.927			2.891			0.532
	Helicopter Landing System (HLS) - ACS		0.483									
SJ261	MWS - L Class <sup>1</sup>	A	2.745	2	0.662	1.323	2	0.828	1.656	2	0.867	1.734
SJ263	MWS-Air Capable Ships (ACS)	A					3	0.694	2.082			
SJ280	ARC CVN <sup>2</sup>	A	25.352	10	0.995	9.950	5	1.014	5.068			
SJ281	ARC Shorebased	A	0.443	2	1.456	2.912				1	1.995	1.995
SJ300	AAG - CVN	B										
SJ301	AAG-Shorebased	B										
SJ302	ADMACS Block 2 <sup>3</sup>	B		2	1.803	3.605				1	3.095	3.095
SJ303	ADMACS Block 3	B										
SJ800	Integrated Logistics Support		8.663			2.102			2.314			1.696
SJ830	Production Engineering		25.128			10.028			3.726			8.912
SJ860	Acceptance, Test & Evaluation		0.035									
SJ900	Installation - NonFMP		10.018			4.095			5.007			2.521
SJ910	Installation - FMP		29.763			9.082			9.677			13.301
SJ990	Initial Training		1.019									
TOTAL			115.558			46.225			39.683			37.063

<sup>1</sup>MWS shipset is comprised of Sensors, High End Displays, Low End displays, WPU's, GUI kits, cables. Numbers of displays, etc vary depending on ship class/hull. Unit cost reflects component contract pricing.<sup>2</sup> ARC CVN/Shorebased Unit cost varies based upon quantities procured.<sup>3</sup>ADMACS Block 2 (SJ302) Unit cost consists of 1 shipsets and 1 inexpensive lab unit in FY09; Unit cost variance in FY11 is due to different shipboard configurations (ISNS) shipsets {CVN 77} vs other carriers



PROCUREMENT HISTORY AND PLANNING P-5A								A. DATE February 2010		
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy/BA-3 AVIATION SUPPORT EQUIPMENT					C. P-1 ITEM NOMENCLATURE 421600, Aircraft Launch and Recovery Equipment (ALRE)				SUBHEAD Y3SJ	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	TECH DATA AVAILABLE NOW ?	DATE REVISIONS AVAILABLE
MWS - L Class (SJ261)										
FY09	2	0.662	NAWCAD LKEHRST	2/08	C/FFP/IDIQ	Quality Performance Inc Fredericksburg VA	12/08	10/09	Yes	
FY10	2	0.828	NAWCAD LKEHRST	2/08	Option	Quality Performance Inc Fredericksburg VA	12/09	10/10	Yes	
FY11	2	0.867	NAWCAD LKEHRST	2/08	Option	Quality Performance Inc Fredericksburg VA	12/10	10/11	Yes	
MWS - ACS (SJ263)										
FY10	3	0.694	NAWCAD LKEHRST	2/08	C/FFP/IDIQ	Quality Performance Inc Fredericksburg VA	12/09	10/10	Yes	
ARC - CVN (SJ280)										
FY09	10	0.995	NAWCAD LKEHRST	2/02	C/FPI/IDIQ	Northrop Grumman Sykesville, MD	12/08	12/09	Yes	
FY10	5	1.014	NAWCAD LKEHRST	2/02	Option	Northrop Grumman Sykesville, MD	1/10	12/10	Yes	
ARC - Shorebased (SJ281)										
FY09	2	1.456	NAWCAD LKEHRST	2/02	C/FPI/IDIQ	Northrop Grumman Sykesville, MD	12/08	12/09	Yes	
FY11	1	1.995	NAWCAD LKEHRST	2/02	Option	Northrop Grumman Sykesville, MD	12/10	12/11	Yes	
ADMACS Block 2 (SJ302)										
FY09	2	1.803 <sup>1</sup>	NAWCAD LKEHRST	5/08	SS/FFP	Chugach Alaska Corp. Chesapeake, VA	3/10	12/10	Yes	
FY11	1	3.095	NAWCAD LKEHRST	5/08	Option	Chugach Alaska Corp. Chesapeake, VA	1/11	10/11	Yes	
D. REMARKS C= Competitive/ FFP= Firm fixed Price / IDIQ=Indefinite Delivery Indefinite Quantity / SS/FFP= Sole Source Firm Fixed Price										

### INDIVIDUAL MODIFICATION

### Air Capable Ships

TYPE MODIFICATION: Increase Capability/Safety

MODIFICATION TITLE: Moriah Wind System - ACS SJ263

<p>Moriah Wind System (MWS) provides digital wind speed and direction information, including crosswind and headwind, to support decision-making for air operations, combat, navigation, tactical planning, weapons employment and firefighting. MWS replaces the Type F Wind Measuring and Indicating System. In addition, MWS displays Aircraft Recovery Bulletins (ARBs), Launch and Recovery Envelopes (LREs) and Vertical Short Take-off and Landing (VSTOL) Bulletin Data. The MWS replaces the current Type F Wind Measuring and Indicating System (WMIS), providing a single wind measuring system, consistent across all ship classes and shore stations. MWS consists of wind sensor units (WSU), a redundant wind processor unit (WPU), high-end displays (HED) and low-end displays (LED).</p>
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DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:	FRP Aug 2006
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	<u>Prior Years</u>		<u>FY 2009</u>		<u>FY 2010</u>		<u>FY 2011</u>		<u>FY 2012</u>		<u>FY 2013</u>		<u>FY 2014</u>		<u>FY 2015</u>		<u>TC</u>		<u>TOTAL</u>	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
<b>FINANCIAL PLAN (IN MILLIONS)</b>																				
<i>RD&amp;E</i>																				
<i>PROCUREMENT</i>																				
INSTALLATION KITS					3	2.082							8	6.752	5	4.430	110	93.500	126	106.764
INSTALLATION KITS - UNIT COST						0.694								0.844		0.886		0.850		0.847
INSTALLATION KITS NRE																				
EQUIPMENT NRE																				
EQUIPMENT																				
ENGINEERING CHANGE ORDERS																				
DATA																				
TRAINING EQUIPMENT																				
SUPPORT EQUIPMENT																				
ILS						0.170		0.120						0.338		0.280		8.463		9.371
PE						0.443		0.463						1.600		1.340		19.427		23.273
ATE																				
INTERIM CONTRACTOR SUPPORT																				
INSTALL COST					AP	0.759	3	1.608					AP	1.339	8	6.164	115	88.320	126	98.190
<b>TOTAL PROCUREMENT</b>						3.454		2.191						10.029		12.214		209.710		237.598

Note: AP is advanced planning for installation. Totals may not match due to rounding.

FY12 & FY13 MWS will be funded by other customer funds, therefore no production break.

P3A (Continued)

MODELS OF SYSTEMS AFFECTED: Air Capable Ships MODIFICATION TITLE: Moriah Wind System -ACS SJ263

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Shipyard/AITADMINISTRATIVE LEADTIME: 3 months PRODUCTION LEADTIME: 10 months

CONTRACT DATES: FY 2009: \_\_\_\_\_ FY 2010: 12/09 FY 2011: \_\_\_\_\_  
 DELIVERY DATE: FY 2009: \_\_\_\_\_ FY 2010: 10/10 FY 2011: \_\_\_\_\_

(\$ in Millions)

Cost:	Prior Years				FY 2009		FY 2010		FY 2011		FY 2012		FY 2013		FY 2014		FY 2015		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS																						
FY 2009 EQUIPMENT																						
FY 2010 EQUIPMENT (3)							AP	0.759	3	1.608											3	2.367
FY 2011 EQUIPMENT																						-
FY 2012 EQUIPMENT																						
FY 2013 EQUIPMENT																						-
FY 2014 EQUIPMENT (8)															AP	1.339	8	5.164			8	6.503
FY 2015 EQUIPMENT (5)																	AP	1.000	5	3.840	5	4.840
TO COMPLETE (110)																			110	84.480	110	84.480
TOTAL INSTALL COST	-	-	-	-	-	-	-	0.759	3	1.608	-	-	-	-	-	1.339	8	6.164	115	88.320	126	98.190

INSTALLATION SCHEDULE:

	FY 2008 & Prior	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	2	2	115	126
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	2	2	115	126

Total OPN Inventory Objective for this modification is 126.

Note: AP is advanced planning for installation.

P3A INDIVIDUAL MODIFICATION																				
MODELS OF SYSTEM AFFECTED: <u>Mk7 Mod 2,3,4</u>				TYPE MODIFICATION: <u>Increase Capability/Safety</u>				MODIFICATION TITLE: <u>Advanced Recovery Control - CVN SJ280</u>												
DESCRIPTION/JUSTIFICATION: The Advanced Recovery Control (ARC) system provides a recovery control and monitoring function. The ARC system replaces the Mark 7 arresting gear Constant Runout Valve mechanical actuator components and chain drive system with a computer controlled hydraulic operator. The ARC system also replaces the manually operated retract levers at the arresting gear deck edge station and associated cable system with an electronically controlled electro-hydraulic actuator system for each engine. The new ARC / Cross Check system, provides the aircraft type selected for recovery, arresting gear engine status, Improved Fresnel Lens Optical Landing System (IFLOLS) status, the targeted arresting gear wire, Clear deck / Foul deck status, Headwind / Crosswind advisory, arresting gear and IFLOLS crosscheck indication.																				
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: <u>Milestone C May-2006</u>																				
	<u>Prior Years</u>		<u>FY 2009</u>		<u>FY 2010</u>		<u>FY 2011</u>		<u>FY 2012</u>		<u>FY 2013</u>		<u>FY 2014</u>		<u>FY 2015</u>		<u>TC</u>		<u>TOTAL</u>	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E		25.781																		25.781
PROCUREMENT																				
INSTALLATION KITS	23	23.529	10	9.950	5	5.068													38	38.547
INSTALLATION KITS - UNIT COST		1.023		0.995		1.014														1.014
INSTALLATION KITS NRE																				
EQUIPMENT NRE																				
EQUIPMENT																				
ENGINEERING CHANGE ORDERS																				
DATA																				
TRAINING EQUIPMENT																				
SUPPORT EQUIPMENT																				
ILS		1.703		0.389		0.351		0.309		0.438										3.190
PE		5.021		1.022		0.876		0.972		0.916										8.807
ATE																				
INTERIM CONTRACTOR SUPPORT																				
INSTALL COST	9	4.995	9	3.377	10	3.168	10	3.032											38	14.572
TOTAL PROCUREMENT		35.248		14.738		9.463		4.313		1.354										65.116

Note: Totals may not match due to rounding.

P3A (Continued)

MODELS OF SYSTEMS AFFECTED: Mk7 Mod 2,3,4 MODIFICATION TITLE: Advanced Recovery Control System - CVN SJ280

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Shipyard/AITADMINISTRATIVE LEADTIME: 3 monthsPRODUCTION LEADTIME: 12 months

CONTRACT DATES: \_\_\_\_\_ FY 2009: 12/08 FY 2010: 12/09 FY 2011: \_\_\_\_\_  
 DELIVERY DATE: \_\_\_\_\_ FY 2009: 12/09 FY 2010: 12/10 FY 2011: \_\_\_\_\_

(\$ in Millions)

Cost:	Prior Years				FY 2009		FY 2010		FY 2011		FY 2012		FY 2013		FY 2014		FY 2015		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS (23)	9	4.995			9	2.949			5 <sup>1</sup>	1.516											23	9.460
FY 2009 EQUIPMENT (10)					AP	0.428	10	2.949													10	3.377
FY 2010 EQUIPMENT (5)							AP	0.219	5	1.516											5	1.735
FY 2011 EQUIPMENT																					-	-
FY 2012 EQUIPMENT																					-	-
FY 2013 EQUIPMENT																					-	-
FY 2014 EQUIPMENT																					-	-
FY 2015 EQUIPMENT																					-	-
TO COMPLETE																					-	-
TOTAL INSTALL COST	9	4.995	-	-	9	3.377	10	3.168	10	3.032	-	-	-	-	-	-	-	-	-	-	38	14.572

INSTALLATION SCHEDULE:

	FY 2008 & Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	TC	TOTAL
In	9	-	-	-	-	-	4	-	5	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38
Out	9	-	-	-	-	-	-	-	4	5	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38

Total OPN Inventory Objective for this modification is 38.

Note: AP is advanced planning for installation.

In &amp; Out based on Ship in yard dates.

<sup>1</sup> Due to ship non availability CVN-75 was not able to be installed as planned, therefore install has been moved to next ship availability in FY2011.

P3A

**INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: ADMACS Block 2 TYPE MODIFICATION: Increase Capability/Safety MODIFICATION TITLE: ADMACS Block 2 Upgrade SJ302

**DESCRIPTION/JUSTIFICATION:**

The Aviation Data Management and Control System (ADMACS) grew out of the Aviation Weapons Information Management System (AWIMS) initiative. ADMACS is an integrated, network-centric, shipboard aviation operations information management system, which will provide data required for CVN aviation operations planning, execution, and readiness assessment. Block 2 is the third incremental development in this integration program.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: DT-IIA 3Q2008, OT & MS-C 2Q2010

	<u>Prior Years</u>		<u>FY 2009</u>		<u>FY 2010</u>		<u>FY 2011</u>		<u>FY 2012</u>		<u>FY 2013</u>		<u>FY 2014</u>		<u>FY 2015</u>		<u>TC</u>		<u>TOTAL</u>	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
<b>FINANCIAL PLAN (IN MILLIONS)</b>																				
<u>RDT&amp;E</u>		14.635		1.898		5.635		0.102												22.270
<u>PROCUREMENT</u>																				
INSTALLATION KITS			2	3.605			1	3.095	1	3.187	1	3.282	2	6.761					7	19.930
INSTALLATION KITS - UNIT COST				1.803				3.095		3.187		3.282		3.381						2.847
INSTALLATION KITS NRE																				
EQUIPMENT NRE																				
EQUIPMENT																				
ENGINEERING CHANGE ORDERS																				
DATA																				
TRAINING EQUIPMENT																				
SUPPORT EQUIPMENT																				
ILS						0.300		0.361		0.272		0.199		0.133		0.198				1.463
PE						1.497		1.689		1.399		1.138		1.702		0.810		0.069		8.304
ATE																				
INTERIM CONTRACTOR SUPPORT																				
INSTALL COST			AP	0.886	AP	0.635	2	4.093	1	3.898	1	4.606	1	4.738	2	7.800			7	26.656
TOTAL PROCUREMENT		0.0		4.491		2.432		9.238		8.756		9.225		13.334		8.808		0.069		56.353

ADMACS Block 2 (SJ302) Unit cost consists of 2 ships and 1 lab unit in FY09.

Note: AP is advanced planning for installation. Totals may not match due to rounding.

## P3A (Continued)

MODELS OF SYSTEMS AFFECTED: ADMACS Block 2 MODIFICATION TITLE: ADMACS Block 2 Upgrade SJ302

## INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Shipyard/AITADMINISTRATIVE LEADTIME: 18 months PRODUCTION LEADTIME: 9 months

CONTRACT DATES: \_\_\_\_\_ FY 2009: 3/10<sup>1</sup> FY 2010: \_\_\_\_\_ FY 2011: 1/11  
 DELIVERY DATE: \_\_\_\_\_ FY 2009: 12/10 FY 2010: \_\_\_\_\_ FY 2011: 10/11

(\$ in Millions)

Cost:	Prior Years				FY 2009		FY 2010		FY 2011		FY 2012		FY 2013		FY 2014		FY 2015		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS																					-	-
FY 2009 EQUIPMENT (2)					AP	0.886	AP	0.635	2	3.779											2	5.300
FY 2010 EQUIPMENT																						-
FY 2011 EQUIPMENT (1)									AP	0.314	1	3.575									1	3.889
FY 2012 EQUIPMENT (1)											AP	0.323	1	4.273							1	4.596
FY 2013 EQUIPMENT (1)													AP	0.333	1	4.052					1	4.385
FY 2014 EQUIPMENT (2)															AP	0.686	2	7.800			2	8.486
FY 2015 EQUIPMENT																					-	-
TO COMPLETE																					-	-
TOTAL INSTALL COST	-	-	-	-	AP	0.886	-	0.635	2	4.093	1	3.898	1	4.606	1	4.738	2	7.800	-	-	7	26.656

## INSTALLATION SCHEDULE:

	FY 2008 & Prior					FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	1	-	-	1	-	-	1	-	1	1	-	-	-	7		
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	1	-	-	-	1	-	-	1	1	-	-	-	7		

Note: AP is advanced planning for installation.

Total OPN Inventory Objective for this modification is 7.

<sup>1</sup> Contract will be awarded in March 2010 due to schedule slip of Milestone C. Schedule slip due to changing the Engineering Development Model (EDM) ship from CVN-72 to CVN-69 due to system readiness.

Note: Admin Leadtime of 18 months calculated from start of Fiscal Year 09 to actual contract award date, due to program delays leadtime has grown to 18 months.

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BUDGET ITEM JUSTIFICATION SHEET										DATE February 2010	
APPROPRIATION/BUDGET ACTIVITY OP,N - BA3 AVIATION SUPPORT EQUIPMENT						P-1 ITEM NOMENCLATURE 4226 METEOROLOGICAL EQUIPMENT				SUBHEAD 53SP	
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	TO COMP	TOTAL
QUANTITY											
COST (in millions)	21.169	14.514	25.581		25.581	24.430	22.430	24.575	25.765	CONT	CONT
Initial Spares (in millions)	0.792	0.245	0.362		0.362	0.376	0.392	0.409	0.135	CONT	CONT
<p><b>PROGRAM COVERAGE/JUSTIFICATION FOR BUDGET YEAR REQUIREMENTS:</b></p> <p>This item provides new and replacement meteorological equipment for all Navy and Marine Corps Air Stations, all Navy ships, Fleet Marine Force units and other activities required to provide weather observations and provide safety of flight capabilities. The procurement has been thoroughly coordinated with the other DOD and civilian agencies. Equipment is funded under the following programs:</p> <p><u>Satellite Receiver Upgrades (AN/SMQ-11 and AN/FMQ-17) (SP051):</u> Environmental satellite receivers used to receive and process remotely sensed data from the Defense Meteorological Satellite Program satellites, the National Oceanic and Atmospheric Administration satellites, the National Polar-orbiting Operational Environmental Satellite System satellites, the Geostationary Operational Environmental Satellites (GEOSAT), and the GEOSAT Follow-On satellite. The evolutionary upgrades will enhance weather service capabilities to receive and preprocess additional environmental satellites, comply with open systems architecture standards, and provide for antenna replacement. Specifically, in the remote sensing efforts, integration of next generation of Polar Orbiting Satellite families and new sensors of opportunity are incorporated in design and software development into existing systems.</p> <p>FY11: Funding realigned to OMN to support Environmental Satellite Receiver Processor software system upgrades.</p> <p><u>Tactical Environmental Support System/Naval Integrated Tactical Environmental Subsystem (TESS/NITES) Upgrades (SP190):</u> Procures mobile workstations, servers, input/output control devices, software and integration services to support the evolutionary acquisition of TESS/NITES capabilities and Navy Service Oriented Architecture.</p> <p><u>FMF Meteorological Equipment (SP300):</u> Meteorological equipment required to maintain, upgrade, and replace the Meteorological Mobile Facility Replacement (METMF(R)).</p> <p><u>USMC METMF(R) (NEXGEN) (SP350):</u> Production of the Next Generation, portable, armored METMF(R) with a modular, scalable, fully integrated, network-centric, system capable of automatic data acquisition from secure and unsecured communications channels providing METOC data, mesoscale modeling, meteorological satellite, meteorological doppler radar, upper air observation, local and remote meteorological sensors. The METMF(R) NEXGEN is equipped to enhance Marine Air-Ground Task Force (MAGTF) operational capability world wide and requires increased mobility and tactical flexibility to support the MAGTF and combatant commander battlespace sensing strategy.</p>											

Exhibit P-40, Budget Item Justification

<b>BUDGET ITEM JUSTIFICATION SHEET</b>		<b>DATE</b>	February 2010
<b>APPROPRIATION/BUDGET ACTIVITY</b>		<b>P-1 ITEM NOMENCLATURE</b>	<b>SUBHEAD</b>
OP,N - BA3 AVIATION SUPPORT EQUIPMENT		4226 METEOROLOGICAL EQUIPMENT	53SP
<p><b>PROGRAM COVERAGE/JUSTIFICATION FOR BUDGET YEAR REQUIREMENTS:</b></p> <p><u>National Polar-orbiting Operational Satellite System (NPOESS) Readiness (SP400)</u>: Readiness for NPOESS will require the procurement and installation of software and hardware products necessary to accommodate the significantly increased data stream from NPOESS as compared with the current Defense Meteorological Satellite Program and the Polar-orbiting Operational Environmental Satellite which NPOESS replaces. The Navy Production Centers at Fleet Numerical Meteorology and Oceanography Center (FNMOC), Monterey, CA, and the Naval Oceanographic Office (NAVOCEANO), Stennis Space Center, MS, will require upgrades of their Storage Area Networks and increased processing capability for their assimilation, analysis and forecasting systems. Upgrades to existing tactical receivers are also required to extend their life and to receive and process the new downlinks from NPOESS. FY11 budget request is for the procurement of hardware to upgrade and technically enhance the Navy's super computer systems to specifically accommodate a 3X increase in data receipt, data complexity, data simulation requirements, and the expected demand for atmospheric and oceanographic climate/weather predications. This data will be part of the NPOESS C1 and C2 satellite sensor capabilities. NPOESS C1 is scheduled to launch early 1st Qtr FY13.</p> <p><u>Meteorological and Oceanographic Surface-based Atmospheric Sensing Capabilities (METOC SASC) Upgrades (SP550)</u>: Government Off-The-Shelf/Commercial Off-The-Shelf hardware and associated software upgrades for installed METOC atmospheric sensing systems such as Next Generation Radar, Automated Surface Observing System, Supplemental Weather Radar and procurement of the follow-on upper air sensing system replacement for the out-of-production Mini-Rawin System. The follow-on system replacement is for MRS installed on Navy CVs, LHAs, and LPDs. Procurement under this project will provide required system hardware and software upgrades developed by the lead agency (in most cases, the National Weather Service). Procurements made under this project are essential to the continued support of Naval Aviation operations.</p> <p><u>Littoral Battlespace Sensors - Unmanned Undersea Vehicles (LBS-UUV) (SP600)</u>: Procures Unmanned Undersea Vehicle ocean sensor systems. These include powered, short duration (~days) Autonomous Undersea Vehicles and long duration (~months) buoyancy driven Ocean Gliders which carry sensors that characterize the ocean bottom (bathymetry, imagery, sediments, etc.) and measure ocean volume parameters (conductivity, temperature, depth, optics, currents, etc.). These vehicles are preprogrammed with mission profiles and once launched are totally autonomous. The increase in funding in FY11 is due to the planned transition from Low Rate Initial Production to Full-Rate Production.</p> <p><u>Installation of Equipment</u> - Installation efforts include plans, site surveys, Base Electronic System Engineering Plans, equipment installation and checkout for Satellite Receiver Upgrades (AN/SMQ-11 and AN/FMQ-17).</p> <p>The primary focus of the FY11 request is the planned transition from LRIP to FRP of the Littoral Battlespace Sensors - Unmanned Undersea Vehicles (LBS-UUV) program's Gliders, the FRP of the United States Marine Corps Meteorological Mobile Facility (Replacement) Next Generation, the continuation of enhancements to the Navy Production Centers - FNMOC and NAVOCEANO - in preparation for NPOESS, and the continuation of upgrades to the METOC SASC family of systems.</p>			

Exhibit P-40, Budget Item Justification

COST ANALYSIS										DATE #REF!		
APPROPRIATION ACTIVITY										SUBHEAD		
OP,N - BA3 AVIATION SUPPORT EQUIPMENT										53SP		
COST CODE	ELEMENT OF COST	ID CODE	PY	FY 2009			FY 2010			FY 2011		
			TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
SP051	Satellite Receiver Upgrades (Space) <sup>1,4,5</sup>	A		23	48	1,101	22	54	1,194			
SP190	TESS/NITES Upgrades	A		195	27	5,275						
SP300	Met Equipment (METMF(R)) Upgrades <sup>4</sup>	A		12	368	4,419	12	283	3,391			
SP350	USMC Meteorological Mobile Facility (Replacement) Next Generation (METMF(R) NEXGEN)	A								4	2,323	9,292
SP400	National Polar-orbiting Operational Environmental Satellite System (NPOESS) Readiness <sup>2,4</sup>	A		2	2,373	4,746	2	1,173	2,345	2	2,575	5,149
SP550	METOC SASC (formerly Aviation Safety) Upgrades <sup>3,4</sup>	A		71	66	4,717	28	157	4,388	30	146	4,387
SP555	<b>Production Support</b> LBS-UUV METMF(R) NEXGEN								<b>268</b> 268			<b>1,968</b> 171 1,797
SP600	Littoral Battlespace Sensors - Unmanned Undersea Vehicles (LBS-UUV) Littoral Battlespace Sensors - Gliders (LBS-G) <sup>4</sup>	A					15	145	2,175	33	145	4,785
	<b>INSTALLATION</b>					<b>790</b>			<b>753</b>			<b>0</b>
SP776	Non-FMP					398			409			
SP777	FMP					392			344			
	Acquisition Workforce Fund - 2009					121						
	<b>TOTAL CONTROL</b>					<b>21,169</b>			<b>14,514</b>			<b>25,581</b>
	<b>Initial Spares</b>					<b>792</b>			<b>245</b>			<b>362</b>

**Notes/Comments:**

1. Cost Code SP051 - Quantities represent the number of systems (AN/SMQ-11 and AN/FMQ-17) upgraded annually. Upgrades are Hardware & Software refresh based on subsystem, site or platform.
2. Cost Code SP400 - Quantities represent upgrades to the super computers at the 2 METOC Production Centers (FNMOC and NAVOCEANO). Upgrades consist of data processing and communications hardware and vary annually dependent depending on the launch of each of the satellites in the NPOESS constellation.
3. Cost Code SP550 - Quantities represent the number of sites upgraded annually. Upgrades are GOTS/COTS hardware and associated software for installed systems such as Next Generation Radar, Automated Surface Observing System, Supplemental Weather Radar and the Mini-Rawin System.
4. Unit costs represent the average unit cost of each planned Hardware/Software procurement or refresh based on subsystem, site or platform.
5. FY11 - Funding realigned to OMN to support Environmental Satellite Receiver Processor (ESRP) software system upgrades.

Exhibit P-5, Cost Analysis

Exhibit P-5A, Procurement History and Planning										DATE February 2010		
APPROPRIATION/BUDGET ACTIVITY OP,N - BA3 AVIATION SUPPORT EQUIPMENT				P-1 ITEM NOMENCLATURE 4226 METEOROLOGICAL EQUIPMENT						SUBHEAD 53SP		
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
SP051	Satellite Receiver Upgrades (Space) <sup>1,3,5</sup>	10	Raytheon, VA	OPTION/FFP	SPAWAR	N/A	Jan-10	Jul-10	22	54	YES	N/A
SP350	USMC Meteorological Mobile Facility (Replacement) Next Generation (METMF(R) NEXGEN)	11	TBD	FFP	SPAWAR	Oct-10	Mar-11	Sep-11	4	2,323	YES	N/A
SP550	METOC SASC (formerly Aviation Safety) Upgrades <sup>2,3,4</sup>	10 11	Var Var	Var Var	SSC LANT SSC LANT	N/A N/A	N/A N/A	N/A N/A	28 30	157 146	YES YES	N/A N/A
SP600	Littoral Battlespace Sensors - Unmanned Undersea Vehicles (LBS-UUV) Littoral Battlespace Sensors - Gliders (LBS-G) Littoral Battlespace Sensors - Gliders (LBS-G)	10 11	Teledyne Brown Eng., AL Teledyne Brown Eng., AL	OPTION/FPI OPTION/FPI	SPAWAR SPAWAR	Apr-08 Apr-08	Aug-10 Aug-11	Aug-11 Aug-12	15 33	145 145	YES YES	N/A N/A
Notes/Comments: 1. Cost Code SP051 - Quantities represent the number of systems (AN/SMQ-11 and AN/FMQ-17) upgraded annually. Upgrades are Hardware & Software refresh based on subsystem, site or platform. 2. Cost Code SP550 - Quantities represent the number of sites upgraded annually. Upgrades are GOTS/COTS hardware and associated software for installed systems such as Next Generation Radar, Automated Surface Observing System, Supplemental Weather Radar and the Mini-Rawin System. 3. Unit costs represent the average unit cost of each planned Hardware/Software procurement or refresh based on subsystem, site or platform. 4. "Contractor and Location" and "Contract Method & Type" are various ("Var") because the differing components required for each system/subsystem upgrade are supplied by multiple commercial vendors and integrated into each system/subsystem by the SPAWAR System Centers (Pacific and Atlantic). 5. FY11 - Funding realigned to OMN to support Environmental Satellite Receiver Processor (ESRP) software system upgrades.												

Exhibit P-5A, Procurement History and Planning

MODIFICATION TITLE: SATELLITE RECEIVER UPGRADES (SPACE) - (SHIP)  
 COST CODE: SP051

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: Satellite Receiver Upgrades (AN/SMQ-11 and AN/FMQ-17) are environmental satellite receivers that are used to receive and process remotely sensed data from the Defense Meteorological Satellite Program (DMSP) satellites, the National Oceanic and Atmospheric Administration (NOAA) satellites, the National Polar-orbiting Operational Environmental Satellite System (NPOESS) satellites, the Geostationary Operational Environmental Satellites (GOES), and the GEOSAT Follow-On (GFO) satellite. The evolutionary upgrades will enhance weather service capabilities to receive and reprocess additional environmental satellites, and comply with open systems architecture standards.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	<u>PY</u>		<u>FY 09</u>		<u>FY 10</u>		<u>FY 11</u>		<u>FY 12</u>		<u>FY 13</u>		<u>FY 14</u>		<u>FY 15</u>		<u>TC</u>		<u>Total</u>	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
PROCUREMENT:																				
Kit Quantity																				
Installation Kits																				
Installation Kits Nonrecurring																				
Equipment (Note 1 &2)	122	2.632	11	0.505	10	0.507			10	0.390	10	0.389	10	0.363	10	0.366	CONT	CONT	CONT	CONT
Equipment Nonrecurring																				
FY 2011 OCO Funding																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Production Support		0.075																		
DSA																				
Interim Contractor Support																				
Installation of Hardware (Note 3)	122	1.952	11	0.392	10	0.344			10	0.366	10	0.378	10	0.386	10	0.393	CONT	CONT	CONT	CONT
PRIOR YR EQUIP	117	1.786																	117	1.786
FY 07 EQUIP																			0	0.000
FY 08 EQUIP	5	0.166																	5	0.166
FY 09 EQUIP			11	0.392															11	0.392
FY 10 EQUIP					10	0.344													10	0.344
FY 11 EQUIP																			0	0.000
FY 12 EQUIP								10	0.366										10	0.366
FY 13 EQUIP										10	0.378								10	0.378
FY 14 EQUIP												10	0.386						10	0.386
FY 15 EQUIP														10	0.393				10	0.393
FY TC EQUIP																	CONT	CONT	CONT	CONT
TOTAL INSTALLATION COST		1.952		0.392		0.344		0.000		0.366		0.378		0.386		0.393	CONT	CONT	CONT	CONT
TOTAL PROCUREMENT COST		4.659		0.897		0.851		0.000		0.756		0.767		0.749		0.759	CONT	CONT	CONT	CONT

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEAD-TIME:

1 month

PRODUCTION LEAD-TIME:

6 months

CONTRACT DATES:

FY 2009: Oct-08

FY 2010: Jan-10

FY 2011:

DELIVERY DATES:

FY 2009: Jul-09

FY 2010: Jul-10

FY 2011:

INSTALLATION SCHEDULE:	<u>PY</u>	<u>FY 10</u>				<u>FY 11</u>				<u>FY 12</u>				<u>FY 13</u>				<u>FY 14</u>				<u>FY 15</u>				<u>TC</u>	<u>TOTAL</u>
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT	133				10												5					5					
OUTPUT	128	5						10																	5		
INSTALLATION SCHEDULE:		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4										
INPUT				5	5			5	5			5	5			5	5					5	5			CONT	CONT
OUTPUT		5			5		5		5		5		5		5		5					5				CONT	CONT

Notes/Comments

1/ The complete buy of FCIII procurements occurred in FY06 with hardware installs completed by FY09 due to CNO availabilities. Beginning in FY08 the installs are software upgrades.

2/ Procurement quantities represent the number of systems (AN/SMQ-11 and AN/FMQ-17) upgraded annually. Upgrades are Hardware & Software refresh and upgrade quantities are based on subsystem, site or platform type.

3/ Installation quantities reflect number of sites/platforms.

4/ FY11: Funding realigned to OMN to support ESRP Software System Upgrades.

Exhibit P-3a, Individual Modification Program

MODIFICATION TITLE: SATELLITE RECEIVER UPGRADES (SPACE) - (SHORE)  
COST CODE: SP051

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: Satellite Receiver Upgrades (AN/SMQ-11 and AN/FMQ-17) are environmental satellite receivers that are used to receive and process remotely sensed data from the Defense Meteorological Satellite Program (DMSP) satellites, the National Oceanic and Atmospheric Administration (NOAA) satellites, the National Polar-orbiting Operational Environmental Satellite System (NPOESS) satellites, the Geostationary Operational Environmental Satellites (GOES), and the GEOSAT Follow-On (GFO) satellite. The evolutionary upgrades will enhance weather service capabilities to receive and reprocess additional environmental satellites, and comply with open systems architecture standards.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	<u>PY</u>		<u>FY 09</u>		<u>FY 10</u>		<u>FY 11</u>		<u>FY 12</u>		<u>FY 13</u>		<u>FY 14</u>		<u>FY 15</u>		<u>TC</u>		<u>Total</u>	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
PROCUREMENT:																				
Kit Quantity																				
Installation Kits																				
Installation Kits Nonrecurring																				
Equipment (Note 1)	124	1.948	12	0.596	12	0.687			12	0.790	13	0.720	13	0.755	13	0.759	CONT	CONT	CONT	CONT
Equipment Nonrecurring																				
FY 2011 OCO Funding																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Production Support																				
DSA																				
Interim Contractor Support																				
Installation of Hardware (Note 2)	124	1.486	12	0.398	12	0.409			12	0.441	13	0.495	13	0.503	13	0.498	CONT	CONT	CONT	CONT
PRIOR YR EQUIP	111	1.073																	111	1.073
FY 07 EQUIP																			0	0.000
FY 08 EQUIP	13	0.413																	13	0.413
FY 09 EQUIP			12	0.398															12	0.398
FY 10 EQUIP					12	0.409													12	0.409
FY 11 EQUIP																			0	0.000
FY 12 EQUIP									12	0.441									12	0.441
FY 13 EQUIP											13	0.495							13	0.495
FY 14 EQUIP													13	0.503					13	0.503
FY 15 EQUIP															13	0.498			13	0.498
FY TC EQUIP																	CONT	CONT	CONT	CONT
TOTAL INSTALLATION COST		1.486		0.398		0.409		0.000		0.451		0.495		0.503		0.498	CONT	CONT	CONT	CONT
TOTAL PROCUREMENT COST		3.434		0.994		1.096		0.000		1.231		1.215		1.258		1.257	CONT	CONT	CONT	CONT

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEAD-TIME: 1 month

PRODUCTION LEAD-TIME: 6 months

CONTRACT DATES: FY 2009: Oct-08

FY 2010: Jan-10

FY 2011:

DELIVERY DATES: FY 2009: Jul-09

FY 2010: Jul-10

FY 2011:

INSTALLATION SCHEDULE:	<u>PY</u>	<u>FY 10</u>				<u>FY 11</u>				<u>FY 12</u>				<u>FY 13</u>				<u>FY 14</u>				<u>FY 15</u>				<u>TC</u>	<u>TOTAL</u>
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT	136				12												3										
OUTPUT	127		9					12																			
INSTALLATION SCHEDULE:		<u>FY 13</u>				<u>FY 14</u>				<u>FY 15</u>				<u>FY 16</u>				<u>FY 17</u>				<u>FY 18</u>				<u>TC</u>	<u>TOTAL</u>
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT				4	9			4	9				4	9							4	9				CONT	CONT
OUTPUT			9		4		9		4			9										4				CONT	CONT

Notes/Comments

1/ Procurement quantities represent the number of systems (AN/SMQ-11 and AN/FMQ-17) upgraded annually. Upgrades are Hardware & Software refresh and upgrade quantities are based on subsystem, site or platform type.

2/ Installation quantities reflect number of sites/platforms.

4/ FY11: Funding realigned to OMN to support ESRP Software System Upgrades.

Exhibit P-3a, Individual Modification Program



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**BUDGET ITEM JUSTIFICATION SHEET****P-40**

DATE:

**February 2010**

APPROPRIATION/BUDGET ACTIVITY

**OTHER PROCUREMENT, NAVY BA 3 - Aviation Support Equipment**

P-1 ITEM NOMENCLATURE

**424200, DCRS/DPL**

Program Element for Code B Items:

Other Related Program Elements

	Prior Years	ID Code	FY 2009	FY 2010	Base FY 2011	OCO FY 2011	Total FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
Quantity							<b>0</b>						
Cost (\$M)	<b>86.6</b>	<b>A</b>	<b>1.6</b>	<b>1.6</b>	<b>1.6</b>	<b>0.0</b>	<b>1.6</b>	<b>1.6</b>	<b>1.6</b>	<b>1.7</b>	<b>1.7</b>	<b>Continuing</b>	<b>Continuing</b>
Initial Spares (\$M)			<b>0.1</b>	<b>0.4</b>	<b>0.2</b>	<b>0.0</b>	<b>0.2</b>	<b>0.0</b>	<b>0.6</b>	<b>0.4</b>	<b>0.5</b>	<b>Continuing</b>	<b>Continuing</b>

DESCRIPTION: DCRS/DPL The Naval Air Systems Command is tasked to support digital imagery shipboard photographic (CNO Memo Ser 09B/2U2501983 of 23 Oct 92 applies). There are two systems supported by the OPN funding line.

First, the Digital Camera Receive Station (DCRS) is a combat system located in the Carrier Intelligence Center (CVIC) that processes classified Bomb Hit Assessment (BHA) and target imagery. DCRS has requirements to support near real-time over-the-horizon imagery transfer, as well as post-mission playback of imagery obtained from aircraft sensors. DCRS is a one rack system with a multiple PC workstation for video editing and playback, media receptacles for aircraft data transfer devices, and communications equipment to support Fast Tactical Imagery (FTI). Equipment and software are updated through field change installations scheduled periodically every three years for each CV/CVN.

Second, the Digital Photo Lab (DPL) is an unclassified system that processes visual information for incidents and accidents at sea, shipboard investigations, medical records, combat camera, safety, training, and Public Affairs Office (PAO) functions. The DPL produces visual information documentation of real world events (e.g. drug interdiction programs, humanitarian relief efforts, shipboard and flight operations) that is eventually viewed by CNO, SECNAV, JCS, National Military Command Center and the White House. Digital imagery can be quickly disseminated via shipboard communication systems to support decision makers at all levels. DPL Phase I equipment installations are complete. In accordance with requirements set forth in CINCLANT MSG DTG 051820Z Apr 00, the current supported DPL configuration is versioned as V2X (DPL Phase II) and consists of the following components: two hard mounted racks for PC workstations and media receptacles; a rack for two scanners and two photo quality printers; a separate large format printer; a separate high speed laser printer; and a photo LAN that networks all of these components. The DPL also provides two high quality digital cameras to the ship. Equipment and software are updated through field change installations scheduled periodically every three years for each CV/CVN.

FY09 - Completed Equipment and software updates through field change installations as scheduled on various CV/CVN for DCRS and DPL.

FY10 - Continue to support equipment and software updates through field change installations as scheduled on various CV/CVN for DCRS and DPL.

FY11 - Continue to support equipment and software updates through field change installations as scheduled on various CV/CVN for DCRS and DPL.

P-1 Line Item No. 98  
(Page 2 of 2)

<b>BUDGET ITEM JUSTIFICATION SHEET</b>								DATE: <b>February 2010</b>					
<b>P-40</b>													
APPROPRIATION/BUDGET ACTIVITY								P-1 ITEM NOMENCLATURE					
<b>OTHER PROCUREMENT, NAVY BA 3 - Aviation Support Equipment</b>								<b>424400, AVIATION LIFE SUPPORT</b>					
Program Element for Code B Items:								Other Related Program Elements					
	Prior* Years	ID Code	FY 2009	FY 2010	Base FY 2011	OCO FY 2011	Total FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
Quantity													
Cost (\$M)	<b>138.066</b>		<b>21.609</b>	<b>48.157</b>	<b>40.696</b>	<b>26.024</b>	<b>66.720</b>	<b>65.841</b>	<b>48.871</b>	<b>45.561</b>	<b>43.957</b>	<b>CONT</b>	<b>CONT</b>
Initial Spares (\$M)													
<p><b>DESCRIPTION:</b></p> <p>This account provides for the acquisition, upgrade, and production support of aviation life support systems required for the personal safety and protection of aircrew against the hazards encountered in the aircraft operating environment and for safe recovery of downed aircrew.</p> <p><b>NEW SURVIVAL RADIO - SY030 (FY10 OCO Budget)</b></p> <p>- AN/URT-140 Radio Beacons, a component of the New Survival Radio, are required on all NACES ejection seats to aid in the location of aircrew after ejection from the aircraft. Due to increased numbers of F/A-18 being procured, FY10 OCO will allow for outfitting to the new Inventory Objective. The additional 28 AN/URT-140 beacons would ensure 406 beacon capability for all deployed ejection seat aircraft.</p> <p><b>COMBAT SURVIVOR EVADER LOCATOR (CSEL) - SY060 (Includes FY10 &amp; FY11 OCO)</b></p> <p>- CSEL has been designated as an ACAT III Joint Service Program with the USAF as lead service. The CSEL Radio system provides U.S. combat forces with secure, encrypted, low probability of exploitation, two-way, over the horizon, near real time databurst communications with integral precise geopositioning; and non-secure, unencrypted line-of-sight voice and beacon capability to support survival, evasion, and personnel recovery operations. The user segment of the CSEL system is composed of a battery operated Hand Held Radio (HHR) (AN/PRQ-7), a Radio Set Adapter (RSA) (J-6431/PRQ-7), a Global Positioning System (GPS) antenna and coupler, and a laptop Central Processing Unit (CPU) with software for loading the HHR (CSEL Planning Computer (CPC)). The HHR will weigh less than 32 ounces and is of comparable size to other portable SATCOM radios (8x3.5x1.75"). CSEL will require a key fill device and will have improved jam and spoofing resistance by incorporating the next-generation Selective Availability Anti-Spoofing Module (SAASM) GPS module. The HHR requires the "CSEL infrastructure" to be installed and operational, including the ground segment's Joint Search and Rescue Center (JSRC) workstation/software and the Over-The-Horizon (OTH) segment's UHF Base Station (UBS), but can work autonomously in the line-of-sight voice or beacon modes. FY10 Budget includes Overseas Contingency Operations (OCO) funding for 834 CSEL radios in support of new H-1, MV-22B and MH-60 squadrons. FY11 OCO is for procurement of 2252 CSEL radios to support Central Command (CENTCOM) Directive requiring all aircrew have CSEL for combat operations. Increased fielding of CSEL radios will provide 100% coverage of radios to Aviation personnel that currently lack military GPS enabled radios today.</p> <p><b>CSEL WORKSTATION - SY061 (FY10 OCO Budget)</b></p> <p>- CSEL workstations are used to communicate with the CSEL radio. Delay of CSEL Web Application Workstation has required the current hardware workstation to be retained in service longer than planned. This has also required additional Hardware workstations to be installed on CVN's than initially planned. FY10 OCO Funding will procure and install 5 additional CSEL workstations.</p> <p><b>JOINT SERVICE AIRCREW LOW ENERGY MULTIPLE WAVELENGTH ADVANCED LASER EYE PROTECTION VISOR (JALEPV) - SY085</b></p> <p>- JALEPV has been designated as an ACAT IVM Joint Program with the Navy as the lead service. The JALEPV is being developed to provide day and limited night multiple wavelength, low energy protection to address the needs of fixed and rotary wing aircrew in a fixed multiple wavelength laser threat environment. The LEP (visor, spectacle or goggle format) is being developed for compatibility with current Army and USN/USMC Aviation Life Support Equipment (ALSE) as well as cockpit displays, night vision, and fire control systems.</p>													

Note: \*Prior Year Total Costs do not include Elements of Cost that are no longer funded in FYDP.

**BUDGET ITEM JUSTIFICATION SHEET****P-40**

DATE:

**February 2010**

APPROPRIATION/BUDGET ACTIVITY

**OTHER PROCUREMENT, NAVY BA 3 - AVIATION SUPPORT EQUIPMENT**

P-1 ITEM NOMENCLATURE

**424400, AVIATION LIFE SUPPORT****CHEMICAL/BIOLOGICAL/RADIOLOGICAL NON-DEVELOPMENTAL ITEMS PROGRAM (CBR) - SY090**

-This is a Non Development Item (NDI) Program to re-procure aircrew Chemical Biological Radiological (CBR) protective systems, support equipment, and protective garments which provide all US Navy and US Marine Corps aircrewmen the necessary head-eye-respiratory protection during inflight operations. Head-eye-respiratory protection is provided by a hood-mask assembly that precludes the wearer from contact with the Chemical Biological (CB) agent and provides filtered breathing air. In order to have complete protection, the aircrew must also wear a below-the-neck CBR protective clothing ensemble. This re-procurement is required due to the slip in the Joint Service Air Mask (JSAM) program which is suppose to replace the legacy mask inventory which is being reduced due to shelf life expiration.

**\*AIRCREW ENDURANCE (AE) - SY125**

-AE is an abbreviated acquisition program. The program is comprised of a number of components to improve endurance in flights of longer duration: survival vests and body armor design, sizing, compatibility, durability and color improvements; hydration systems; mission extender devices to address physical waste needs; and improved universal camouflage to the Marine Corps coyote color schemes. These improvements will address issues associated with heat stress, physical fatigue, safety and loss of mobility on long duration missions. FY 2009 procures 495 Aircrew Mission Extender Device Kits, FY 2010 procures 302 Aircrew Mission Extender Devices adn 154 Body Armor Devices. Developmental Testing to complete 3rd quarter FY10. (CONGRESSIONAL ADD of \$2M in FY09 and \$1.6M in FY10). Additionally, FY10 OCO funding is to procure 9200 upgrades to the aircrew survival kit (\$4.2M).

**MULTI-CLIMATE PROTECTION SYSTEMS (MCP) - SY146**

-MCP is an abbreviated acquisition program. The program is intended to develop a modular protective clothing system which provides flame protection, thermal protection, and sufficient insulation while reducing heat stress and bulk commonly associated with cold weather clothing systems. Components of the system will be used for a wide range of temperatures and climate conditions. (CONGRESSIONAL ADD OF \$2M in FY09 and \$6.4M in FY10 will complete program requirement.)

**AN/AVS-9 IMAGE INTENSIFIER (AN/AVS-9) - SY212 (FY10 OCO Budget)**

Requested to procure 281 Night Vision Goggles (NVGs) to outfit recently added USMC MV-22 and H-1 squadrons due to change in force construct that currently cannot be provisioned with existing NVG inventory and 5600 tilt lock modifications required for the entire AN/AVS Rotary Wing inventory. Interoperability in joint operations mandates the procurement and incorporation of enhanced night vision capabilities. With 70% of flight operations conducted at night, failure to provide USMC aircrew with this mission essential equipment will seriously impact sortie completion rates and aircrew situational awareness.

Note: \*Aircrew Endurance is a multi-commodity line that encompasses different products. Multiple products may procured each fiscal year.

**Exhibit P-40, Budget Item Justification****UNCLASSIFIED**

**BUDGET ITEM JUSTIFICATION SHEET****P-40**

DATE:

**February 2010**

APPROPRIATION/BUDGET ACTIVITY

**OTHER PROCUREMENT, NAVY BA 3 - AVIATION SUPPORT EQUIPMENT**

P-1 ITEM NOMENCLATURE

**424400, AVIATION LIFE SUPPORT****JOINT HELMET MOUNTED CUEING SYSTEM (JHMCS) NIGHT VISION INTEGRATION - SY215**

- This system will provide aircraft equipped with the Joint Helmet Mounted Cueing System (JHMCS) the ability to cue and display weapons and sensors at night using a forty degree field of view Night Vision Device that integrates the JHMCS cueing and display symbology. The system will be compatible with the current JHMCS helmet and will use the power and data provided by the JHMCS Universal Connector on the helmet. The System includes a high resolution image intensifier assembly, a camera to record the pilot's visual scene and display assembly that combines the JHMCS symbology and the scene viewed through the NVD. It also has an objective lens with a leaky green filter that enables the fixed wing pilot to view the head-up display while wearing the system. The system is fully adjustable by the operator and is detachable from the helmet.

**ANV-6 SURVIVAL NIGHT VISION SCOPES (SNVS) - SY216**

-Survival Night Vision Scopes (SNVS), Model F6015S, are made by reutilizing the optics (eyepiece and objective lens assemblies) and image tubes from AN/AVS-6 Night Vision Goggles (NVGs) turned in by the fleet and a kit which consists of a housing with an infrared light emitting diode (LED), lens caps and neck lanyard. Two SNVS systems are made from one AN/AVS-6 NVG. The SNVS will provide night vision capability for survival, escape and evasion for TACAIR and rotary-wing operators as NVGs are designed to break-away during emergency egress.

**FLIGHT DECK CRANIAL w/ HEARING PROTECTION- SY505**

-This is a lightweight head protection device that incorporates state of the art advancements in hearing protection, speech intelligibility, impact protection and is compatible with Night Vision Devices, Chemical/Biological/Radiological clothing, and necessary eye protection. It has improved maintainability and durability that is comfortable to wear for long periods of time, easily cleaned, fits the 5th to 95th percentile population and is not a Foreign Object Damage (FOD) source. In addition, it must interface with existing and planned flight deck communications systems. This program will accelerate fielding of improved acoustic headsets and deep-seated custom-molded earplugs. These products will greatly improve the level of hearing protection available to maintainers and aircraft handlers.

Developmental Testing to complete 3rd quarter FY10. Early Operational Capability (EOC) approval from the Milestone Decision Authority (MDA) will allow for the advanced molding and procurement of the Custom Molded Ear Plugs and Ear Muff Upgrade kits up to the total inventory objective. Milestone C will be conducted for the Flight Deck Cranial Units to complete the total system.

**Exhibit P-40, Budget Item Justification****UNCLASSIFIED**

OTHER PROCUREMENT COST ANALYSIS P-5										DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy/BA 3 - Aviation Life Support							ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD 424400, AVIATION LIFE SUPPORT/43SY				
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS									
			Prior Years	FY 2009			FY 2010			FY 2011		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
SY030	NEW SURVIVAL RADIO	A	5,625	72	4.160	300						
SY030	NEW SURVIVAL RADIO (OCO)	A					17	4.353	74			
SY060	CSEL (Note 6)	A	52,975	215	10.890	2,341	929	10.926	10,150	94	11.096	1,043
SY060	CSEL (OCO)	A								2,252	11.096	24,988
SY061	CSEL WORK STATIONS (OCO)	A					5	39.200	196			
SY085	JALEPV	A	3,355									
SY090	NDI RESPIRATORS (Note 1,5)	A								291	10.698	3,113
SY125	AIRCREW ENDURANCE (Note 2)	B		495	5.200	2,574	9,656	0.672	6,489	518	4.469	2,315
SY146	MULTI-CLIMATE PROTECTION SYSTEM (Note 8)	A	12,955	1,752	1.734	3,037	4,217	1.588	6,697			
SY212	AN/AVS-9 IMAGE INTENSIFIER (OCO) (Note 7)	A					5,881	0.729	4,290			
SY215	JHMCS NIGHT VISION INTEGRATION (Note 5)	A	4,582	28	271.250	7,595	61	152.705	9,315	130	158.077	20,550
SY216	SURVIVAL NIGHT VISION SCOPES (SNVS)	A		4,157	0.490	2,037						
SY505	FLIGHT DECK CRANIAL/HEARING PROTECTION (Note 5)	B					3,674	1.391	5,111	5,464	1.413	7,718
SY830	PRODUCTION ENGINEERING SUPPORT (Note 3)		62,718			3,725			5,835			5,957
SY830	PRODUCTION ENGINEERING SUPPORT (OCO)											1,036
TOTAL			142,210			21,609			48,157			66,720

Note 1: NDI Respirators will include the purchase of consumable items used in conjunction with the respirators (e.g. batteries, below the neck protection). Fluctuation in unit cost due to the multiple product line.

Note 2: Aircrew Endurance is a multi-commodity line that encompasses different products. Multiple products may be procured each fiscal year. FY10 OCO funds 9200 Survival Kit upgrades at an average unit cost of \$.458K.

Baseline funds 154 Body Armor units at \$4.403K per unit. Congressional add of \$1.6M for AMXD will procure 302 units at \$5.304K per unit.

Note 3: JHMCS NRE ECP will be conducted in FY10 (\$3.8M) and FY11 (\$2.9M). This cost has been placed in Production Engineering Support.

Note 4: WFOV - Per RDT&E issue 22074, WFOV procurement will not begin until FY 18.

Note 5: Fluctuation in unit costs relative to Cost Codes SY090, SY215, SY505 are due to contractor range pricing and procurement of multiple piece parts.

Note 6: FY 10 CSEL includes OCO funding for 834 radios and baseline funding for 95 radios.

Note 7: FY10 AN/ANS-9 Image Intensifier is OCO funding for 281 Night Vision Goggles and 5,600 Tilt Lock Mechanisms.

Note 8: FY10 includes Congressional add of \$6.4M which will allow for procurement of remaining fleet requirement.

Note: Prior Year Total Costs do not include Elements of Cost that are no longer funded in the FYDP.

PROCUREMENT HISTORY AND PLANNING						A. DATE				
P-5A						February 2010				
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE				SUBHEAD	
Other Procurement, Navy/BA 3-AVIATION SUPPORT EQUIPMENT					424400 AVIATION LIFE SUPPORT				43SY	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	TECH DATA AVAILABLE NOW ?	DATE REVISIONS AVAILABLE
SY030 NEW SURVIVAL RADIO										
2007	3	4.160	NAVAIR	08/2008	SS-FFP	TADIRAN, HOLAN, ISRAEL	09/2009	07/2010	Yes	
2008	353	4.160	NAVAIR	08/2008	SS-FFP	TADIRAN, HOLAN, ISRAEL	09/2009	07/2010	Yes	
2009	72	4.160	NAVAIR	08/2008	SS-FFP	TADIRAN, HOLAN, ISRAEL	12/2009	07/2010	Yes	
2010 (OCO)	17	4.353	NAVAIR	10/2009	C-IDIQ	THE BOEING COMPANY, ANAHEIM, CA	03/2010	12/2010	Yes	
SY060 CSEL										
2006	2042	8.217	NAVAIR	12/2006	C-IDIQ	THE BOEING COMPANY, ANAHEIM, CA	06/2008	05/2009	Yes	
2007	218	10.042	NAVAIR	04/2008	C-IDIQ	THE BOEING COMPANY, ANAHEIM, CA	09/2008	08/2009	Yes	
2008	380	11.318	NAVAIR	04/2008	C-IDIQ	THE BOEING COMPANY, ANAHEIM, CA	09/2008	08/2009	Yes	
2008	189	11.318	NAVAIR	09/2008	SS-FFP	THE BOEING COMPANY, ANAHEIM, CA	02/2009	04/2010	Yes	
2009	215	10.890	NAVAIR	09/2008	SS- FFP/OPTION	THE BOEING COMPANY, ANAHEIM, CA	02/2009	04/2010	Yes	
2010	929	10.926	NAVAIR	10/2009	SS-FFP	THE BOEING COMPANY, ANAHEIM, CA	03/2010	02/2011	Yes	
2011	94	11.096	NAVAIR	10/2010	SS-FFP	THE BOEING COMPANY, ANAHEIM, CA	03/2011	02/2012	Yes	
2011 (OCO)	2252	11.096	NAVAIR	10/2010	SS-FFP	THE BOEING COMPANY, ANAHEIM, CA	03/2011	02/2012	Yes	
SY061 CSEL WORKSTATIONS (OCO)										
2010	5	39.200	NAVAIR	10/2009	C-IDIQ	THE BOEING COMPANY, ANAHEIM, CA	03/2010	06/2010	Yes	
SY090 NDI RESPIRATOR										
2011	291	10.698	NAVAIR	09/2010	SS-FFP	CAM LOCK, LTD, ALDRSHOT, UK	09/2011	01/2012	Yes	
SY125 AIRCREW ENDURANCE										
**2009	495	5.200	AFMS/SMC	12/2008	C-FFP	OMNI MEASUREMENT SYSTEMS, MILTON, VT	05/2009	06/2009	Yes	
***2010	154	4.403	AFMS/SMC	08/2009	C-FFP	OMNI MEASUREMENT SYSTEMS, MILTON, VT	03/2010	05/2010	Yes	
***2010	302	5.304	NAWCADPAX	08/2009	C-FFP	OMNI MEASUREMENT SYSTEMS, MILTON, VT	05/2010	06/2010	Yes	
***2010 OCO	9200	0.458	NAWCADPAX	08/2009	C-FFP	VARIOUS	03/2010	06/2010	Yes	
2011	518	4.469	NAVAIR	08/2010	C-FFP	VARIOUS	03/2011	05/2011	No	05/2010
D. REMARKS										
*FFP - Firm Fixed Price, MILSTRIPS - Military Standard Requisition and Issue Procedures, IDIQ - Indefinite Delivery Indefinite Quantity, CPFF - Cost Plus Fixed Fee, FPI - Fixed Price Incentive										
** FY 2009 Procures 495 aircrew mission extender devices.										
***FY10 OCO contract for SY125 is for separate commodity from the FY10 baseline contract. FY 2010 baseline buys 154 survival vest and 302 AMXD. FY 2010 OCO buys 9200 survival kit upgrades.										

PROCUREMENT HISTORY AND PLANNING								A. DATE		
P-5A								February 2010		
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE				SUBHEAD	
Other Procurement, Navy/BA 3-AVIATION SUPPORT EQUIPMENT					424400 AVIATION LIFE SUPPORT				43SY	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	TECH DATA AVAILABLE NOW ?	DATE REVISIONS AVAILABLE
SY212 AN/AVS-9 IMAGE INTENSIFIER (AN/AVS-9)										
2010 OCO	5881	0.729	NSWC, CRANE	10/2009	C-IDIQ	ITT NIGHT VISION, ROANOKE VA	03/2010	09/2010	Yes	
SY146 MULTI-CLIMATE PROTECTION SYSTEM										
2008	2000	1.500	NAWCADPAX	08/2007	SS-FFP	PECKHAM VOC IND INC, LANSING MI	08/2008	02/2009	Yes	
2009	1752	1.734	NAWCADPAX	08/2008	SS-FFP	PECKHAM VOC IND INC, LANSING MI	02/2009	08/2009	Yes	
2010	4217	1.588	NAWCADPAX	08/2009	SS-FFP	PECKHAM VOC IND INC, LANSING MI;	02/2010	08/2010	Yes	
SY215 JHMCS NIGHT VISION INTEGRATION										
2008	20	229.100	NAVAIR	01/2009	SS-FFP	VISION SYSTEMS INTL SAN JOSE CA	09/2009	07/2010	Yes	
2009	28	271.250	NAVAIR	08/2009	SS-FFP	VISION SYSTEMS INTL SAN JOSE CA	12/2009	03/2011	Yes	
2010	61	152.705	JPO WRIGHT PATTERSON AFB	10/2009	SS-FFP	VISION SYSTEMS INTL SAN JOSE CA	06/2010	09/2011	Yes	
2011	130	158.077	JPO WRIGHT PATTERSON AFB	10/2010	SS-FFP	VISION SYSTEMS INTL SAN JOSE CA	05/2011	08/2012	Yes	
SY216 SURVIVAL NIGHT VISION SCOPES (SNVS)										
2009	4157	0.490	NSWC, CRANE	N/A	MILSTRIP	VARIOUS	06/2009	08/2009	Yes	
SY505 FLIGHT DECK CRANIAL W/HEARING PROTECTION										
2010	3307	1.391	NAWCADLKE	10/2009	SS-FFP	Aegisound, LLC	11/2009	01/2010	No	07/2009
2010	367	1.391	NAWCADLKE	04/2010	SS-FFP	OTTO	06/2010	08/2010	No	07/2009
2011	2732	1.413	NAWCADLKE	N/A	SS-FFP/ OPTION	Aegisound, LLC	10/2010	11/2010	No	07/2009
2011	2732	1.413	NAWCADLKE	N/A	SS-FFP/ OPTION	OTTO	10/2010	11/2010	No	07/2009
D. REMARKS										



BUDGET PRODUCTION SCHEDULE																DATE															
P-21																February 2010															
APPROPRIATION/BUDGET ACTIVITY											Weapon System					P-1 ITEM NOMENCLATURE															
Other Procurement, Navy/BA 3-AVIATION SUPPORT EQUIPMENT																424400 AVIATION LIFE SUPPORT															
						Production Rate					Procurement Leadtimes																				
Item		Manufacturer's Name and Location				MSR	ECON	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure																	
SY060, CSEL		Boeing, North Americk, Anaheim, CA				60	300	600	7	6		11	17	E																	
SY215, JHMCS NIGHT VISION INTEGRATION		Vision Systems, San Jose, CA				20	180	360	7	8	22	19	27	E																	
SY505 FLIGHT DECK CRANIAL/HEARING		Aegisound, Blacksburg, VA				2400	6000	12000	7	1		1	2	E																	
SY505 FLIGHT DECK CRANIAL/HEARING		Otto, Chicago, Ill				2400	6000	12000	7	1		1	2	E																	
ITEM / MANUFACTURER		F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2008										FISCAL YEAR 2009										B A L				
							2007			CALENDAR YEAR 2008							CALENDAR YEAR 2009														
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y		J U N	J U L	A U G	S E P
SY060, CSEL/Boeing		06	N	2042	0	2042								A												170	170	170	170	170	1192
SY060, CSEL/Boeing		07	N	218	0	218											A											18	18	182	
SY060, CSEL/Boeing		08	N	380	0	380											A										38	38	304		
SY060, CSEL/Boeing		08	N	189	0	189														A										189	
SY060, CSEL/Boeing		09	N	215	0	215														A										215	
SY215, JHMCS NIGHT VISION INTEGRATION		08	N	20	0	20																							A	20	
SY215, JHMCS NIGHT VISION INTEGRATION		09	N	28	0	28																								28	
SY215, JHMCS NIGHT VISION INTEGRATION		09	AF	50	0	50																								50	
ITEM / MANUFACTURER		F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2010										FISCAL YEAR 2011										B A L				
							2009			CALENDAR YEAR 2010							CALENDAR YEAR 2011														
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y		J U N	J U L	A U G	S E P
SY060, CSEL/Boeing		06	N	2042	850	1192	170	170	170	170	170	171	171																		0
SY060, CSEL/Boeing		07	N	218	36	182	18	18	18	18	18	18	18	18	19	19															0
SY060, CSEL/Boeing		08	N	380	76	304	38	38	38	38	38	38	38	38																	0
SY060, CSEL/Boeing		08	N	189	0	189							75	75	39																0
SY060, CSEL/Boeing		09	N	215	0	215							75	75	65																0
SY060, CSEL/Boeing		10	N	929	0	929						A									82	77	77	77	77	77	77	77	77	308	
SY060, CSEL/Boeing		11	N	2346	0	2346																A								2346	
SY215, JHMCS NIGHT VISION INTEGRATION		08	N	20	0	20										1	1	3	3	3	3	3	3							0	
SY215, JHMCS NIGHT VISION INTEGRATION		09	N	28	0	28				A												1	3	3	4	5	6	6		0	
SY215, JHMCS NIGHT VISION INTEGRATION		09	AF	50	0	50				A												2	3	3	4	5	6	3		24	
SY215, JHMCS NIGHT VISION INTEGRATION		10	N	61	0	61								A														5		56	
SY215, JHMCS NIGHT VISION INTEGRATION		10	AF	110	0	110								A																110	
SY215, JHMCS NIGHT VISION INTEGRATION		11	N	130	0	130																		A						130	
SY215, JHMCS NIGHT VISION INTEGRATION		11	AF	115	0	115																	A							115	
SY505 FLIGHT DECK CRANIAL/HEARING		10	N	3307	0	3307		A		306	306	306	306	306	306	306	306	306	247											0	
SY505 FLIGHT DECK CRANIAL/HEARING		10	N	367	0	367								A		367														0	
SY505 FLIGHT DECK CRANIAL/HEARING		11	N	2732	0	2732												A	228	228	228	228	228	228	228	228	228	228	228	224	
SY505 FLIGHT DECK CRANIAL/HEARING		11	N	2732	0	2732												A	228	228	228	228	228	228	228	228	228	228	228	224	
Remarks:																															
Reorder Lead time for JHMCS is longer then initial lead time because subsequent orders are limited by production capacity of the vendor. Initial units will be hand built by engineers.																															
Note: SY505 FDC Hardware configurations for the FDC contractors are not identical, therefore utilizing 2 separate contracts.																															

Remarks:

Reorder Lead time for JHMCS is longer then initial lead time because subsequent orders are limited by production capacity of the vendor. Initial units will be hand built by engineers.

Note: SY505 FDC Hardware configurations for the FDC contractors are not identical, therefore utilizing 2 separate contracts.

Exhibit P-21, Production Schedule

CLASSIFICATION:

UNCLASSIFIED

[illegible]

<b>CLASSIFICATION:</b>		<b>UNCLASSIFIED</b>													
<b>Exhibit P-40, BUDGET ITEM JUSTIFICATION</b>								DATE February 2010							
APPROPRIATION/BUDGET ACTIVITY <b>OTHER PROCUREMENT, NAVY/BA 3</b>							P-1 LINE ITEM NOMENCLATURE AIRBORNE MINE COUNTERMEASURES <b>SUBHEAD NO. 73S0 BLI: 4248</b>								
Program Element for Code B Items 0604373N							Other Related Program Elements 0204302N								
	Prior Years	ID Code		FY 2009	FY 2010	BASELINE FY 2011	OCO FY 2011	TOTAL FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total	
Quantity	0			0	0	0	0	0	0	0	0	0	0	0	
COST ( In Millions)	138.6	B		28.9	51.3	35.9	0.0	35.9	90.2	33.6	22.6	20.2	13.7	435.0	
SPARES COST ( In Millions)	14.7	0		3.5	2.9	3.8	0.0	3.8	0.8	0.6	0.2	0.2	0.0	26.7	
<b>PROGRAM DESCRIPTION/JUSTIFICATION:</b> Airborne Mine Countermeasures (AMCM) Equipment is currently used by MH-53E helicopters to counter the threat of sea mines. The MH-60S helicopter will be adapted for the AMCM mission in support of the development of an Organic Fleet AMCM program. The equipment is divided into three categories -- minesweeping, minehunting and mine neutralization. (1) Minesweeping is performed by mechanical or influence sweeps. In mechanical sweeping, the mine mooring is severed by the sweep gear allowing the mine to float to the surface where it is destroyed. In influence sweeping, a magnetic or acoustic field which simulates the magnetic/acoustic signature of a ship is introduced into the water. This field causes the mine mechanism to actuate. (2) In mine hunting, the object is to actually locate and classify mine-like objects (usually by means of high resolution sonar). (3) Then neutralize mines using explosive devices. AMCM squadrons currently have mechanical, magnetic, and acoustic sweeping capabilities, and mine surveillance and marking capabilities. Their mission is to locate, classify, identify and neutralize moored, surface and bottom mines.  Note: for program procurement completeness, the Littoral Combat Ships (LCS) Mission Modules are procured under BLI 1600 <b>S0020 MOD/PROD</b> Funds provided are for the modification and product improvements of systems to accommodate replacement of subsystems/components because of safety, maintainability, reliability issues and obsolescence. ECPs are analyzed, prioritized and screened to accommodate replacement of subsystems/components. Funding for this effort is designated in all fiscal years. <b>S0065 AMNS</b> Airborne Mine Neutralization System (AMNS) is an expendable remote controlled neutralizer vehicle deployed from the helicopter platform to reacquire, identify, and neutralize moored or proud bottom sea mines.  Note: for program procurement completeness, the LCS Mission Modules are procured under BLI 1600 <b>S0074 AN/AQS-20A</b> AN/AQS-20A (AN/AQS-20/X) includes a sonar for mine detection, classification and identification. The Navy does not possess a capability to conduct high speed minefield reconnaissance to determine mine density and location. The AN/AQS-20A will be procured to address the emergent requirements for mine identification and to integrate AMCM systems with a MH-60S platform and the Remote Mine Hunting System (RMS)															



CLASSIFICATION:		UNCLASSIFIED										
EXHIBIT P-5 COST ANALYSIS				Weapon System							DATE February 2010	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA 3				ID Code	P-1 LINE ITEM NOMENCLATURE AIRBORNE MINE COUNTERMEASURES SUBHEAD NO. 73S0							
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN MILLIONS OF DOLLARS									
			Prior Years	FY 2009			FY 2010			FY 2011		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	<u>EQUIPMENT</u>											
S0020	MODIFICATION	A	20.540	0	0.000	8.401	0	0.000	5.554	0	0.000	9.835
S0061	<u>MK-105 MOD 4</u>											
S0065	<u>UNIT COST - AMNS</u>											
	CONSULTING SERVICES		0.110	0	0.000	0.287	0	0.000	0.206	0	0.000	0.380
	AMNS	A	4.564	4	2.225	8.900	2	2.224	4.448	4	2.206	8.824
	SUPPORT EQUIPMENT		0.411		0.000	0.811	0	0.000	0.403	0	0.000	0.804
	ILS/PUBS/TECH DATA		0.180	0	0.000	0.469	0	0.000	0.336	0	0.000	0.618
	TRAINING EQUIPMENT		2.542	0	0.000	0.000	0	0.000	1.650	0	0.000	0.000
	PRODUCTION ENGINEERING		0.139	0	0.000	0.359	0	0.000	0.257	0	0.000	0.474
S0074	<u>UNIT COST - AQS-20A</u>											
	AN/AQS-20A	A	50.225	0	0.000	0.000	2	6.315	12.630	0	0.000	0.000
	EOID KIT		6.684	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	NON-RECURRING ENGINEERING		2.291	0	0.000	0.000	0	0.000	0.295	0	0.000	0.000
	SUPPORT EQUIPMENT		2.849	0	0.000	0.000	0	0.000	0.275	0	0.000	0.000
	ILS/PUBS/TECH/DATA		1.514	0	0.000	0.000	0	0.000	0.379	0	0.000	0.000
	TRAINING EQUIPMENT		8.146	0	0.000	0.000	0	0.000	0.279	0	0.000	0.000
	PRODUCTION EQUIPMENT		2.831	0	0.000	0.000	0	0.000	0.276	0	0.000	0.000
	CONSULTING SERVICES		1.371	0	0.000	0.000	0	0.000	0.175	0	0.000	0.000
	PRODUCTION ECP (HW/SW)		10.903	0	0.000	0.000	0	0.000	0.211	0	0.000	0.000
S0075	<u>UNIT COST - ALMDS</u>											
	ALMDS		15.318	0	0.000	0.000	3	6.802	20.406	2	7.100	14.200
	PRODUCTION ECP (HW/SW)		1.897	0	0.000	0.000	0	0.000	0.047	0	0.000	0.000

CLASSIFICATION:			UNCLASSIFIED									
EXHIBIT P-5 COST ANALYSIS (CONTINUATION)				Weapon System							DATE February 2010	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA 3				ID Code		P-1 LINE ITEM NOMENCLATURE AIRBORNE MINE COUNTERMEASURES SUBHEAD NO. 73S0						
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN MILLIONS OF DOLLARS									
			Prior Years	FY 2009			FY 2010			FY 2011		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	SUPPORT EQUIPMENT		0.047	0	0.000	0.682	0	0.000	0.000	0	0.000	0.000
	ILS/PUBS/TECH DATA		0.435	0	0.000	1.734	0	0.000	0.098	0	0.000	0.120
	TRAINING EQUIPMENT		0.025	0	0.000	0.351	0	0.000	0.000	0	0.000	0.000
	PRODUCTION ENGINEERING		3.078	0	0.000	3.485	0	0.000	1.749	0	0.000	0.480
S0076	UNIT COST - OASIS	A										
S0090	UNIT COST OAMCM SUPPORT EQUIPMENT											
	OPMA		0.256	8	0.032	0.256	8	0.032	0.256	0	0.000	0.000
	SNIUTT		0.120	0	0.000	0.120	0	0.000	0.120	0	0.000	0.120
	ORCA		2.102	3	0.964	2.893	1	1.200	1.200	0	0.000	0.000
WAXXX	ACQUISITION WORKFORCE FUND-2009											
	ACQUISITION WORKFORCE FUND-2009		0.000	0	0.000	0.130	0	0.000	0.000	0	0.000	0.000
	TOTAL EQUIPMENT		138.578			28.878			51.250			35.855
	TOTAL		138.578			28.878			51.250			35.855

<b>CLASSIFICATION:</b>				<b>UNCLASSIFIED</b>							
<b>Exhibit P5A, PROCUREMENT HISTORY AND PLANNING</b>					Weapon System				DATE February 2010		
<b>APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA 3</b>					<b>P-1 LINE ITEM NOMENCLATURE AIRBORNE MINE COUNTERMEASURES BLIN: 4248</b>				<b>SUBHEAD 73S0</b>		
COST ELEMENT FISCAL YEAR	Quantity	UNIT COST	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPEC AVAIL NOW	DATE REVISIONS AVAILABLE	
<b>FY 2009</b>											
<b>S0065 UNIT COST - AMNS</b>											
AMNS	4	2.225	NAVSEA	N/A	SS/FFP	RAYTHEON	JUN-10	NOV-11			
<b>S0090 UNIT COST OAMCM SUPPORT EQUIPMENT</b>											
OPMA	8	0.032	NSWC PC	MAY-08	FFP	SAIC	NOV-08	APR-09			
ORCA	3	0.964	NSWC PC	MAY-08	SS/FFP	ODIM, CANADA	AUG-09	AUG-10			
<b>FY 2010</b>											
<b>S0065 UNIT COST - AMNS</b>											
AMNS	2	2.224	NAVSEA	N/A	SS/OPTION/FFP	RAYTHEON	JUN-10	NOV-11			
<b>S0074 UNIT COST - AQS-20A</b>											
AN/AQS-20A	2	6.315	NAVSEA	SEP-10	C/FFP	UNKNOWN	MAR-11	JAN-13	YES		
<b>S0075 UNIT COST - ALMDS</b>											
ALMDS	3	6.802	NSWC PC	DEC-08	SS/FFP	NG MELBOURNE, FL	APR-10	OCT-11			
<b>S0090 UNIT COST OAMCM SUPPORT EQUIPMENT</b>											
OPMA	8	0.032	NAVSEA	OCT-08	FFP	SAIC	FEB-10	JUL-10			
ORCA	1	1.200	NSWC PC	OCT-08	SS/FFP	ODIM, CANADA	APR-10	APR-11			
<b>FY 2011</b>											
<b>S0065 UNIT COST - AMNS</b>											
AMNS	4	2.206	NAVSEA	SEP-10	C/FFP	UNKNOWN	JUL-11	DEC-12	YES		
<b>S0075 UNIT COST - ALMDS</b>											
ALMDS	2	7.100	NAVSEA	NOV-10	C/FFP	UNKNOWN	DEC-10	JUN-12	YES		

<b>CLASSIFICATION:</b>		<b>UNCLASSIFIED</b>																																			
<b>EXHIBIT P-21, PRODUCTION SCHEDULE</b>																		<b>DATE:</b> February 2010																			
<b>APPROPRIATION/BUDGET ACTIVITY</b> <b>OTHER PROCUREMENT, NAVY/BA 3</b>																		<b>Weapon System</b>						<b>P-1 LINE ITEM NOMENCLATURE</b> <b>AIRBORNE MINE COUNTERMEASURES BLI: 4248</b>													
						<b>Production Rate</b>			<b>Procurement Leadtimes</b>																												
<b>Item</b>		<b>Manufacturer's Name and Location</b>				<b>MSR</b>	<b>ECON</b>	<b>MAX</b>	<b>ALT Prior to Oct 1</b>			<b>ALT After Oct 1</b>			<b>Initial Mfg PLT</b>			<b>Reorder Mfg PLT</b>			<b>Total</b>			<b>Unit of Measure</b>													
AMNS		RAYTHEON				2	12	24	2			2			13			17			19			E													
<b>ITEM</b>		<b>F Y</b>	<b>S V C</b>	<b>Q T Y</b>	<b>D E L</b>	<b>B A L</b>	<b>FISCAL YEAR 2009</b>												<b>FISCAL YEAR 2010</b>												<b>B A L</b>						
							<b>CY 2008</b>			<b>CALENDAR YEAR 2009</b>									<b>CALENDAR YEAR 2010</b>																		
							<b>O C T</b>	<b>N O V</b>	<b>D E C</b>	<b>J A N</b>	<b>F E B</b>	<b>M A R</b>	<b>A P R</b>	<b>M A Y</b>	<b>J U N</b>	<b>J U L</b>	<b>A U G</b>	<b>S E P</b>	<b>O C T</b>	<b>N O V</b>	<b>D E C</b>	<b>J A N</b>	<b>F E B</b>	<b>M A R</b>	<b>A P R</b>	<b>M A Y</b>	<b>J U N</b>	<b>J U L</b>	<b>A U G</b>	<b>S E P</b>							
AMNS		2007	N	1	0	1										1													0								
AMNS		2008	N	2	0	2											1		1										0								
AMNS		2009	N	4	0	4																				A			4								
AMNS		2010	N	2	0	2																				A			2								
<b>ITEM</b>		<b>F Y</b>	<b>S V C</b>	<b>Q T Y</b>	<b>D E L</b>	<b>B A L</b>	<b>FISCAL YEAR 2011</b>												<b>FISCAL YEAR 2012</b>												<b>B A L</b>						
							<b>CY 2010</b>			<b>CALENDAR YEAR 2011</b>									<b>CALENDAR YEAR 2012</b>																		
							<b>O C T</b>	<b>N O V</b>	<b>D E C</b>	<b>J A N</b>	<b>F E B</b>	<b>M A R</b>	<b>A P R</b>	<b>M A Y</b>	<b>J U N</b>	<b>J U L</b>	<b>A U G</b>	<b>S E P</b>	<b>O C T</b>	<b>N O V</b>	<b>D E C</b>	<b>J A N</b>	<b>F E B</b>	<b>M A R</b>	<b>A P R</b>	<b>M A Y</b>	<b>J U N</b>	<b>J U L</b>	<b>A U G</b>	<b>S E P</b>							
AMNS		2009	N	4	0	4													1	1		1		1					0								
AMNS		2010	N	2	0	2													1		1								0								
AMNS		2011	N	4	0	4										A													4								
Remarks:																																					



CLASSIFICATION:		UNCLASSIFIED																													
EXHIBIT P-21, PRODUCTION SCHEDULE																		DATE: February 2010													
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA 3														Weapon System						P-1 LINE ITEM NOMENCLATURE AIRBORNE MINE COUNTERMEASURES BLI: 4248											
						Production Rate						Procurement Leadtimes																			
Item		Manufacturer's Name and Location				MSR	ECON	MAX		ALT Prior to Oct 1			ALT After Oct 1			Initial Mfg PLT			Reorder Mfg PLT			Total			Unit of Measure						
AMNS		RAYTHEON				2	12	24		2			2			13			17			19			E						
ITEM		F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2013												FISCAL YEAR 2014												B A L
							CY 2012			CALENDAR YEAR 2013									CALENDAR YEAR 2014												
							O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	
							C	O	E	A	E	A	P	A	U	U	U	E	C	O	E	A	E	A	P	A	U	U	U	E	
							T	V	C	N	B	R	R	Y	N	L	G	P	T	V	C	N	B	R	R	Y	N	L	G	P	
AMNS		2011	N	4	0	4			1			1			1													0			
ITEM		F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2015												FISCAL YEAR 2016												B A L
							CY 2014			CALENDAR YEAR 2015									CALENDAR YEAR 2016												
							O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	
							C	O	E	A	E	A	P	A	U	U	U	E	C	O	E	A	E	A	P	A	U	U	U	E	
							T	V	C	N	B	R	R	Y	N	L	G	P	T	V	C	N	B	R	R	Y	N	L	G	P	
Remarks:																															

<b>CLASSIFICATION:</b>		<b>UNCLASSIFIED</b>																																			
<b>EXHIBIT P-21, PRODUCTION SCHEDULE</b>																	<b>DATE:</b> February 2010																				
<b>APPROPRIATION/BUDGET ACTIVITY</b> <b>OTHER PROCUREMENT, NAVY/BA 3</b>																	<b>Weapon System</b>					<b>P-1 LINE ITEM NOMENCLATURE</b> <b>AIRBORNE MINE COUNTERMEASURES BLI: 4248</b>															
						<b>Production Rate</b>			<b>Procurement Leadtimes</b>																												
<b>Item</b>		<b>Manufacturer's Name and Location</b>				<b>MSR</b>	<b>ECON</b>	<b>MAX</b>	<b>ALT Prior to Oct 1</b>		<b>ALT After Oct 1</b>		<b>Initial Mfg PLT</b>		<b>Reorder Mfg PLT</b>		<b>Total</b>		<b>Unit of Measure</b>																		
AQS-20A		RAYTHEON, PORTSMOUTH, RI				3	12	12	1		1		0		22		23		E																		
<b>ITEM</b>		F Y	S V C	Q T Y	D E L	B A L	<b>FISCAL YEAR 2009</b>										<b>FISCAL YEAR 2010</b>										<b>B A L</b>										
							<b>CY 2008</b>			<b>CALENDAR YEAR 2009</b>							<b>CALENDAR YEAR 2010</b>																				
							O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M		J	J	A	S						
							C	O	E	A	E	A	P	A	U	U	U	E	C	O	E	A	E	A	P	A		U	U	U	E						
AQS-20A		2010	N	2	0	2																						2									
<b>ITEM</b>		F Y	S V C	Q T Y	D E L	B A L	<b>FISCAL YEAR 2011</b>										<b>FISCAL YEAR 2012</b>										<b>B A L</b>										
							<b>CY 2010</b>			<b>CALENDAR YEAR 2011</b>							<b>CALENDAR YEAR 2012</b>																				
							O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M		J	J	A	S						
							C	O	E	A	E	A	P	A	U	U	U	E	C	O	E	A	E	A	P	A		U	U	U	E						
AQS-20A		2010	N	2	0	2						A																2									
Remarks: For program procurement completeness, the LCS Mission Modules are procured under BLI 1600.																																					

<b>CLASSIFICATION:</b>		<b>UNCLASSIFIED</b>																													
<b>EXHIBIT P-21, PRODUCTION SCHEDULE</b>																		DATE: February 2010													
APPROPRIATION/BUDGET ACTIVITY <b>OTHER PROCUREMENT, NAVY/BA 3</b>														Weapon System				P-1 LINE ITEM NOMENCLATURE <b>AIRBORNE MINE COUNTERMEASURES BLI: 4248</b>													
						Production Rate			Procurement Leadtimes																						
Item		Manufacturer's Name and Location				MSR	ECON	MAX	ALT Prior to Oct 1		ALT After Oct 1		Initial Mfg PLT		Reorder Mfg PLT		Total		Unit of Measure												
AQS-20A		RAYTHEON, PORTSMOUTH, RI				3	12	12	1		1		0		22		23		E												
ITEM		F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2013										FISCAL YEAR 2014										B A L				
							CY 2012			CALENDAR YEAR 2013							CALENDAR YEAR 2014														
							O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M		J	J	A	S
							C	O	E	A	E	A	P	A	U	U	U	E	C	O	E	A	E	A	P	A		U	U	U	E
							T	V	C	N	B	R	R	Y	N	L	G	P	T	V	C	N	B	R	R	Y	N	L	G	P	
AQS-20A		2010	N	2	0	2				1			1																	0	
ITEM		F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2015										FISCAL YEAR 2016										B A L				
							CY 2014			CALENDAR YEAR 2015							CALENDAR YEAR 2016														
							O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M		J	J	A	S
							C	O	E	A	E	A	P	A	U	U	U	E	C	O	E	A	E	A	P	A		U	U	U	E
							T	V	C	N	B	R	R	Y	N	L	G	P	T	V	C	N	B	R	R	Y	N	L	G	P	
Remarks: For program procurement completeness, the LCS Mission Modules are procured under BLI 1600.																															

CLASSIFICATION:		UNCLASSIFIED																													
EXHIBIT P-21, PRODUCTION SCHEDULE																		DATE: February 2010													
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA 3														Weapon System						P-1 LINE ITEM NOMENCLATURE AIRBORNE MINE COUNTERMEASURES BLI: 4248											
						Production Rate			Procurement Leadtimes																						
Item		Manufacturer's Name and Location				MSR	ECON	MAX	ALT Prior to Oct 1			ALT After Oct 1			Initial Mfg PLT			Reorder Mfg PLT			Total			Unit of Measure							
ALMDS		NG, MELBOURNE, FL				3	12	24	2			2			16			16			18			E							
ITEM		F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2009												FISCAL YEAR 2010												B A L
							CY 2008			CALENDAR YEAR 2009									CALENDAR YEAR 2010												
							O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	
							C	O	E	A	E	A	P	A	U	U	U	E	C	O	E	A	E	A	P	A	U	U	U	E	
							T	V	C	N	B	R	R	Y	N	L	G	P	T	V	C	N	B	R	R	Y	N	L	G	P	
ALMDS		2008	N	2	0	2						1	1																0		
ALMDS		2010	N	3	0	3																			A				3		
ITEM		F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2011												FISCAL YEAR 2012												B A L
							CY 2010			CALENDAR YEAR 2011									CALENDAR YEAR 2012												
							O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	
							C	O	E	A	E	A	P	A	U	U	U	E	C	O	E	A	E	A	P	A	U	U	U	E	
							T	V	C	N	B	R	R	Y	N	L	G	P	T	V	C	N	B	R	R	Y	N	L	G	P	
ALMDS		2010	N	3	0	3												1		1		1							0		
ALMDS		2011	N	2	0	2			A																	1		1	0		
Remarks:																															

<b>BUDGET ITEM JUSTIFICATION SHEET</b>								DATE: <b>February 2010</b>					
<b>P-40</b>													
APPROPRIATION/BUDGET ACTIVITY								P-1 ITEM NOMENCLATURE					
<b>OTHER PROCUREMENT, NAVY                      BA 3 - AVIATION SUPPORT EQUIPMENT</b>								<b>4255, LAMPS MK III SHIPBOARD EQUIPMENT</b>					
Program Element for Code B Items:								Other Related Program Elements					
<b>0604216N</b>								<b>0204243N</b>					
	Prior Years	ID Code	FY 2009	FY 2010	Base FY 2011	OCO FY 2011	Total FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
Quantity	<b>5</b>		<b>10</b>	<b>9</b>	<b>11</b>	<b>0</b>	<b>11</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>11</b>	<b>26</b>	<b>102</b>
Cost (\$M)	<b>103.4</b>	A	<b>35.0</b>	<b>23.6</b>	<b>20.7</b>	<b>0.0</b>	<b>20.7</b>	<b>20.9</b>	<b>21.4</b>	<b>21.8</b>	<b>22.2</b>	<b>81.5</b>	<b>350.5</b>
Initial Spares (\$M)													
<p>This program provides for non-recurring engineering and procurement of AN/SRQ-4(Ku) field install kits. This system encompasses hardware and software to transmit sensor data from the Light Airborne Multi-Purpose System (LAMPS) MK III aircraft to the host ship classes of cruisers, destroyers, and frigates.</p> <p>Basis for Request: The FY11 request funds for the procurement of 11 AN/SRQ-4(Ku) ship units and associated support to meet the MH-60R fleet deployment schedule.</p>													

P3A INDIVIDUAL MODIFICATION																				
MODELS OF SYSTEM AFFECTED:		LAMPS MK III		TYPE MODIFICATION:		Modification required by frequency spectrum change.		MODIFICATION TITLE:		S1010 - SRQ(KU)4										
DESCRIPTION/JUSTIFICATION:																				
This program provides for NRE and procurement of AN/SRQ-4(Ku) field install kits. This system encompasses hardware and software to transmit sensor data from the Light Airborne Multi-Purpose System (LAMPS) MK III aircraft to the host ship classes.																				
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:																				
The MH-60R aircraft completed Milestone III in March 2006. Procurement of AN/SRQ-4(Ku) Kits commenced in August 2008.																				
	Prior Years		FY 2009		FY 2010		FY 2011		FY 2012		FY 2013		FY 2014		FY 2015		TC		TOTAL	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																			0	0.0
PROCUREMENT																				
INSTALLATION KITS	5	21.595	10	11.667	9	9.463	11	11.769	10	11.127	10	11.572	10	12.035	11	13.768	26	35.271	102	138.270
INSTALLATION KITS NRE																				
Component "A"																				
Component "B"																				
Component "C"																				
EQUIPMENT NRE		28.931															4.000			32.931
EQUIPMENT																				
Equipment "A"																				
Equipment "B"																				
ECP 1 Grp "A"																				
ECP 2 Grp "B"																				
ECP 3 Grp "A"																				
ECP 4 Grp "B"																				
DATA																				
TRAINING EQUIPMENT																				
SUPPORT EQUIPMENT		0.635				1.104		1.023		1.149		1.387		1.195		1.653		14.050		22.196
ILS		5.881		2.289		4.860		2.905		2.568		2.554		2.490		1.539		7.695		32.781
PRODUCTION ENGINEERING		44.835		7.822		7.734		3.174		2.860		2.094		1.847		1.751		8.100		80.217
ACCEPTANCE TEST & EVALUATION		0.305		13.235		0.198		0.477		0.195		0.198		0.202		0.206		1.082		16.098
GFE		1.203				0.262		0.267		0.273		0.278		0.295						2.578
INTERIM CONTRACTOR SUPPORT										0.831		0.713		1.498		0.982				4.024
INSTALL COST							5	1.047	10	1.922	9	2.614	11	2.222	10	2.266	57	11.290	102	21.361
TOTAL PROCUREMENT		103.386		35.013		23.621		20.662		20.924		21.410		21.784		22.165		81.488		350.457

\*Totals may not add due to rounding.

Installation kits in FY 2009, FY 2010, and FY 2011 based on recently awarded contract.

## INSTALLATION INFORMATION:

CONTRACT DATES:	_____	FY 2009: <u>Jun 09</u>	FY 2010: <u>Apr 10</u>	FY 2011: <u>Feb 11</u>
DELIVERY DATE:	_____	FY 2009: <u>Jul 11</u>	FY 2010: <u>May 12</u>	FY 2011: <u>Mar 13</u>

(\$ in Millions)

Cost:	Prior Years				FY 2009		FY 2010		FY 2011		FY 2012		FY 2013		FY 2014		FY 2015		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS (5)									5	1.047											5	1.047
FY 2009 EQUIPMENT (10)											10	1.922									10	1.922
FY 2010 EQUIPMENT (9)													9	2.614							9	2.614
FY 2011 EQUIPMENT (11)															11	2.222					11	2.222
FY 2012 EQUIPMENT (10)																	10	2.266			10	2.266
FY 2013 EQUIPMENT (10)																			10	2.312	10	2.312
FY 2014 EQUIPMENT (10)																			10	2.594	10	2.594
FY 2015 EQUIPMENT (11)																			11	2.165	11	2.165
TO COMPLETE (26)																			26	4.219	26	4.219
TOTAL INSTALL COST	-	-	-	-	-	-	-	-	5	1.047	10	1.922	9	2.614	11	2.222	10	2.266	57	11.290	102	21.361

INSTALLATION SCHEDULE:

		FY 2008 & Prior				FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	4	1	-	3	2	3	5	2	3	3	4	3	3	2	3	3	2	2	3	3	48	102
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	2	2	2	3	3	2	3	2	2	4	3	3	1	2	3	3	2	57	102

Exhibit P-40, Budget Item Justification  
CLASSIFICATION: **UNCLASSIFIED**

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**BUDGET ITEM JUSTIFICATION SHEET****P-40**

DATE:

**February 2010**

APPROPRIATION/BUDGET ACTIVITY

**OTHER PROCUREMENT, NAVY BA 3 AVIATION SUPPORT EQUIPMENT**

P-1 ITEM NOMENCLATURE

**426400, PORTABLE ELECTRONIC MAINTENANCE AID**

Program Element for Code B Items:

Other Related Program Elements

	Prior Years	ID Code	FY 2009	FY 2010	Base FY 2011	OCO FY 2011	Total FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
Quantity													
Cost (\$M)		A		<b>4.9</b>	<b>12.8</b>		<b>12.8</b>	<b>8.0</b>	<b>8.1</b>	<b>5.8</b>	<b>4.5</b>	<b>Cont.</b>	<b>Cont.</b>
Initial Spares (\$M)													

Portable Electronic Maintenance Aids (PEMAs) are Aviation Support Equipment end items used by fleet technicians to assist in performing maintenance and diagnostics of aircraft. Funding is required to procure the necessary hardware, software applications, initial stand up, and production support. PEMAs are a portable display device used in the Automated Maintenance Environment (AME) to read digital maintenance publications and Integrated Electronic Technical Manuals (IETMs). PEMAs with IETMs applications interpret aircraft BIT Data to diagnose the aircraft systems and direct maintenance actions.

FY10 Provides funding to procure 888 PEMA units and associated support cost.

FY11 Provides funding to procure 1,887 PEMA units and associated support cost.

OTHER PROCUREMENT COST ANALYSIS P-5										DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy/BA 3 Aviation Support Equipment							ID Code A	P-1 ITEM NOMENCLATURE/SUBHEAD 426400, PORTABLE ELECTRONIC MAINTENANCE AID/ 43S6				
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS									
			Prior Years	FY 2009			FY 2010			FY 2011		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
S6001	Portable Electronic Maintenance Aids (PEMAs)	A					888	5.000	4,440	1,887	5.085	9,595
S6820	Production Support*								455			3,217
TOTAL									4,895			12,812

\*OSD increased production support by \$3.0M. The allocation of the \$3M from the USMC allowed us to increase the production support cost to a more realistic level. The FY11 Production Support cost of \$3.217M will be used for organic warehouse storage, hardware configuration, and initial deployment of the hardware (PEMAs), to include site survey and set-up.

PROCUREMENT HISTORY AND PLANNING P-5A								A. DATE <b>February 2010</b>		
B. APPROPRIATION/BUDGET ACTIVITY <b>Other Procurement, Navy/BA 3 Aviation Support Equipment</b>					C. P-1 ITEM NOMENCLATURE <b>426400, PORTABLE ELECTRONIC MAINTENANCE AID</b>				SUBHEAD <b>43S6</b>	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	TECH DATA AVAILABLE NOW ?	DATE REVISIONS AVAILABLE
S60001 Portable Electronic Maintenance Aids										
2010	888	5.000	NAWCAD Pax River	07/2009	C-IDIQ	Panasonic, Secaucus, NJ	10/2009	12/2009	Yes	
2011	1887	5.085	NAWCAD Pax River	07/2009	C-IDIQ/Option	Panasonic, Secaucus, NJ	10/2010	12/2010	Yes	
D. REMARKS IDIQ - Indefinite Delivery, Indefinite Quantity										



<b>BUDGET ITEM JUSTIFICATION SHEET P-40</b>								DATE: <b>February 2010</b>					
APPROPRIATION/BUDGET ACTIVITY <b>OTHER PROCUREMENT, NAVY      BA 3 - AVIATION SUPPORT EQUIPMENT</b>								P-1 ITEM NOMENCLATURE <b>426500, OTHER AVIATION SUPPORT EQUIPMENT</b>					
Program Element for Code B Items:								Other Related Program Elements					
	Prior Years	ID Code	FY 2009	FY 2010	Base FY 2011	OCO FY 2011	Total FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
Quantity													
Cost (\$M)	142.7		13.3	13.5	12.0	0.0	<b>12.0</b>	12.4	11.8	12.0	12.9	Cont	Cont
Initial Spares (\$M)	0.4		0.1	1.1	0.6		<b>0.6</b>	0.1	0.2	0.2	0.4		
Total (\$M)	<b>143.1</b>	A	<b>13.4</b>	<b>14.6</b>	<b>12.6</b>	<b>0.0</b>	<b>12.6</b>	<b>12.5</b>	<b>12.0</b>	<b>12.2</b>	<b>13.3</b>	<b>Cont</b>	<b>Cont</b>
Unit Cost (\$M)													
<p><b>DESCRIPTION:</b>            Industrial Facilities Equipment (S7030):            Procures upgrades and enhancements to Test Equipment supporting the Sonobuoy Quality Assurance Program at San Clemente Island and ongoing sonobuoy engineering reviews at Naval Air Warfare Center Patuxent River.</p> <p>Decision Knowledge Programming for Logistics Analysis and Technical Evaluation (DECKPLATE) (S7039):            Decision Knowledge Programming for Logistics Analysis and Technical Evaluation (DECKPLATE) is the next generation of Naval Aviation Logistics Data Analysis (NALDA) and will interface with Navy Enterprise Resource Program (ERP) as the Naval Aviation Business Warehouse. It provides the technological improvements and process streamlining required to enable a cost wise transition from the NALDA program to the capabilities required in Joint Vision 2020 and the Naval Transformation Road Map. DECKPLATE is a Commercial Off the Shelf (COTS) intensive system under which numerous stovepipe legacy systems will migrate to create an integrated data environment through the use of Data Warehouse tools and concepts in support of Naval aviation logistics needs. This is being accomplished by upgrading current Naval Aviation logistics reporting mechanisms through the procurement and installation of a fully-licensed, warranted, secure, standardized, COTS, user-friendly, web-based relational database environment. Additionally, Life-Cycle Management (LCM) dollar resource requirements have been identified for hardware, software and process technology upgrades (refreshment), which have also been incorporated above. Funding is required to procure the necessary hardware, networking, systems, applications software, infrastructure, and associated engineering and installation support.</p> <p>Naval Aviation Logistics Data Analysis (NALDA) (S7040):            Naval Aviation Logistics Data Analysis (NALDA) is the single authoritative source for Navy and Marine Corps aviation maintenance and logistics data in an automated information system (AIS). It provides life cycle logistics and operational weapons systems readiness data and the tools to support analyses of this data. NALDA data and tools achieve more affordable readiness, eliminate redundant logistics information systems, improve aircraft configuration management and safety of flight, and improve aircraft inventory and life extension management needed to permit recapitalization and modernization. Funds are required for hardware and software refreshment.</p> <p>Naval Aviation Logistics Command Management Information System (NALCOMIS) (S7041):            As Optimized Organizational Maintenance Activity (OOMA) and Optimized Intermediate Maintenance Activity (OIMA) approach full implementation, NALCOMIS (also identified as Naval Fleet Server Array (NFSA)) is responsible for implementation of Mid Tier Servers at 75+ sites both shipboard and shore based. These Mid Tier Servers replicate data from the Organizational and Intermediate level maintenance activities to the NALDA Upline processing center to provide near-real time data to decision makers at all levels. The Mid Tier also allows data to be pushed from Headquarters activities to the fleet to support maintenance activities.</p>													

<b>BUDGET ITEM JUSTIFICATION SHEET</b>		DATE:
<b>P-40</b>		<b>February 2010</b>
APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE
<b>OTHER PROCUREMENT, NAVY</b>	<b>BA 3 - AVIATION SUPPORT EQUIPMENT</b>	<b>426500, OTHER AVIATION SUPPORT EQUIPMENT</b>
<p><b>Joint Technical Data Integration (JTDI) (S7042):</b>  Funding supports the requirement to procure JTDI for installation on all Carrier (CV) and Amphibious Assault (L) class ships and up to 104 Navy/Marine Corp aviation activities. JTDI is a digital technical data access, delivery and local O&amp;I level library management toolset and telemaintenance collaboration process enabler. It improves accuracy and timeliness of technical manual and other technical data delivery and minimizes the Fleet's library management burden. JTDI reduces maintenance manhours with savings Return on Investment (ROI) of 2.5:1 and savings/avoidance ROI of 9.5:1. It facilitates the transition of the Joint Distance Support and Response (JDSR) Advanced Concept Technology Demonstration (ACTD) for telemaintenance and provides for process efficiencies to support ongoing Aviation Fleet Technical Representative reductions.</p> <p><b>Joint Technical Data Integration (JTDI) Overseas Contingency Operations (OCO FY11) (S7042):</b>  Procurement of Distance Support Deployment kits for the Expeditionary Air Field (EAF) units in support of GWOT Tactical Operations as validated by the EAF Program Management Activity. Increased OpTempos have driven the need for deployable distance support capabilities that will impact turn around time improvements. This procurement will support the requirement in the field where setup of airfield landing requirements are needed to support the War Fighter. The purpose of this procurement is to outfit hardware kits needed to provide real time /near real time collaboration and information distribution for GWOT EAF missions.</p> <p><b>Autonomic Logistics Information System (ALIS) Ship Integration - CVN and LHD (S7044):</b>  ALIS controls all aspects of aircraft mission planning, maintenance, logistics, and supply functions. ALIS Ship Integration efforts will ensure the ship modification and classified/unclassified network integration, as well as installing related equipment, conducting security accreditation, and verifying system operations. Funding supports the integration with Shipboard Command, Control, Communications and Computers &amp; Intelligence (C4I) Networks on CVNs and LHDs to support ALIS installation and Prognostic Health Management (PHM) downlink. Funding will be used to install JSF computer hardware at the appropriate security levels, providing Navy's Local Area Networks/Wide Area Network (LAN/WAN) networks ability to transfer critical time sensitive data for JSF in support of aircraft logistics, mission planning, execution and debriefing.</p>		

OTHER PROCUREMENT COST ANALYSIS P-5										DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY / BA 3 - AVIATION SUPPORT EQUIPMENT							ID Code A	P-1 ITEM NOMENCLATURE/SUBHEAD 426500, OTHER AVIATION SUPPORT EQUIPMENT / 43S7, U3S7, S3S7				
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS									
			Prior Years	FY 2009			FY 2010			FY 2011		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
S7030	Industrial Facilities Equipment	A	4,605	1	178	178	1	180	180			
S7039	NALDA - DECKPLATE	A	6,224	1	1,282	1,282	1	3,668	3,668	1	2,410	2,410
S7040	NALDA	A	51,432	1	858	858	1	777	777	1	299	299
S7041	H/W & S/W - NALCOMIS Optimized	A	21,153	1	1,959	1,959	1	1,530	1,530	1	1,451	1,451
S7042	Joint Tactical Data Integration (JTDI)	A	57,066	1	3,550	3,550	1	3,642	3,642	1	1,134	1,134
S7044	Autonomic Logistics Information System (ALIS)	A								1	750	750
S7833	Production Engineering Support	A	1,396			2,496			684			1,314
S7834	Production Engineering Support JSF		855			2,957			3,017			4,660
S7910	ALIS Ship Installation	A										
	DAWDF Realignment					16						
TOTAL			142,731			13,296			13,498			12,018

PROCUREMENT HISTORY AND PLANNING									A. DATE		
P-5A									February 2010		
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE				SUBHEAD	
OTHER PROCUREMENT, NAVY / BA 3 - AVIATION SUPPORT EQUIPMENT						426500, OTHER AVIATION SUPPORT EQUIPMENT				43S7, U3S7, S3S7	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	TECH DATA AVAILABLE NOW ?	DATE REVISIONS AVAILABLE	
S7030 INDUSTRIAL FAC EQUIP											
2009	1	178	NAWCADPAX	03/2009	C-FFP**	Tektronix, Beaverton, OR	05/2009	09/2009	Yes		
2010	1	180	NAWCADPAX	03/2010	VARIOUS	VARIOUS	05/2010	06/2010	Yes		
S7039 NALDA - DECKPLATE											
2009	1	1,282	NAVICPMECH	03/2009	C-FFP**	CAAS Severn, Laurel, MD***	06/2009	10/2009	Yes		
2010	1	3,668	NAVICPMECH	01/2010	C-TBD	TBD	04/2010	06/2010	Yes		
2011	1	2,410	NAVICPMECH	01/2011	C-TBD	TBD	04/2011	06/2011	Yes		
S7040 NALDA											
2009	1	858	NAVICPMECH	01/2009	C-FFP**	CAAS Severn, Laurel, MD***	01/2009	02/2009	Yes		
2010	1	777	NAVICPMECH	01/2010	C-TBD	TBD	04/2010	06/2010	Yes		
2011	1	299	NAVICPMECH	01/2011	C-TBD	TBD	04/2011	06/2011	Yes		
S7041 H/W & S/W - NALCOMIS OPTIMIZED											
2009	1	1,959	NAVICPMECH	01/2009	C-FFP**	Intergraph Corp.	03/2009	06/2009	Yes		
2010	1	1,530	NAVICPMECH	01/2010	C-TBD	TBD	04/2010	06/2010	Yes		
2011	1	1,451	NAVICPMECH	01/2011	C-TBD	TBD	04/2011	06/2011	Yes		
S7042 JOINT TACTICAL DATA INTEGRATION (JTDI)											
2009	1	3,550	NAVICPMECH	10/2008	C-IDIQ*	Aranea Solutions, Huntsville, AL	12/2008	03/2009	Yes		
2010	1	3,642	NAVICPMECH	10/2009	C-IDIQ	Aranea Solutions, Huntsville, AL	12/2009	03/2010	Yes		
2011	1	1,134	NAVICPMECH	10/2010	C-IDIQ	Aranea Solutions, Huntsville, AL	12/2010	03/2011	Yes		
S7044 Autonomic Logistics Information System (ALIS)											
2011	1	750	SPAWARSSYSCEN- Pacific	10/2010	TBD	TBD	10/2010	09/2011	Yes		
D. REMARKS *IDIQ - Indefinite Delivery, Indefinite Quantity ** FFP - Firm Fixed Price ***Preponderance of funds went to this vendor											



P3A INDIVIDUAL MODIFICATION																				
MODELS OF SYSTEM AFFECTED: CVN, LHD, & LHA				TYPE MODIFICATION: Added Capability				MODIFICATION TITLE ALIS SHIP INSTALLATION S7910												
DESCRIPTION/JUSTIFICATION:																				
Autonomic Logistics Information System (ALIS) Ship Installation. Funding will be used to install JSF computer hardware at the appropriate security levels, providing Navy's Local Area Networks/Wide Area Network (LAN/WAN) networks ability to transfer critical time sensitive data for JSF in support of aircraft logistics, mission planning, execution and debriefing.																				
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES B																				
	Prior Years		FY 2009		FY 2010		FY 2011		FY 2012		FY 2013		FY 2014		FY 2015		TC		TOTAL	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																				
RD&E																				
PROCUREMENT																				
INSTALL KITS							1	0.750	1	0.750	1	0.750	1	0.750	2	1.500	14	10.500	20	15.000
INSTALLATION KITS NRE								1.248												1.248
Component "A"																				
Component "B"																				
Component "C"																				
EQUIPMENT NRE																				
EQUIPMENT																				
Equipment "A"																				
Equipment "B"																				
ECP 1 Grp "A"																				
ECP 2 Grp "B"																				
ECP 3 Grp "A"																				
ECP 4 Grp "B"																				
DATA																				
TRAINING EQUIPMENT																				
SUPPORT EQUIPMENT																				
C4I INTEGRATION				1.625		1.936		2.412		2.500		2.158		2.220		2.193		9.700		24.744
OTHER - Install NRE																				
OTHER																				
OTHER																				
CONTRACTOR SUPPORT		0.855		1.347		1.081		1.000		1.178		0.893		0.911		0.920		9.600		17.785
INSTALL COST									1	1.300	1	1.100	1	1.100	1	1.100	16	19.200	20	23.800
TOTAL PROCUREMENT		0.855		2.972		3.017		5.410		5.728		4.901		4.981		5.713		49.000		82.577

P3A (Continued)

MODELS OF SYSTEMS AFFECTED: CVN & LHD & LHA MODIFICATION TITLE: ALIS SHIP INSTALLATION S7910

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AITADMINISTRATIVE LEADTIME: 12 Months PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 2009: \_\_\_\_\_ FY 2010: \_\_\_\_\_ FY 2011: Oct-10  
 DELIVERY DATE: FY 2009: \_\_\_\_\_ FY 2010: \_\_\_\_\_ FY 2011: Sep-11

(\$ in Millions)

Cost:	Prior Years				FY 2009		FY 2010		FY 2011		FY 2012		FY 2013		FY 2014		FY 2015		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	\$
PRIOR YEARS																					-	-	
FY 2009 EQUIPMENT																					-	-	
FY 2010 EQUIPMENT																					-	-	
FY 2011 EQUIPMENT (1)											1	1.300									1	1.300	
FY 2012 EQUIPMENT (1)													1	1.100							1	1.100	
FY 2013 EQUIPMENT (1)															1	1.100					1	1.100	
FY 2014 EQUIPMENT (1)																	1	1.100			1	1.100	
FY 2015 EQUIPMENT (1)																			1	1.100	1	1.100	
TO COMPLETE (16)																			15	18.100	15	19.200	
TOTAL INSTALL COST	-	-	-	-	-	-	-	-	-	-	1	1.300	1	1.100	1	1.100	1	1.100	16	19.200	20	23.800	

INSTALLATION SCHEDULE:

	FY 2008 & Prior	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	1	-	-	-	1	-	-	-	16	20
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	1	-	-	-	1	16	20