

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: FEBRUARY 2004				
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-4 Ordnance Support Equipment							P-1 ITEM NOMENCLATURE BLI 5260 VERTICAL LAUNCH SYSTEM					
Program Element for Code B Items:							Other Related Program Elements N/A					
	Prior Years	ID Code		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total
QUANTITY				N/A	N/A	N/A	N/A	N/A	N/A	N/A		
COST (In Millions)		A		\$5.3	\$7.8	\$9.8	\$9.0	\$6.9	\$7.0	\$7.1		\$53.0
SPARES COST (In Millions)				\$0.8	\$0.4	\$0.8	\$0.5	\$0.5	\$0.5	\$0.5		\$4.1

SUBMARINES
 The SSN-688 Class Vertical Launch System (VLS) is a weapons system which provides the SSN-688 Class submarines with the capability to carry, preset, and launch up to twelve TOMAHAWK cruise missiles from vertical tubes located in the forward non-pressure hull area. This weapons system is being added to all SSN-688 Class submarines starting with SSN-719 in FY 86 with out degrading any existing SSN-688 Class weapons system capabilities or submarine operational characteristics. The VLS launches TOMAHAWK conventional land attack cruise missiles. The TOMAHAWK cruise missile was modified to allow operation in a vertical orientation. VLS was procured and installed under the SCN appropriation. VLS support, test, and handling equipment are provided by this OPN P-1 line item.

The AUR Simulator is a test and training device that is loaded into a missile tube to simulate an operational Encapsulated TOMAHAWK Vertical All Up Round (AUR) allowing the VLS to be exercised through the launch phase without actually launching a missile. The AUR Simulator consists of an AUR Electronic Simulator enclosed in a Volumetric Shape. The AUR Electronic Simulator (AURES) simulates the AUR operations either while installed in the Volumetric Shape or in the stand-alone mode via electrical umbilical connection. The Volumetric Shape simulates the weight and shape of an operational AUR, provides a watertight, pressure-proof enclosure for the AURES, and interfaces with the missile tube in a manner similar to an operational AUR so that no damage to the tube will occur during simulation. The missile tube bore gauge is used to verify the proper missile tube clear bore to ensure compatibility with the TOMAHAWK AUR. The AUR loader is a funnel-shaped device which mounts to the missile tube muzzle face. It acts as a guide for the AUR and provides the mechanism to push the AUR down during loading and pull the AUR out of the missile tube during unloading. The Missile Tube Control Panel (MTCP) (SSN 719-725, 750) and the Tube Control Panel (TCP) (SSN 751-773) display the status of the missile tubes, controls the operation of the missile tube hatches, and displays the status of various subsystems.

Legacy items include procurement of Peculiar Support Equipment (PSE) All Up Round Volumetric Shapes, procurement of PSE support equipment, MK 101 Mod 5 upgrade, hydraulics block upgrade modification and hall switch modifications.

Two TCP modifications have been combined and stretched in schedule. Also, two fairing modifications have been combined and stretched in schedule.

Long-term changes include: Improved AURVS cable. Improved AURVS Junction Box. Ballast Can covers due to removal problems with existing plug. Improved Ballast Can pads. Platform tent. Commencement of a Mod 5 MK 101 upgrade. Special test equipment. Hall switch upgrade. Improved Fairing Lock Cylinder modification. Hydraulic Actuator pipe flange modification.

P-1 SHOPPING LIST

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BUDGET ITEM JUSTIFICATION SHEET											DATE:	
P-40											FEBRUARY 2004	
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE								
OTHER PROCUREMENT,NAVY/BA-4				VERTICAL LAUNCH SURFACE SYSTEM/A45A BLI# 5260								
Program Element for Code B Items:				Other Related Program Elements								
	FY 2001 and Prior	ID Code		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Program
QUANTITY				N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A
COST (\$M)				\$5.3	\$7.8	\$9.8	\$9.0	\$6.9	\$7.0	\$7.1		\$53.0
Initial Spares (\$M)				\$0.8	\$0.4	\$0.8	\$0.5	\$0.5	\$0.5	\$0.5		\$4.1

PROGRAM OVERVIEW:

SURFACE

The MK-41 Vertical Launching System (VLS) is a surface combatant missile launching system, designed to store, select and launch various STANDARD Missile configurations, TOMAHAWK, Tactical TOMAHAWK, EVOLVED SEASPARROW (ESSM) and Vertical Launch ASROC (VLA) missiles. The MK-41 VLS significantly improves missile capacity, flexibility, multi-mission capability, reaction time and rate of fire and is designed to be adaptable to present and future weapon systems. Current configurations are: two 61 cell launchers, forward and aft, for 22 TICONDEROGA (CG 47) Class Cruisers beginning with CG-52; one 61 cell launcher forward for 5* SPRUANCE (DD 963) Class Destroyers; one 61 cell aft and one 29 cell launcher forward for 28 ARLEIGH BURKE (DDG 51) Class Destroyers; and one 64 cell launcher aft and one 32 cell launcher forward for 32 DDG 51 FLT IIA ships.

The OPN requirements are to procure ORDALT kits and fund government field activity support for ORDALT installation planning, provide sustaining engineering support to MK-41 VLS ships in the fleet, and procure test equipment/special tool replacement in support of ship ROH/SRA testing. The MK-41 VLS program has requirements to: Procure ORDALTs for SM-2 BLK IV for DDG-51 and CG-47 classes; Conduct engineering investigations of 8 to 12 inadvertent deluges and 4 to 6 missile duds per year in order to minimize future material damage; Collect, investigate, and prioritize computer program trouble reports; Investigate discrepancies in, update, and correct shipboard Allowance Equipment Lists (AELs), Consolidated Onboard Ship Allowance Lists (COSALs), and configuration lists; Provide ORDALT production engineering support.

The increase in FY05-07 are for the procurement of Safety Ordnance Alterations.

* 19 SPRUANCE (DD-963) Class Ships are being decommissioned through FY04 bringing the total to 5 DD-963s.

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WEAPONS SYSTEM COST ANALYSIS				Weapon System									DATE:		
P-5													FEBRUARY 2004		
APPROPRIATION/BUDGET ACTIVITY				ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD							SUBHEAD			
Other Procurement, Navy					Vertical Launch Systems							BLI: 526000			A45A
BA-4 Ordnance Support Equipment															
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years	FY 2003			FY 2004			FY 2005					
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost			
	<u>SUBMARINES N-77</u>														
5A101	AUR ELECTRONIC SIMULATOR	A													
	Shape/skid Assembly							5	257	1,285					
	Additional skids										46	26	1,196		
	Internal Load Bank Thermal Protection														
	Improved AURVS Cable			1	70	70	9	10	90	27	10	270			
	Improved AURVS Junction Box			1	30	30	9	7	63	27	7	189			
	Improved Ballast Can Covers			1	40	40	22	4	88	57	4	228			
	Improved Ballast Can Pads			1	40	40	22	3	66	57	3	171			
	Improved Platform Tent			1	55	55	3	6	18	7	6	42			
5A102	AUR ELECTRONIC SIMULATOR	A													
	Tactical Tomahawk Kit Mod 4					70	20	1,400	49	19	931	28	19	532	
	Mod 5 TBD										1	608	608		
5A107	LOADING SUPPORT EQUIPMENT	A													
	Miscellaneous support equipment								416		37			76	
5A116	FACILITY HARDWARE	A													
									25		46			48	
SUBTOTAL (SUBMARINES N-77)									2,076			2,624		3,360	

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WEAPONS SYSTEM COST ANALYSIS P-5				Weapon System									DATE: FEBRUARY 2004		
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-4 Ordnance Support Equipment				ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD Vertical Launch Systems BLI: 526000									SUBHEAD A45A	
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years	FY 2003			FY 2004			FY 2005					
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
5A118	SHIPALT MATERIAL														
	TCP Phase II					7	221	1,547	1	300	300	2	300	600	
	4143 KP MFD 3/9 Handwheel								7	0.6	4.2				
	Fairing Block Upgrade								1	600	600	1	295	295	
	Hydraulic Block Upgrade								1	650	650				
	Hall Switch											1	134	134	
5A6IN	NON-FMP INSTALLATIONS														
5AINS	FMP INSTALLATIONS							1,260			1,669			1,570	
SUBTOTAL (SUBMARINES N-77)						0		4,883			5,847			5,959	

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P-1 SHOPPING LIST

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WEAPONS SYSTEM COST ANALYSIS P-5				Weapon System				DATE: FEBRUARY 2004								
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy				ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD VERTICAL LAUNCH SURFACE SYSTEM				BLI# 5260 A45A							
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS													
			Prior Years	FY 2003			FY 2004			FY 2005						
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	
	<u>SURFACE N76</u>															
5A003	VLS ORDALTS							120			685					3,146
5A830	PRODUCTION ENGINEERING							222			1,161					676
5A870	SPEC TOOLING/TEST EQUIP							0			0					0
5A900	CONSULTING SERVICES							0			0					0
5A5IN	FMP INSTALLATION							58			124					48
	SUBTOTAL (SURFACE N76)							400			1,970					3,870
	TOTAL		0			0		5,283			7,817					9,829

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B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-4 ORDNANCE SUPPORT EQUIPMENT					C. P-1 ITEM NOMENCLATURE SSN 688 CLASS VERTICAL LAUNCH SYSTEM 5A101 AUR ELECTRONIC SIMULATOR				SUBHEAD A45A	
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	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
<u>SUBMARINE</u>										
<u>FY2003</u>										
Improved AURVS Cable	1	\$70	NUWC		COMPET	COMPETITIVE/NUWC	11/02	4/03	YES	N/A
Improved AURVS Junction Box	1	\$30	NUWC		COMPET	COMPETITIVE/NUWC	11/02	4/03	YES	N/A
Improved Ballast Can Covers	1	\$40	NUWC		COMPET	COMPETITIVE/NUWC	11/02	4/03	YES	N/A
Improved Ballast Can Pads	1	\$40	NUWC		COMPET	COMPETITIVE/NUWC	11/02	4/03	YES	N/A
Improved Platform Tent	1	\$55	NUWC		COMPET	COMPETITIVE/NUWC	11/02	4/03	YES	N/A
<u>FY2004</u>										
Shape/skid Assembly	5	\$257	NUWC		COMPET	COMPETITIVE/NUWC	11/03	4/04	YES	N/A
Improved AURVS Cable	9	\$10	NUWC		COMPET	COMPETITIVE/NUWC	11/03	4/04	YES	N/A
Improved AURVS Junction Box	9	\$7	NUWC		COMPET	COMPETITIVE/NUWC	11/03	4/04	YES	N/A
Improved Ballast Can Covers	22	\$4	NUWC		COMPET	COMPETITIVE/NUWC	11/03	4/04	YES	N/A
Improved Ballast Can Pads	22	\$3	NUWC		COMPET	COMPETITIVE/NUWC	11/03	4/04	YES	N/A
Improved Platform Tent	3	\$6	NUWC		COMPET	COMPETITIVE/NUWC	11/03	4/04	YES	N/A
<u>FY2005</u>										
Additional skids	46	\$26	NUWC		COMPET	COMPETITIVE/NUWC	11/04	4/05	YES	N/A
Improved AURVS Cable	27	\$10	NUWC		COMPET	COMPETITIVE/NUWC	11/04	4/05	YES	N/A
Improved AURVS Junction Box	27	\$7	NUWC		COMPET	COMPETITIVE/NUWC	11/04	4/05	YES	N/A
Improved Ballast Can Covers	57	\$4	NUWC		COMPET	COMPETITIVE/NUWC	11/04	4/05	YES	N/A
Improved Ballast Can Pads	57	\$3	NUWC		COMPET	COMPETITIVE/NUWC	11/04	4/05	YES	N/A
Improved Platform Tent	7	\$6	NUWC		COMPET	COMPETITIVE/NUWC	11/04	4/05	YES	N/A

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE FEBRUARY 2004
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B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-4 ORDNANCE SUPPORT EQUIPMENT	C. P-1 ITEM NOMENCLATURE SSN 688 CLASS VERTICAL LAUNCH SYSTEM 5A102 AURES MK101	SUBHEAD A45A
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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	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
<u>SUBMARINE</u>										
<u>FY2003</u> Tactical Tomahawk Kit	70	\$20	NUWC		COMPET	COMPETITIVE/NUWC	11/02	4/03	YES	N/A
<u>FY2004</u> Tactical Tomahawk Kit	49	\$19	NUWC		COMPET	COMPETITIVE/NUWC	11/03	4/04	YES	N/A
<u>FY2005</u> Tactical Tomahawk Kit	28	\$19	NUWC		COMPET	COMPETITIVE/NUWC	11/04	4/05	YES	N/A

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System			A. DATE		
								FEBRUARY 2004		
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE				SUBHEAD	
Other Procurement, Navy BA-4 ORDNANCE SUPPORT EQUIPMENT					SSN 688 CLASS VERTICAL LAUNCH SYSTEM 5A118 SHIPALT MATERIAL				A45A	
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	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
<u>SUBMARINE</u>										
<u>FY2003</u> TCP Phase 2	7	\$221	NUWC		COMPET	COMPETITIVE/NUWC	11/02	4/03	YES	N/A
<u>FY2004</u> TCP Phase 2	1	\$300	NUWC		COMPET	COMPETITIVE/NUWC	11/03	4/04	YES	N/A
4143KP MFD 3/9 Handwheel	7	\$0.6	NUWC		COMPET	COMPETITIVE/NUWC	11/03	4/04	YES	N/A
Fairing Block Upgrade	1	\$600	NUWC		COMPET	COMPETITIVE/NUWC	11/03	4/04	YES	N/A
Hydraulics Block Upgrade	1	\$650	NUWC		COMPET	COMPETITIVE/NUWC	11/03	4/04	YES	N/A
<u>FY2005</u> TCP Phase 2	2	\$300	NUWC		COMPET	COMPETITIVE/NUWC	11/04	4/05	YES	N/A
Fairing Block Upgrade	1	\$295	NUWC		COMPET	COMPETITIVE/NUWC	11/04	4/05	YES	N/A
Hall Switch	1	\$134	NUWC		COMPET	COMPETITIVE/NUWC	11/04	4/05	YES	N/A

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P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: SSN 751-773 TYPE MODIFICATION: KP SHIPALT MODIFICATION TITLE: TCP PHASE 2
 PLUS 2 SHORE SITES

DESCRIPTION/JUSTIFICATION: (5A118)
 THIS MOD FACILITATES MAINTENANCE OF THE TCP.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 2001 & Prior		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<u>FINANCIAL PLAN (IN MILLIONS)</u>																							
<u>RDT&E</u>																							
<u>PROCUREMENT</u>																							
INSTALLATION KITS																							
INSTALLATION KITS - UNIT COST																							
INSTALLATION KITS NONRECURRING																							
EQUIPMENT	4	1.76	3	1.74	7	1.55	1	0.30	2	0.60	6	1.74	1	0.30	1	0.30					25	8.29	
EQUIPMENT NONRECURRING																							
ENGINEERING CHANGE ORDERS																							
DATA																							
TRAINING EQUIPMENT																							
SUPPORT EQUIPMENT																							
OTHER																							
OTHER																							
OTHER																							
INTERIM CONTRACTOR SUPPORT																							
INSTALL COST						1.20		0.93		0.44		0.46		0.60		0.23						0	3.86
TOTAL PROCUREMENT		1.76		1.74		2.75		1.23		1.04		2.20		0.90		0.53						25	12.15

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P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: SSN 719-725, 750-773 TYPE MODIFICATION: KP SHIPALT MODIFICATION TITLE: TEST PRESSURE STATIONS (5A118)

DESCRIPTION/JUSTIFICATION:
 This modification addresses inaccessibility /limited access to some test pressure stations.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	<u>FY 2001 & Prior</u>		<u>FY 2002</u>		<u>FY 2003</u>		<u>FY 2004</u>		<u>FY 2005</u>		<u>FY 2006</u>		<u>FY 2007</u>		<u>FY 2008</u>		<u>FY 2009</u>		<u>TC</u>		<u>TOTAL</u>		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<u>FINANCIAL PLAN (IN MILLIONS)</u>																							
<u>RDT&E</u>																							
<u>PROCUREMENT</u>																							
INSTALLATION KITS																							
INSTALLATION KITS - UNIT COST																							
INSTALLATION KITS NONRECURRING																							
EQUIPMENT	30	0.12																				30	0.12
EQUIPMENT NONRECURRING																							
ENGINEERING CHANGE ORDERS																							
DATA																							
TRAINING EQUIPMENT																							
SUPPORT EQUIPMENT																							
OTHER																							
OTHER																							
OTHER																							
INTERIM CONTRACTOR SUPPORT																							
INSTALL COST			5	0.05	14	0.14	11	0.11															
TOTAL PROCUREMENT	30	0.12				0.14		0.11		0.00		0.00		0.00		0.00		0.00		0.00		30	0.12

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P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: SSN 750-773 TYPE MODIFICATION: KP SHIPALT MODIFICATION TITLE: 4143 KP MFD 3/9 Handwheel (5A118)

DESCRIPTION/JUSTIFICATION:

This modification corrects a deficiency in the MFD 3/9 handwheel which if inadvertently bumped could disrupt the launch sequence.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 2001 & Prior		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<u>FINANCIAL PLAN (IN MILLIONS)</u>																							
<u>RDT&E</u>																							
<u>PROCUREMENT</u>																							
INSTALLATION KITS																							
INSTALLATION KITS - UNIT COST																							
INSTALLATION KITS NONRECURRING																							
EQUIPMENT			7	0.005			7	0.004														14	0.01
EQUIPMENT NONRECURRING																							
ENGINEERING CHANGE ORDERS																							
DATA																							
TRAINING EQUIPMENT																							
SUPPORT EQUIPMENT																							
OTHER																							
OTHER																							
OTHER																							
INTERIM CONTRACTOR SUPPORT																							
INSTALL COST						0.00		0.05		0.00		0.00		0.00		0.00		0.00		0.00		0.00	0.05
TOTAL PROCUREMENT			7			0.00	7	0.05		0.00		0.00		0.00		0.00		0.00		0.00	14	0.05	

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P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: SSN 751-773 MODIFICATION TITLE: 4143 KP MFD 3/9 Handwheel
 PLUS 2 SHORE SITES

INSTALLATION INFORMATION:
 METHOD OF IMPLEMENTATION: AIT
 ADMINISTRATIVE LEADTIME: 8 Months PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 2000: _____ FY 2001: _____ FY 2002: _____
 DELIVERY DATE: FY 2000: _____ FY 2001: _____ FY 2002: _____

(\$ in Millions)

Cost:	Prior Years		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS																							
FY 2002 EQUIPMENT			7	0.04																		7	0.04
FY 2003 EQUIPMENT																						0	0.00
FY 2004 EQUIPMENT							7	0.045														7	0.05
FY 2005 EQUIPMENT																						0	0.00
FY 2006 EQUIPMENT																						0	0.00
FY 2007 EQUIPMENT																						0	0
FY 2008 EQUIPMENT																						0	0.00
FY 2009 EQUIPMENT																						0	0.00
TO COMPLETE			7				7															14	0

INSTALLATION SCHEDULE:

	FY 2001 & Prior	FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				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	0	0	0	0	0	0	0	0	0	0	3	4	0	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
Out	0	0	0	0	0	0	0	0	0	0	3	4	0	0	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	14

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CLASSIFICATION: **UNCLASSIFIED**

P3A

INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: SSN 719-725, 750-773. TYPE MODIFICATION: KP SHIPALT MODIFICATION TITLE: Fairing Linkage Upgrade (5A118)

DESCRIPTION/JUSTIFICATION:

This alteration modifies the VLS fairing to Muzzle Hatch connecting links with predominantly off-shelf hardware to provide increased accuracy of adjustment and eliminate potential binding and interference areas.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 2001 & Prior		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<u>FINANCIAL PLAN (IN MILLIONS)</u>																							
<u>RDT&E</u>																							
<u>PROCUREMENT</u>																							
INSTALLATION KITS																							
INSTALLATION KITS - UNIT COST																							
INSTALLATION KITS NONRECURRING																							
EQUIPMENT							1	0.60	1	0.30	2	0.60	3	0.87	1	0.30	3	0.92			11	3.59	
EQUIPMENT NONRECURRING																							
ENGINEERING CHANGE ORDERS																							
DATA																							
TRAINING EQUIPMENT																							
SUPPORT EQUIPMENT																							
OTHER																							
OTHER																							
OTHER																							
INTERIM CONTRACTOR SUPPORT																							
INSTALL COST								0.60		0.30		0.40		0.87		0.45		0.60		5.95		9.17	
TOTAL PROCUREMENT		0.00		0.00		0.00	1	1.20	1	0.60	2	1.00	3	1.74	1	0.75	3	1.52	20	2.92	31	12.75	

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: SSN 719-725, 750-773 MODIFICATION TITLE: Fairing Block Upgrade (5A118)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: SHIPALT

ADMINISTRATIVE LEADTIME: 4 Months

PRODUCTION LEADTIME: 8 Months

CONTRACT DATES: FY 2000: _____ FY 2001: _____ FY 2002: _____

DELIVERY DATE: FY 2000: _____ FY 2001: _____ FY 2002: _____

(\$ in Millions)

Cost:	Prior Years		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS																							
FY 2002 EQUIPMENT																						0	0.00
FY 2003 EQUIPMENT																						0	0.00
FY 2004 EQUIPMENT							1	0.60														1	0.60
FY 2005 EQUIPMENT									1	0.30												1	0.30
FY 2006 EQUIPMENT											2	0.40										2	0.40
FY 2007 EQUIPMENT													3	0.87								3	0.87
FY 2008 EQUIPMENT															1	0.45						1	0.45
FY 2009 EQUIPMENT																	3	0.6				3	0.60
TO COMPLETE																			20	5.95	20	5.95	

INSTALLATION SCHEDULE:

	FY 2000 & Prior	FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				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	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	1	0	0	1	1	1	0	0	1	0	0	23	31
Out	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	1	0	0	1	1	1	0	0	1	0	23	31

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A

INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: SSN 719-725, 750-773. TYPE MODIFICATION: KP SHIPALT MODIFICATION TITLE: Hydraulics Block Upgrade (5A118)

DESCRIPTION/JUSTIFICATION:

This alteration modifies the VLS fairing to Muzzle Hatch connecting links with predominantly off-shelf hardware to provide increased accuracy of adjustment and eliminate potential binding and interference areas.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 2001 & Prior		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<u>FINANCIAL PLAN (IN MILLIONS)</u>																							
<u>RDT&E</u>																							
<u>PROCUREMENT</u>																							
INSTALLATION KITS																							
INSTALLATION KITS - UNIT COST																							
INSTALLATION KITS NONRECURRING																							
EQUIPMENT							1	0.65			1	0.31	1	0.31	2	0.64	1	0.32	25	5.93	31	8.16	
EQUIPMENT NONRECURRING																							
ENGINEERING CHANGE ORDERS																							
DATA																							
TRAINING EQUIPMENT																							
SUPPORT EQUIPMENT																							
OTHER																							
OTHER																							
OTHER																							
INTERIM CONTRACTOR SUPPORT																							
INSTALL COST								0.00		0.83		0.00		0.35		0.46		0.72		9.93		12.30	
TOTAL PROCUREMENT		0.00		0.00		0.00	1	0.65		0.83	1	0.31	1	0.67	2	1.10	1	1.05	25	15.86	31	20.46	

CLASSIFICATION: UNCLASSIFIED

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: SSN 719-725, 750-773 MODIFICATION TITLE: Hydraulics Block Upgrade (5A118)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: SHIPALT

ADMINISTRATIVE LEADTIME: 4 Months

PRODUCTION LEADTIME: 8 Months

CONTRACT DATES: FY 2000: _____ FY 2001: _____ FY 2002: _____
 DELIVERY DATE: FY 2000: _____ FY 2001: _____ FY 2002: _____

(\$ in Millions)

Cost:	Prior Year		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS																							
FY 2002 EQUIPMENT																						0	0.00
FY 2003 EQUIPMENT																						0	0.00
FY 2004 EQUIPMENT								1	0.83													1	0.83
FY 2005 EQUIPMENT																						0	0.00
FY 2006 EQUIPMENT												1	0.35									1	0.35
FY 2007 EQUIPMENT														1	0.46							1	0.46
FY 2008 EQUIPMENT																2	0.72					2	0.72
FY 2009 EQUIPMENT																		1	0.36			1	0.36
TO COMPLETE																				25	9.57	25	9.57

INSTALLATION SCHEDULE:

	FY 2001 & Prior	FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				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	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	25	31
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	25	31

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A

INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: SSN 719-725, 750-773. TYPE MODIFICATION: KP SHIPALT MODIFICATION TITLE: Hall Switch (5A118)

DESCRIPTION/JUSTIFICATION:

This alteration replaces internal glass-body electromechanical reed switches with an electronic Hall Effect switch actuated by a single pole magnetic field to provide ease of manufacture, eliminate magnet rotational positioning of present magnets, and allow use of higher reliability magnets better suited to the environment.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 2001 & Prior		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<u>FINANCIAL PLAN (IN MILLIONS)</u>																							
<u>RDT&E</u>																							
<u>PROCUREMENT</u>																							
INSTALLATION KITS																							
INSTALLATION KITS - UNIT COST																							
INSTALLATION KITS NONRECURRING																							
EQUIPMENT									1	0.13	5	0.35	6	0.43	6	0.43	5	0.36			23	1.70	
EQUIPMENT NONRECURRING																							
ENGINEERING CHANGE ORDERS																							
DATA																							
TRAINING EQUIPMENT																							
SUPPORT EQUIPMENT																							
OTHER																							
OTHER																							
OTHER																							
INTERIM CONTRACTOR SUPPORT																							
INSTALL COST											0.27		0.25		0.60		0.30			1.28		2.70	
TOTAL PROCUREMENT									1		5	0.27	6	0.25	6	0.60	5	0.43	8	1.63	31	4.40	

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: SSN 719-725, 750-773 MODIFICATION TITLE: Hall Switch (5A118)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: SHIPALT

ADMINISTRATIVE LEADTIME: 2 Months

PRODUCTION LEADTIME: 6 Months

CONTRACT DATES: FY 2000: _____ FY 2001: _____ FY 2002: _____

DELIVERY DATE: FY 2000: _____ FY 2001: _____ FY 2002: _____

(\$ in Millions)

Cost:	Prior Years		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS																						
FY 2000 EQUIPMENT																						
FY 2001 EQUIPMENT																						
FY 2002 EQUIPMENT																						
FY 2003 EQUIPMENT																						
FY 2004 EQUIPMENT																						
FY 2005 EQUIPMENT										1	0.27										1	0.27
FY 2006 EQUIPMENT												5	0.25								5	0.25
FY 2007 EQUIPMENT														6	0.60						6	0.60
FY 2008 EQUIPMENT																6	0.30				6	0.30
FY 2009 EQUIPMENT																		5	0.49		5	0.49
TO COMPLETE																		8	0.79		8	0.79

INSTALLATION SCHEDULE:

	FY 2001 & Prior	FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	2	0	0	2	2	2	0	19	31
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	2	0	0	2	2	2	19	31				

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: DD963/CG47/DDG51 Class MODIFICATION TITLE: MK-41 Vertical Launching System FEBRUARY 2004

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 18 Months

CONTRACT DATES: FY 2000: _____ FY 2001: _____ FY 2002: _____

DELIVERY DATE: FY 2000: _____ FY 2001: _____ FY 2002: _____

(\$ in Millions)

Cost:	Prior Years		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS																							0.0
FY 2001 EQUIPMENT			var																			var	0.0
FY 2002 EQUIPMENT					var	0.1																	0.1
FY 2003 EQUIPMENT								0.1															0.1
FY 2004 EQUIPMENT									var	0.0													0.0
FY 2005 EQUIPMENT											var	0.1											0.1
FY 2006 EQUIPMENT													var	0.1									0.1
FY 2007 EQUIPMENT															var	0.1							0.1
FY 2008 EQUIPMENT																	var	0.1					0.1
TO COMPLETE																							

INSTALLATION SCHEDULE:

	FY 2000 & Prior	FY 2001				FY 2002			FY 2003				FY 2004				FY 2005				FY 2006			FY 2006				FY 2007				TC	TOTAL				
		1	2	3	4	1	3	4	1	2	3	4	1	2	3	4	1	3	4	1	2	3	4	1	2	3	4										
IN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0