

CLASSIFICATION:

UNCLASSIFIED

EXHIBIT R-2, RDT&E Budget Item Justification							DATE:	
							February 2004	
APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMENCLATURE			
RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-5					0604221N P-3 Modernization Program			
COST (\$ in Millions)		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost		0.887	14.593	9.554	5.244	5.281	5.332	5.382
H1152 P-3 Sensor Integration		0.887	7.225	6.566	2.252	2.287	2.334	2.380
H3016 Fatigue Life Management Program				2.988	2.992	2.994	2.998	3.002
H9368 ALR-95 SEI Networking Program			1.286					
H9369 P-3 AIP Phase Capability Upgrade			6.082					
A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:								
<p>This program provides upgrades to P-3C aircraft systems to enhance surface and subsurface tracking and classification; attack capabilities including Specific Emmitter Identification (SEI); improved APS-137 radar tracking and upgrades; and P-3 Critical Obsolescence Program. The P-3C Sensor Integration project provides for the technology insertion support necessary to integrate advanced sensors into embedded P-3C Update III computer systems. Also, P-3 Sensor Integration will expand software technology of P-3 systems to integrate additional sensors, tactical decision aids, and color capabilities to improve aircrew tactical proficiency and awareness. Sensor Integration is a continuous effort to integrate and test newly evolving ASW technologies under the "Extended Echo Ranging (EER) family of Mulit-Static active sensor systems".</p> <p>Fatigue Life Management Program is required to manage P-3/EP-3 inventory fatigue life and includes ongoing structural analysis, analyzing emergent structural issues, conducting engineering studies, assessing Fleet impact, and applying new technologies such as Non-Destructive Inspection (NDI) techniques.</p> <p>ALR-95 SEI Networking Program will provide Specific Emmitter Identification (SEI) connectivity to common tactical networks.</p> <p>P-3 AIP Phased Capability Upgrade will integrate LINK-16 into P-3C AIP aircraft.</p>								

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Exhibit R-2, RDTEN Budget Item Justification
 (Exhibit R-2, page 1 of 33)

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EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2004	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5		PROGRAM ELEMENT NUMBER AND NAME 0604221N P-3 Modernization Program			PROJECT NUMBER AND NAME H1152 P-3 Sensor Integration			
COST (\$ in Millions)		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost		0.887	7.225	6.566	2.252	2.287	2.334	2.380
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This program provides upgrades to P-3C aircraft systems to enhance surface and subsurface tracking and classification; attack capabilities including Specific Emitter Identification (SEI); improved APS-137 radar tracking and upgrades; and P-3 Critical Obsolescence Program. The P-3C Sensor Integration project provides for the technology insertion support necessary to integrate advanced sensors into embedded P-3C Update III computer systems. Also, P-3 Sensor Integration will expand software technology of P-3 systems to integrate additional sensors, tactical decision aids, and color capabilities to improve aircrew tactical proficiency and awareness. Sensor Integration is a continuous effort to integrate and test newly evolving ASW technologies under the "Extended Echo Ranging (EER) family of Multi-Static active sensor systems".

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604221N P-3 Modernization Program	PROJECT NUMBER AND NAME H1152 P-3 Sensor Integration																	
(U) B. Accomplishments/Planned Program																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 10%;"></th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td></td><td style="text-align: center;">0.887</td><td style="text-align: center;">2.725</td><td style="text-align: center;">1.068</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table>							FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost		0.887	2.725	1.068	RDT&E Articles Quantity				
		FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost		0.887	2.725	1.068															
RDT&E Articles Quantity																			
<div style="border: 1px solid black; height: 60px; margin-top: 10px;"></div>																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 10%;"></th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td></td><td></td><td style="text-align: center;">4.500</td><td style="text-align: center;">5.498</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table>							FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost			4.500	5.498	RDT&E Articles Quantity				
		FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost			4.500	5.498															
RDT&E Articles Quantity																			
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604221N P-3 Modernization Program	PROJECT NUMBER AND NAME H1152 P-3 Sensor Integration

(U) C. PROGRAM CHANGE SUMMARY:

(U) Funding:	FY 2003	FY 2004	FY 2005
Previous President's Budget:	2.297	7.306	6.785
Current BES/President's Budget	0.887	7.225	6.566
Total Adjustments	-1.410	-0.081	-0.219
Summary of Adjustments			
Congressional program reductions			
Congressional undistributed reductions		-0.081	
Congressional rescissions			
SBIR/STTR Transfer	-0.052		
Economic Assumptions			-0.015
Reprogrammings	-1.358		
Other Navy/OSD Adjustments			
Reprioritization of requirements			-0.204
Congressional Increases			
Subtotal	-1.410	-0.081	-0.219

(U) Schedule:

The following milestones were reported incorrectly and are not included in this submission: IEER operational assessment (OA), AEER P-3C software development, IEER DT/OT and Swalas/Tamda. They are related to the ASW Sensor & processing development efforts. The P-3 Sensor integration takes the developed technologies and integrates them into the P-3. The milestones now reflect this integrated support and insertion of technology under "Extended Echo Ranging (EER) family of multi-static active sensor systems".

(U) Technical:

Not Applicable

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Exhibit R-2a, RD TEN Project Justification
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EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2004		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5		PROGRAM ELEMENT NUMBER AND NAME 0604221N P-3 Modernization Program			PROJECT NUMBER AND NAME H1152 P-3 Sensor Integration				
(U) D. OTHER PROGRAM FUNDING SUMMARY:									
<u>Line Item No. & Name</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>To Complete</u>	<u>Total Cost</u>
BLI#36 P-3 Critical Obsolescence Program (COP) (OSIP 04-04)		15.902	19.904	43.024	44.255	42.620	42.973	36.468	245.146
(U) E. ACQUISITION STRATEGY:									
The Air Deployable Active Receiver/Improved Extended Echo Ranging (IEER) Operational Requirements Document (Ser# 297(1)-05-97)) for H1152 was approved on 29 December 1997. The P-3 ASUW Improvement Program (AIP) ORD (Ser#355-88-94) for H2417 was approved on 30 March 1994. The Acquisition Plan (AIR-93-08A Rev 2) was approved on 30 March 1998.									

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Exhibit R-3 Cost Analysis (page 1)									DATE: February 2004			
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-5			0604221N P-3 Modernization Program			H1152 P-3 Sensor Integration						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total Pys Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Development (EER)	C/FP	Raytheon, McKinney, TX	6.425								6.425	6.425
Systems Engineering	Various	Various	28.160	0.362	01/03	1.181	01/04	0.695	01/05	Continuing	Continuing	
Systems Engineering	Various	Various				0.729	01/04	1.132	01/05	0.755	2.616	
Subtotal Product Development			34.585	0.362		1.910		1.827		Continuing	Continuing	
Remarks:												
Software Development	C/FP	Raytheon, McKinney, Tx	5.781								5.781	5.781
Software Development	C/FP	Raytheon, McKinney, Tx	1.998								1.998	1.998
Software Development	SS/FP	LMNESS, Egan, MN	14.561								14.561	14.561
Software Development	WX	NAWCAD, Pax River, MD	2.266	0.307	01/03	0.324	01/04	0.392	01/05	Continuing	Continuing	
Subtotal Support			24.606	0.307		0.324		0.392		Continuing	Continuing	
Remarks:												

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Exhibit R-2a, RDTEN Project Justification
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Exhibit R-3 Cost Analysis (page 2)										DATE: February 2004		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5			PROGRAM ELEMENT 0604221N P-3 Modernization Program				PROJECT NUMBER AND NAME H1152 P-3 Sensor Integration					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total Pys Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Test Support	WX	NAWCAD, Pax River, MD				2.241	01/04	2.255	01/05	2.351	6.847	
Subtotal T&E						2.241		2.255		2.351	6.847	
Remarks:												
Government Engineering Support	WX	NAWCAD, Pax River, MD	11.758	0.218	01/03	1.220	01/04			Continuing	Continuing	
Program Management Support	WX	NAWCAD, Pax River, MD				0.794	01/04	0.985	01/05	Continuing	Continuing	
Government Technical Support	WX	NAWCAD, Pax River, MD				0.366	01/04	0.444	01/05	Continuing	Continuing	
Logistics Support	WX	NAWCAD, Pax River, MD				0.370	01/04	0.663	01/05	Continuing	Continuing	
SBIR												
Subtotal Management			11.758	0.218		2.750		2.092		Continuing	Continuing	
Remarks:												
Total Cost			70.949	0.887		7.225		6.566		Continuing	Continuing	
Remarks:												

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Exhibit R-3, Project Cost Analysis
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EXHIBIT R4, Schedule Profile																								DATE:				February 2004											
APPROPRIATION/BUDGET ACTIVITY												PROGRAM ELEMENT NUMBER AND NAME												PROJECT NUMBER AND NAME															
RDT&E, N / BA-5												0604221N P-3 Modernization Program												H1152 P-3 Sensor Integration															
Fiscal Year					2003				2004				2005				2006				2007				2008				2009										
	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											
EER Multi-Static Active Sensor System Support				△																																			
EER Fleet Technology Insertion					△																																		
P-3 Critical Obsolesence Program Integration & Test									△													▽																	
P-3 Critical Obsolesence Program Kits & Installation										△																													

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Exhibit R-3, Project Cost Analysis
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EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2004	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604221N P-3 Modernization Program				PROJECT NUMBER AND NAME H3016 Fatigue Life Management Program			
COST (\$ in Millions)		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost				2.988	2.992	2.994	2.998	3.002
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Fatigue Life Management Program is required to manage P-3/EP-3 inventory fatigue life and includes ongoing structural analysis, analyzing emergent structural issues, conducting engineering studies, assessing Fleet impact, and applying new technologies such as Non-Destructive Inspection (NDI) techniques.

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604221N P-3 Modernization Program	PROJECT NUMBER AND NAME H3016 Fatigue Life Management Program		
(U) B. Accomplishments/Planned Program				
		FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost				2.988
RDT&E Articles Quantity				
<p>Fatigue Life Management Program : Manage P-3/EP-3 inventory fatigue life including conducting structural analysis, analyzing structural issues, conducting engineering studies, assessing Fleet impact. Research, test and apply new Fatigue Inspection techniques to the P-3/EP-3 Fleet.</p>				

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Exhibit R-2a, RDTEN Project Justification
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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004
APPROPRIATION/BUDGET ACTIVITY RDTE, N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604221N P-3 Modernization Program	PROJECT NUMBER AND NAME H3016 Fatigue Life Management Program

(U) C. PROGRAM CHANGE SUMMARY:

(U) Funding:	FY 2003	FY 2004	FY 2005
Previous President's Budget:	0.000	0.000	0.000
Current BES/President's Budget	0.000	0.000	2.988
Total Adjustments	0.000	0.000	2.988
Summary of Adjustments			
Congressional program reductions			
Congressional undistributed reductions			
Congressional rescissions			
SBIR/STTR Transfer			
Economic Assumptions			-0.010
Reprogrammings			
Other Navy/OSD Adjustments			2.998
Reprioritization of requirements			
Congressional Increases			
Subtotal	0.000	0.000	2.988

(U) Schedule:

(U) Technical:

Not Applicable

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Exhibit R-2a, RDTE Project Justification
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EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2004																					
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5		PROGRAM ELEMENT NUMBER AND NAME 0604221N P-3 Modernization Program		PROJECT NUMBER AND NAME H3016 Fatigue Life Management Program																							
<p>(U) D. OTHER PROGRAM FUNDING SUMMARY:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Line Item No. & Name</th> <th style="text-align: center; border-bottom: 1px solid black;">FY 2003</th> <th style="text-align: center; border-bottom: 1px solid black;">FY 2004</th> <th style="text-align: center; border-bottom: 1px solid black;">FY 2005</th> <th style="text-align: center; border-bottom: 1px solid black;">FY 2006</th> <th style="text-align: center; border-bottom: 1px solid black;">FY 2007</th> <th style="text-align: center; border-bottom: 1px solid black;">FY 2008</th> <th style="text-align: center; border-bottom: 1px solid black;">FY 2009</th> <th style="text-align: center; border-bottom: 1px solid black;">To Complete</th> <th style="text-align: center; border-bottom: 1px solid black;">Total Cost</th> </tr> </thead> <tbody> <tr> <td>N/A</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p style="margin-top: 20px;">(U) E. ACQUISITION STRATEGY:</p> <p>The Fatigue Life Management Program leverages off of prior work done under P-3 SLAP (H2451). The ASUW Improvement Program (AIP) ORD 355-88-94 was approved 30 March 94. PMP #0526 Ser 902D1/6U324405 was approved on 6 Feb 1986. Navy Decision Coordination Paper W-0484-AS was signed 23 Jun 1984. Work will be performed by LMAS and other industry participants along with the NAVAIR Structural Engineering Dept, AIR-4.3. This program supports the 7 June 2003 CNO approved P-3/EP-3 Sustainment Bridge to MMA.</p>								Line Item No. & Name	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Cost	N/A									
Line Item No. & Name	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Cost																		
N/A																											

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Exhibit R-3 Cost Analysis (page 1)									DATE: February 2004			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5			PROGRAM ELEMENT 0604221N P-3 Modernization Program			PROJECT NUMBER AND NAME H3016 Fatigue Life Management Program						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total Pys Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Systems Engineering	C/CPIF	LMAS, Marietta, GA						2.288	01/05	10.186	12.474	12.474
Subtotal Product Development			0.000	0.000		0.000		2.288		10.186	12.474	12.474
Remarks:												
Subtotal Support			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												

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Exhibit R-3 Cost Analysis (page 2)								DATE: February 2004				
APPROPRIATION/BUDGET ACTIVITY RD&E, N / BA-5			PROGRAM ELEMENT 0604221N P-3 Modernization Program			PROJECT NUMBER AND NAME H3016 Fatigue Life Management Program						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total Pys Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Subtotal T&E						0.000		0.000		0.000	0.000	
Remarks:												
Govt Engineering Support	WX	NAWCAD, Pax River						0.700	12/04	1.800	2.500	
Subtotal Management			0.000	0.000		0.000		0.700		1.800	2.500	
Remarks:												
Total Cost			0.000	0.000		0.000		2.988		11.986	14.974	
Remarks:												

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EXHIBIT R4, Schedule Profile																								DATE:											
APPROPRIATION/BUDGET ACTIVITY												PROGRAM ELEMENT NUMBER AND NAME												PROJECT NUMBER AND NAME											
RDT&E, N / BA-5												0604221N P-3 Modernization Program												H3016 Fatigue Life Management Program											
Fiscal Year					2003				2004				2005				2006				2007				2008				2009						
	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							
Inventory Fatigue Life Management/Sustainment																																			

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Exhibit R-4, Schedule Profile
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5		PROGRAM ELEMENT NUMBER AND NAME 0604221N P-3 Modernization Program			PROJECT NUMBER AND NAME H9368 ALR-95 SEI Networking Program			
COST (\$ in Millions)		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost			1.286					
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The U.S. Navy P-3C "Orion" is increasingly being tasked to conduct long-endurance standoff maritime surveillance operations. In support of these missions, the P-3C is being upgraded with the Anti-Surface Warfare Improvement Program (AIP). AIP incorporates a number of sensor system additions to the aircraft. Among these enhancements are a SAR/ISAR radar for high resolution target identification, a long range electro-optical surveillance system, communications and survivability enhancements and the new ALR-95 electronic support measures (ESM) system. Phased Capability Upgrade (PCU), encompasses improvements to the aircraft including Link 16, Global Command and Control System-Maritime (GCCS-M), Integrated Tactical Picture (ITP) Precision Targeting Workstation (PTW), Architecture Upgrade, ALR 95 Geo-Location, ALR 95 Networking, and Tactical Common Data Link (TCDL). PCU will provide sensor and C4I modernization which will enhance the Carrier Strike Group/ Expeditionary Strike Group (CSG/ESG) integration and a bridge to the Multi-Mission Maritime Aircraft (MMA) architecture. The new ESM System includes Specific Emitter Identification (SEI) capability that permits the P-3 to passively detect, identify and track high interest targets at extremely distant ranges. Currently, the P-3 shares intelligence associated with SEI contacts only with ground-based Tactical Support Center. There is an urgent fleet requirement to ensure the P-3 can connect with other fleet and ISR platforms to exchange SEI contact information in real time.

This Congressional Add will upgrade the system to conform to the Navy's standard tactical message format.

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(U) B. Accomplishments/Planned Program				
		FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost			1.286	
RDT&E Articles Quantity				
<p>The SEI system as deployed is not equipped to handle the large increase of high interest targets that have resulted from the wide-ranging war on terrorism. These shortcomings can be addressed with upgrades to the system. The system will be upgraded to conform to the Navy's standard tactical message format. In addition, upgraded CPU cards and SEI card sets will be selected and tested to change significantly the ability to handle many targets in a single area.</p>				

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604221N P-3 Modernization Program	PROJECT NUMBER AND NAME H9368 ALR-95 SEI Networking Program	
(U) C. PROGRAM CHANGE SUMMARY:			
(U) Funding:	FY 2003	FY 2004	FY 2005
Previous President's Budget:	0.000	0.000	0.000
Current BES/President's Budget	0.000	1.286	0.000
Total Adjustments	0.000	1.286	0.000
Summary of Adjustments			
Congressional program reductions			
Congressional undistributed reductions		-0.014	
Congressional rescissions			
SBIR/STTR Transfer			
Economic Assumptions			
Reprogrammings			
Other Navy/OSD Adjustments			
Reprioritization of requirements			
Congressional Increases		1.300	
Subtotal	0.000	1.286	0.000
(U) Schedule:			
(U) Technical:			
Not Applicable			

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5		PROGRAM ELEMENT NUMBER AND NAME 0604221N P-3 Modernization Program		PROJECT NUMBER AND NAME H9368 ALR-95 SEI Networking Program					
(U) D. OTHER PROGRAM FUNDING SUMMARY:									
<u>Line Item No. & Name</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>To Complete</u>	<u>Total Cost</u>
N/A									
(U) E. ACQUISITION STRATEGY:									
Existing Sole Source FFP contract to EDO									

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Exhibit R-3 Cost Analysis (page 1)								DATE: February 2004				
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5			PROGRAM ELEMENT 0604221N P-3 Modernization Program			PROJECT NUMBER AND NAME H9368 ALR-95 SEI Networking Program						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total Pys Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Systems Engineering	SS/FFP	EDO Morgan Hill Ca.				1.157	04/04				1.157	1.157
Subtotal Product Development			0.000	0.000		1.157		0.000			1.157	
Remarks:												
Subtotal Support			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)										DATE: February 2004		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5			PROGRAM ELEMENT 0604221N P-3 Modernization Program				PROJECT NUMBER AND NAME H9368 ALR-95 SEI Networking Program					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total Pys Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Subtotal T&E						0.000		0.000		0.000	0.000	
Remarks:												
Govt Engineering Support	WX	NAWCAD Patuxent River, MD				0.129	02/04				0.129	
Subtotal Management			0.000	0.000		0.129		0.000		0.000	0.129	
Remarks:												
Total Cost			0.000	0.000		1.286		0.000		0.000	1.286	
Remarks:												

CLASSIFICATION:

EXHIBIT R4, Schedule Profile																								DATE:								
APPROPRIATION/BUDGET ACTIVITY										PROGRAM ELEMENT NUMBER AND NAME										PROJECT NUMBER AND NAME												
RDT&E, N / BA-5										0604221N P-3 Modernization Program										H9368 ALR-95 SEI Networking Program												
Fiscal Year					2003				2004				2005				2006				2007				2008				2009			
	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				
ALR 95 Networking Engineering Development																																

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Exhibit R-4a, Schedule Detail
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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2004	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5		PROGRAM ELEMENT NUMBER AND NAME 0604221N P-3 Modernization Program			PROJECT NUMBER AND NAME H9369 P-3 AIP Phase Capability Upgrade			
COST (\$ in Millions)		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost			6.082					
RDT&E Articles Qty								
<p>A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</p> <p>The U.S. Navy P-3C "Orion" is increasingly being tasked to conduct long-endurance standoff maritime surveillance operations. In support of these missions, the P-3C is being upgraded with the Anti-Surface Warfare Improvement Program (AIP). AIP incorporates a number of sensor system additions to the aircraft. Among these enhancements are a SAR/ISAR radar for high resolution target identification, a long range electro-optical surveillance system, communications and survivability enhancements and the new ALR-95 electronic support measures (ESM) system. Phased Capability Upgrade (PCU), encompasses improvements to the aircraft including Link 16, Global Command and Control System-Maritime (GCCS-M), Integrated Tactical Picture (ITP) Precision Targeting Workstation (PTW), Architecture Upgrade, ALR 95 Geo-Location, ALR 95 Networking, and Tactical Common Data Link (TCDL). PCU will provide sensor and C4I modernization which will enhance the Carrier Strike Group/ Expeditionary Strike Group (CSG/ESG) integration and a bridge to the Multi-Mission Maritime Aircraft (MMA) architecture.</p> <p>This Congressional Add includes the Engineering Development, integration and test of Link-16. LINK 16 will provide the communications path to enable AIP's mission critical role in Sea Power 21 (Forcenet, Sea Control, Persistent Intelligence, Surveillance, and Reconnaissance (ISR), and Common Operational Picture (COP)).</p>								

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604221N P-3 Modernization Program	PROJECT NUMBER AND NAME H9369 P-3 AIP Phase Capability Upgrade		
(U) B. Accomplishments/Planned Program				
		FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost			6.082	
RDT&E Articles Quantity				
<p>LINK 16 is a secure Tactical Data Link (TDL) that provides secure information, voice distribution and position location within a common position reference grid (i.e., intrinsic identification capability through the dissemination of secure position and identification information).</p> <p>LINK 16:</p> <ul style="list-style-type: none">- Provides capability to interconnect multiple sources and users of information with data and voice communication.- Distributes information at high data rates, encrypted in such a way as to provide security and with sufficient jam resistance to yield highly reliable communications in a hostile electromagnetic environment.- Allows the P-3 AIP platform interoperability between USN and Joint Operations, increasing the AIP communication exchange opportunities with U.S. and allied forces				

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Exhibit R-4a, Schedule Detail
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EXHIBIT R-2a, RDT&E Project Justification		DATE:	
		February 2004	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-5	0604221N P-3 Modernization Program	H9369 P-3 AIP Phase Capability Upgrade	
(U) C. PROGRAM CHANGE SUMMARY:			
(U) Funding:	FY 2003	FY 2004	FY 2005
Previous President's Budget:	0.000	0.000	0.000
Current BES/President's Budget	0.000	6.082	0.000
Total Adjustments	0.000	6.082	0.000
Summary of Adjustments			
Congressional program reductions			
Congressional undistributed reductions		-0.068	
Congressional rescissions			
SBIR/STTR Transfer			
Economic Assumptions			
Reprogrammings			
Other Navy/OSD Adjustments			
Reprioritization of requirements			
Congressional Increases		6.150	
Subtotal	0.000	6.082	0.000
(U) Schedule:			
(U) Technical:			
Not Applicable			

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EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2004			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5		PROGRAM ELEMENT NUMBER AND NAME 0604221N P-3 Modernization Program		PROJECT NUMBER AND NAME H9369 P-3 AIP Phase Capability Upgrade					
(U) D. OTHER PROGRAM FUNDING SUMMARY:									
<u>Line Item No. & Name</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>To Complete</u>	<u>Total Cost</u>
N/A									
 (U) E. ACQUISITION STRATEGY:									
Sole source FFP to an existing contract									

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Exhibit R-3 Cost Analysis (page 1)									DATE: February 2004			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5			PROGRAM ELEMENT 0604221N P-3 Modernization Program			PROJECT NUMBER AND NAME H9369 P-3 AIP Phase Capability Upgrade						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total Pys Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Systems Engineering	SS/FFP	Lockheed Martin, Eagan Mn.				5.474	06/04				5.474	5.474
Subtotal Product Development			0.000	0.000		5.474		0.000		0.000	5.474	5.474
Remarks:												
Subtotal Support			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												

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Exhibit R-3 Cost Analysis (page 2)										DATE: February 2004		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5			PROGRAM ELEMENT 0604221N P-3 Modernization Program				PROJECT NUMBER AND NAME H9369 P-3 AIP Phase Capability Upgrade					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total Pys Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Subtotal T&E						0.000		0.000		0.000	0.000	
Remarks:												
Govt Engineering Support	WX	NAWCAD Patuxent River, MD				0.608	2/04				0.608	
Subtotal Management			0.000	0.000		0.608		0.000		0.000	0.608	
Remarks:												
Total Cost			0.000	0.000		6.082		0.000		0.000	6.082	
Remarks:												

CLASSIFICATION:

EXHIBIT R4, Schedule Profile																								DATE:											
APPROPRIATION/BUDGET ACTIVITY												PROGRAM ELEMENT NUMBER AND NAME												PROJECT NUMBER AND NAME											
RDT&E, N / BA-5												0604221N P-3 Modernization Program												H9369 P-3 AIP Phase Capability Upgrade											
Fiscal Year					2003				2004				2005				2006				2007				2008				2009						
	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							
Link 16 Engineering and integration																																			

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Exhibit R-3, Project Cost Analysis
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