

CLASSIFICATION:

UNCLASSIFIED

EXHIBIT R-2, RDT&E Budget Item Justification							DATE:	
							February 2005	
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-5					R-1 ITEM NOMENCLATURE 0604221N P-3 Modernization Program			
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Total PE Cost	14.257	13.038	7.401	5.245	5.343	5.412	5.540	5.655
1152 P-3 Sensor Integration	7.097	6.124	4.387	3.215	3.294	3.350	3.409	3.455
3016 Fatigue Life Management Program		2.954	3.014	2.030	2.049	2.062	2.131	2.200
9368 ALR-95 SEI Networking Program	1.250	2.971						
9369 P-3 AIP Phase Capability Upgrade	5.910							
9551 Personal Digital Assistant Maintenance		0.989						
<b>A. RDT&amp;E MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</b> This program provides for P-3C aircraft systems development in subsurface and surface surveillance, search, detection, localization, classification, attack and communications in support of Sea Shield/Sea Power 21. The P-3C Sensor Integration project integrates advanced and future ASW and ASuW sensors, weapons systems, and supporting technology into legacy P-3C systems and phased capabilities upgrades. Also, P-3 Sensor Integration will expand software and hardware technology of P-3 systems to integrate additional sensor and processing capabilities, environmental prediction tools, tactical decision aides, color capabilities and communications to improve aircrew tactical proficiency and battlespace awareness. Sensor Integration is a continuous effort to integrate and test newly evolving ASW and ASuW technologies such as Analyzer Sub-Unit and System Controller Technology Insertions, "Extended Echo Ranging" (EER) family of Multi-Static active systems, Acoustic Rapid Cots Insertion (ARCI), Non-acoustic ASW sensors and systems, and future Technical Refresh insertions for obsolescence and processing improvements. Develop interface control for ASW weapon improvement solutions.  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.  ALR-95 SEI Networking Program will provide Specific Emitter Identification (SEI) connectivity to common tactical networks. The ALR-95 Radio Frequency Distribution (RFD) will upgrade the system of the ALR-95 with fibre optic cable to reduce losses and improve performance.  P-3 AIP Phased Capability Upgrade will integrate LINK-16 into P-3C AIP aircraft.  The Personal Digital Assistant Maintenance Application Program (PDA MAP) will reduce paper data collection and manual data entry process associated with scheduled maintenance inspections. PDA MAP will improve efficiency, increase data collection accuracy, and reduce Naval Aviation Logistics Command Management Information System (NALCOMIS) data entry time.								

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**Exhibit R-2, RDTEN Budget Item Justification**  
 (Exhibit R-2, page 1 of 25)

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EXHIBIT R-2a, RDT&E Project Justification							DATE: <b>February 2005</b>	
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-5</b>		PROGRAM ELEMENT NUMBER AND NAME 0604221N P-3 Modernization Program			PROJECT NUMBER AND NAME 1152 P-3 Sensor Integration			
COST (\$ in Millions)	FY2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	7.097	6.124	4.387	3.215	3.294	3.350	3.409	3.455
RDT&E Articles Qty								

### A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

#### RDT&E Mission Description and Budget Item Justification

This program provides for P-3C aircraft systems development in subsurface and surface surveillance, search, detection, localization, classification, attack and communications in support of Sea Shield/Sea Power 21. The P-3C Sensor Integration project integrates advanced and future ASW and ASuW sensors, weapons systems, and supporting technology into legacy P-3C systems and phased capabilities upgrades. The program also advances Air ARCI efforts by replacing legacy MIL-SPEC UYS-1 with increasingly open, COTS-based architecture. Also, P-3 Sensor Integration will expand software and hardware technology of P-3 systems to integrate additional sensor and processing capabilities, environmental prediction tools, tactical decision aides, color capabilities and communications to improve aircrew tactical proficiency and battlespace awareness. Sensor Integration is a continuous effort to integrate and test newly evolving ASW and ASuW technologies such as Analyzer Sub-Unit (ASU) and System Controller (SC) Technology Insertions, "Extended Echo Ranging" (EER) family of Multi-Static active systems, Acoustic Rapid Cots Insertion (ARCI), Non-acoustic ASW sensors and systems, and future Technical Refresh insertions for obsolescence and processing improvements. Develop interface control for ASW weapon improvement solutions.

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APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-5</b>	PROGRAM ELEMENT NUMBER AND NAME 0604221N P-3 Modernization Program	PROJECT NUMBER AND NAME 1152 P-3 Sensor Integration																	
<b>B. Accomplishments/Planned Program</b>																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY04</th><th style="width: 15%;">FY 05</th><th style="width: 15%;">FY 06</th><th style="width: 15%;">FY 07</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">2.597</td><td style="text-align: center;">1.624</td><td style="text-align: center;">4.387</td><td style="text-align: center;">3.215</td></tr><tr><td>RDT&amp;E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table>						FY04	FY 05	FY 06	FY 07	Accomplishments/Effort/Subtotal Cost	2.597	1.624	4.387	3.215	RDT&E Articles Quantity				
	FY04	FY 05	FY 06	FY 07															
Accomplishments/Effort/Subtotal Cost	2.597	1.624	4.387	3.215															
RDT&E Articles Quantity																			
<div style="border: 1px solid black; padding: 5px;"><p>System engineering support for integration of EER family of Multi-Static active sensor system. Integrates advanced and future ASW and ASuW sensors, weapons systems, and supporting technology into legacy P-3C systems and phased capabilities upgrades. Advances Air ARCI efforts by replacing legacy MIL-SPEC UYS-1 with increasingly open, COTS-based architecture. Expands software and hardware technology of P-3 systems to integrate additional sensor and processing capabilities, environmental prediction tools, tactical decision aides, color capabilities and communications to improve aircrew tactical proficiency and battlespace awareness. Specifically the program integrates and tests newly evolving ASW and ASuW technologies such as Analyzer Sub-Unit (ASU) and System Controller (SC) Technology Insertions, "Extended Echo Ranging" (EER) family of Multi-Static active systems, Acoustic Rapid Cots Insertion (ARCI), Non-acoustic ASW sensors and systems, and future Technical Refresh insertions for obsolescence and processing improvements.</p></div>																			
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	FY04	FY 05	FY 06	FY 07															
Accomplishments/Effort/Subtotal Cost	4.500	4.500																	
RDT&E Articles Quantity																			
<div style="border: 1px solid black; padding: 5px;"><p>P-3 Critical Obsolescence Program (COP): Integration, prototyping, testing, aircraft support, logistics, contracting, engineering, and program management of the five COP systems (HF Radio, Data Link, Infrared Detection, Tactical ASW Auto-Pilot, and Inter Communications).</p></div>																			

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EXHIBIT R-2a, RDT&E Project Justification			DATE: <b>February 2005</b>	
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-5</b>	PROGRAM ELEMENT NUMBER AND NAME 0604221N P-3 Modernization Program	PROJECT NUMBER AND NAME 1152 P-3 Sensor Integration		

**C. PROGRAM CHANGE SUMMARY:**

	FY 2004	FY 2005	FY 2006	FY 2007
(U) Funding:				
Previous President's Budget:	7.225	6.566	2.252	2.287
Current BES/President's Budget	7.097	6.124	4.387	3.215
Total Adjustments	-0.128	-0.442	2.135	0.928
Summary of Adjustments				
Congressional program reductions				
Congressional undistributed reductions		-0.058		
Congressional rescissions				
SBIR/STTR Transfer	-0.136			
Other Adjustments		-0.384	2.049	0.882
Economic Assumptions			0.086	0.046
Reprogrammings	0.008			
Congressional Increases				
Subtotal	-0.128	-0.442	2.135	0.928

(U) Schedule:

The P-3 Critical Obsolescence Program Commence APN Procurement milestone moved from 2Q/04 to 3Q/04 due to rate issues and audits, delaying Contract Award. P-3 ARCI and Future Fleet Technology Insertion programs begin 2Q/06.

(U) Technical:

Not Applicable

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Exhibit R-2, RD TEN Budget Item Justification  
(Exhibit R-2, page 4 of 25)

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APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME					
RDT&E, N / BA-5		0604221N P-3 Modernization Program				1152 P-3 Sensor Integration					
<b>D. OTHER PROGRAM FUNDING SUMMARY:</b>											
<u>Line Item No. &amp; Name</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>FY 2010</u>	<u>FY 2011</u>	<u>To Complete</u>	<u>Total Cost</u>	
BLI 0538 P-3 Critical Obsolescence Program (COP) (OSIP 04-04)	14.502	22.904	43.712	43.696	42.141	46.168	39.776	35.653	256.270	544.822	
<b>E. ACQUISITION STRATEGY:</b>											
The Air Deployable Active Receiver/Improved Extended Echo Ranging (IEER) Operational Requirements Document (Ser# 297(1)-05-97)) for 1152 was approved on 29 December 1997. The P-3 ASUW Improvement Program (AIP) ORD (Ser#355-88-94) for 2417 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: <b>February 2005</b>				
APPROPRIATION/BUDGET ACTIVITY <b>RDTE&amp;E, N / BA-5</b>			PROGRAM ELEMENT 0604221N P-3 Modernization Program			PROJECT NUMBER AND NAME 1152 P-3 Sensor Integration						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total Pys Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 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	30.440	0.050	01/05	2.200	01/06	2.000	01/07	Continuing	Continuing	
Systems Engineering	CPFF	Lockheed Martin, Manassas, Va.		1.000	02/05						1.000	1.000
Subtotal Product Development			36.865	1.050		2.200		2.000		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	2.897	0.600	01/05	0.500	01/06	0.515	01/07	Continuing	Continuing	
Subtotal Support			25.237	0.600		0.500		0.515		Continuing	Continuing	
Remarks:												

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Exhibit R-2, RDTE Budget Item Justification  
(Exhibit R-2, page 6 of 25)

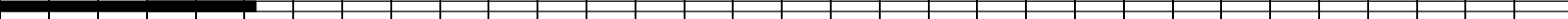
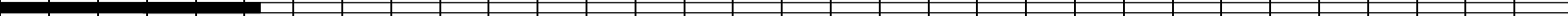
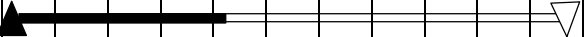

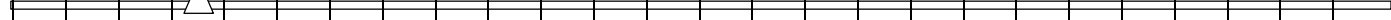
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Exhibit R-3 Cost Analysis (page 2)										DATE: <b>February 2005</b>		
APPROPRIATION/BUDGET ACTIVITY <b>RD&amp;E, N / BA-5</b>				PROGRAM ELEMENT 0604221N P-3 Modernization Program			PROJECT NUMBER AND NAME 1152 P-3 Sensor Integration					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total Pys Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Test Support	WX	NAWCAD, Pax River, MD	2.241	2.255	01/05	0.650	01/06	0.300	01/07	Continuing	Continuing	
Subtotal T&E			2.241	2.255		0.650		0.300		Continuing	Continuing	
Remarks:												
Government Engineering Support	WX	NAWCAD, Pax River, MD	13.060									
Program Management Support	WX	NAWCAD, Pax River, MD	0.794	0.985	01/05	0.400	01/06	0.200	01/07	Continuing	Continuing	
Government Technical Support	WX	NAWCAD, Pax River, MD	0.366	0.500	01/05	0.450	01/06	0.100	01/07	Continuing	Continuing	
Government Technical Support	MIPR	MITRE, McLean, Va.		0.070								
Logistics Support	WX	NAWCAD, Pax River, MD	0.370	0.664	01/05	0.187	01/06	0.100	01/07	Continuing	Continuing	
SBIR												
Subtotal Management			14.590	2.219		1.037		0.400		Continuing	Continuing	
Remarks:												
Total Cost			78.933	6.124		4.387		3.215		Continuing	Continuing	
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												1152 P-3 Sensor Integration											
Fiscal Year	2004				2005				2006				2007				2008				2009				2010				2011						
	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			
EER Multi-Static Active Sensor System Support																																			
EER Fleet Technology Insertion																																			
P-3 Critical Obsolescence Program Integration & Test																																			
P-3 Critical Obsolescence Program Kits & Installation																																			
P-3 ARCI program and Future Fleet Technology Insertion																																			

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**Exhibit R-2, RD TEN Budget Item Justification**  
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EXHIBIT R-2a, RDT&E Project Justification							DATE: <b>February 2005</b>	
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-5</b>	PROGRAM ELEMENT NUMBER AND NAME 0604221N P-3 Modernization Program				PROJECT NUMBER AND NAME 3016 Fatigue Life Management Program			
COST (\$ in Millions)	FY2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost		2.954	3.014	2.030	2.049	2.062	2.131	2.200
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: <b>February 2005</b>		
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-5</b>	PROGRAM ELEMENT NUMBER AND NAME 0604221N P-3 Modernization Program	PROJECT NUMBER AND NAME 3016 Fatigue Life Management Program		
<b>B. Accomplishments/Planned Program</b>				
	FY04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost		2.954	3.014	2.030
RDT&E Articles Quantity				
<div>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.</div>				

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<p><b>C. PROGRAM CHANGE SUMMARY:</b></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 40%;">(U) Funding:</th> <th style="text-align: right; width: 10%;">FY2004</th> <th style="text-align: right; width: 10%;">FY 2005</th> <th style="text-align: right; width: 10%;">FY 2006</th> <th style="text-align: right; width: 10%;">FY 2007</th> </tr> </thead> <tbody> <tr> <td>Previous President's Budget:</td> <td></td> <td style="text-align: right;">2.988</td> <td style="text-align: right;">2.992</td> <td style="text-align: right;">2.994</td> </tr> <tr> <td>Current BES/President's Budget</td> <td></td> <td style="text-align: right;"><u>2.954</u></td> <td style="text-align: right;"><u>3.014</u></td> <td style="text-align: right;"><u>2.030</u></td> </tr> <tr> <td>Total Adjustments</td> <td></td> <td style="text-align: right;">-0.034</td> <td style="text-align: right;">0.022</td> <td style="text-align: right;">-0.964</td> </tr> <tr> <td colspan="5" style="padding-top: 10px;">Summary of Adjustments</td> </tr> <tr> <td>    Congressional program reductions</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>    Congressional undistributed reductions</td> <td></td> <td style="text-align: right;">-0.030</td> <td></td> <td></td> </tr> <tr> <td>    Congressional rescissions</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>    SBIR/STTR Transfer</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>    Other Adjustments</td> <td></td> <td style="text-align: right;">-0.004</td> <td style="text-align: right;">-0.007</td> <td style="text-align: right;">-1.010</td> </tr> <tr> <td>    Economic Assumptions</td> <td></td> <td></td> <td style="text-align: right;">0.029</td> <td style="text-align: right;">0.046</td> </tr> <tr> <td>    Reprogrammings</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>    Congressional Increases</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>    Subtotal</td> <td></td> <td style="text-align: right; border-top: 1px solid black;">-0.034</td> <td style="text-align: right; border-top: 1px solid black;">0.022</td> <td style="text-align: right; border-top: 1px solid black;">-0.964</td> </tr> </tbody> </table> <p style="margin-top: 20px;">Schedule:</p> <p style="margin-left: 40px;">Not Applicable</p>   <p>Technical:</p> <p style="margin-left: 40px;">Not Applicable</p>					(U) Funding:	FY2004	FY 2005	FY 2006	FY 2007	Previous President's Budget:		2.988	2.992	2.994	Current BES/President's Budget		<u>2.954</u>	<u>3.014</u>	<u>2.030</u>	Total Adjustments		-0.034	0.022	-0.964	Summary of Adjustments					Congressional program reductions					Congressional undistributed reductions		-0.030			Congressional rescissions					SBIR/STTR Transfer					Other Adjustments		-0.004	-0.007	-1.010	Economic Assumptions			0.029	0.046	Reprogrammings					Congressional Increases					Subtotal		-0.034	0.022	-0.964
(U) Funding:	FY2004	FY 2005	FY 2006	FY 2007																																																																						
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APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME					
RDT&E, N / BA-5		0604221N P-3 Modernization Program			3016 Fatigue Life Management Program					
<b>D. OTHER PROGRAM FUNDING SUMMARY:</b>										
<u>Line Item No. &amp; Name</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>FY 2010</u>	<u>FY 2011</u>	<u>To Complete</u>	<u>Total Cost</u>
N/A										
<b>E. ACQUISITION STRATEGY:</b>										
The Fatigue Life Management Program leverages off of prior work done under P-3 SLAP (2451). 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.										

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Exhibit R-3 Cost Analysis (page 1)										DATE: February 2005		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5			PROGRAM ELEMENT 0604221N P-3 Modernization Program				PROJECT NUMBER AND NAME 3016 Fatigue Life Management Program					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total Pys Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Systems Engineering	C/CPIF	LMAS, Marietta, GA		2.254	01/05	2.314	01/06	1.330	01/07	5.642	11.540	11.540
Subtotal Product Development			0.000	2.254		2.314		1.330		5.642	11.540	11.540
Remarks:												
Subtotal Support			0.000	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: <b>February 2005</b>				
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-5</b>			PROGRAM ELEMENT 0604221N P-3 Modernization Program			PROJECT NUMBER AND NAME 3016 Fatigue Life Management Program						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total Pys Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Subtotal T&E				0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
Govt Engineering Support	WX	NAWCAD, Pax River		0.700	12/04	0.700	12/05	0.700	12/06	2.800	4.900	4.900
Subtotal Management			0.000	0.700		0.700		0.700		2.800	4.900	4.900
Remarks:												
Total Cost			0.000	2.954		3.014		2.030		8.442	16.440	16.440
Remarks:												

CLASSIFICATION:

EXHIBIT R4, Schedule Profile																								DATE:								
																								February 2005								
APPROPRIATION/BUDGET ACTIVITY										PROGRAM ELEMENT NUMBER AND NAME										PROJECT NUMBER AND NAME												
RDT&E, N / BA-5										0604221N P-3 Modernization Program										3016 Fatigue Life Management Program												
Fiscal Year	2004				2005				2006				2007				2008				2009				2010				2011			
	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-2, RD TEN Budget Item Justification**  
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R-1 SHOPPING LIST - Item No. 89

# UNCLASSIFIED

## CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: <b>February 2005</b>	
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-5</b>		PROGRAM ELEMENT NUMBER AND NAME 0604221N P-3 Modernization Program			PROJECT NUMBER AND NAME 9368 ALR-95 SEI Networking Program			
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	1.250	2.971						
RDT&E Articles Qty								

### A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The 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. The FY04 Congressional Add provided the connectivity to allow the ALR-95 to conform to the Navy's standard tactical message format. The FY05 Congressional Add of \$1.5M will continue this effort.

The FY05 Congressional Add of \$1.5M for the ALR-95 RFD will upgrade the Radio Frequency Distribution system of the ALR-95 with fibre optic cable to reduce losses and improve performance.

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## CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: <b>February 2005</b>		
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-5</b>	PROGRAM ELEMENT NUMBER AND NAME 0604221N P-3 Modernization Program	PROJECT NUMBER AND NAME 9368 ALR-95 SEI Networking Program		
<b>B. Accomplishments/Planned Program</b>				
	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	1.250	2.971		
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. The FY-05 Congressional Add for the ALR-95 RFD will upgrade the Radio Frequency Distribution system of the ALR-95 with fibre optic cable to reduce losses and improve performance.</p>				

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# UNCLASSIFIED

## CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: <b>February 2005</b>
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-5</b>	PROGRAM ELEMENT NUMBER AND NAME 0604221N P-3 Modernization Program	PROJECT NUMBER AND NAME H9368 ALR-95 SEI Networking Program

**C. PROGRAM CHANGE SUMMARY:**

Funding:	FY 04	FY 05	FY 06	FY 07
Previous President's Budget:	1.286	0.000		
Current BES/President's Budget	1.250	2.971		
Total Adjustments	-0.036	2.971		
Summary of Adjustments				
Congressional program reductions				
Congressional undistributed reductions		-0.028		
Congressional rescissions				
SBIR/STTR Transfer	-0.035			
Other Adjustments		-0.001		
Economic Assumptions	-0.001			
Reprogrammings				
Congressional increases		3.000		
Subtotal	-0.036	2.971		

Schedule:

Not Applicable

Technical:

Not Applicable

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**CLASSIFICATION:**

EXHIBIT R-2a, RDT&E Project Justification								DATE: <b>February 2005</b>		
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-5</b>			PROGRAM ELEMENT NUMBER AND NAME 0604221N P-3 Modernization Program			PROJECT NUMBER AND NAME 9368 ALR-95 SEI Networking Program				
<b>D. OTHER PROGRAM FUNDING SUMMARY:</b>										
<u>Line Item No. &amp; Name</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>FY 2010</u>	<u>FY 2011</u>	To <u>Complete</u>	Total <u>Cost</u>
N/A										
<b>E. ACQUISITION STRATEGY:</b>										
Existing Sole Source FFP contract to EDO										

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**Exhibit R-2, RD TEN Budget Item Justification**  
(Exhibit R-2, page 21 of 25)

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## CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: <b>February 2005</b>	
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-5</b>		PROGRAM ELEMENT NUMBER AND NAME 0604221N P-3 Modernization Program			PROJECT NUMBER AND NAME 9551 - Personal Digital Assistant Maintenance Application			
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost		<b>0.989</b>						
RDT&E Articles Qty								
<p><b>A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</b></p> <p>The Personal Digital Assistant Maintenance Application Program (PDA MAP) will reduce paper data collection and manual data entry process associated with scheduled maintenance inspections. PDA MAP will improve efficiency, increase data collection accuracy, and reduce Naval Aviation Logistics Command Management Information System (NALCOMIS) data entry time.</p>								

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Exhibit R-2, RD TEN Budget Item Justification  
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# UNCLASSIFIED

## CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: <b>February 2005</b>	
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-5</b>	PROGRAM ELEMENT NUMBER AND NAME 0604221N P-3 Modernization Program	PROJECT NUMBER AND NAME 9551 - Personal Digital Assistant Maintenance Application		
<b>B. Accomplishments/Planned Program</b>				
	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost		0.989		
RDT&E Articles Quantity				
<p>The Personal Digital Assistant Maintenance Application Program (PDA MAP) will reduce paper data collection and manual data entry process associated with scheduled maintenance inspections. PDA MAP will improve efficiency, increase data collection accuracy, and reduce Naval Aviation Logistics Command Management Information System (NALCOMIS) data entry time.</p>				

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Exhibit R-2, RDTEN Budget Item Justification  
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# UNCLASSIFIED

## CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: <b>February 2005</b>	
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-5</b>	PROGRAM ELEMENT NUMBER AND NAME 0604221N P-3 Modernization Program	PROJECT NUMBER AND NAME 9551 - Personal Digital Assistant Maintenance Application		

**C. PROGRAM CHANGE SUMMARY:**

	FY 04	FY 05	FY 06	FY 07
Funding:				
Previous President's Budget:		0.000		
Current BES/President's Budget		0.989		
Total Adjustments	0.000	0.989	0.000	0.000
Summary of Adjustments				
Congressional program reductions				
Congressional undistributed reductions		-0.011		
Congressional rescissions				
SBIR/STTR Transfer				
Economic Assumptions				
Reprogrammings				
Congressional increases		1.000		
Subtotal	0.000	0.989	0.000	0.000

Schedule:

Not Applicable

Technical:

Not Applicable

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# UNCLASSIFIED

## CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: <b>February 2005</b>																								
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-5</b>			PROGRAM ELEMENT NUMBER AND NAME 0604221N P-3 Modernization Program			PROJECT NUMBER AND NAME 9551 - Personal Digital Assistant Maintenance Application																									
<p><b>D. OTHER PROGRAM FUNDING SUMMARY:</b></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Line Item No. &amp; Name</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;">FY 2010</th> <th style="text-align: center; border-bottom: 1px solid black;">FY 2011</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 colspan="11" style="padding-top: 20px;">Not Applicable</td> </tr> </tbody> </table> <p style="margin-top: 40px;"><b>E. ACQUISITION STRATEGY:</b></p> <p>Sole source contract to Computer Products, Inc for the engineering and manufacturing development of the Personal Digital Assistant Maintenance Application.</p>										Line Item No. & Name	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Complete	Total Cost	Not Applicable										
Line Item No. & Name	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Complete	Total Cost																					
Not Applicable																															

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