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CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification							DATE: February 2004	
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-7					R-1 ITEM NOMENCLATURE 0702207N Depot Maintenance (Non-IF)			
COST (\$ in Millions)		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost		12.839	8.972					
E3030 F-18 SLAP		3.575						
H2451 P-3 SLAP		9.264	8.972					
W2454 AN/ARC-210-RT-1794(C)								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The F/A-18 Service Life Assessment Program (SLAP) will assess the structural condition of the F/A-18 fleet in order to determine what structural modifications are necessary to extend the aircraft designed service life and allow it to achieve inventory requirements. The Resource Sponsor (N78) has indicated an urgent need to assess the structural condition of the F/A-18 fleet to determine whether the structural condition supports OPNAV Tactical Aircraft inventory requirements through fiscal year (FY) 2020. It is known that F/A-18 aircraft built prior to Lot 18 are limited to 78% of their design fatigue life due to structural cracking in the section of the fuselage known as the "Center Barrel". The Center Barrel Replacement Plus (CBR+) program eliminates structural life limitations caused by cracking in the Center Barrel. The airframe structure also has the following structural limitations, both of which must be addressed to extend the designed service life of the aircraft. The F/A-18 A/B/C/D aircraft structure will also be assessed to determine the life limit on landings for all four models of types for aircraft lot 8 and above aircraft. Currently the aircraft structure is limited to 8300 landings. The goal of the SLAP program will be to identify critical structure to allow total landings to be increased to 14,500. This increase in total landings would allow the F/A-18 A/B/C/D to meet OPNAV Tactical Aircraft inventory requirements through fiscal year (FY) 2020. The Service Life Assessment Program (SLAP) on the P-3 includes all P-3 derivatives (H2451.) These efforts are required to be conducted for these airframes to ascertain what actions must be taken to safely operate each system until the targeted end of service life. The AN/ARC-210-RT-1794C (W2454) provided for the development of radio software modifications required for upgrades to the evolving standards.

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7		PROGRAM ELEMENT NUMBER AND NAME 0702207N Depot Maintenance (Non-IF)			PROJECT NUMBER AND NAME H2451 P-3 SLAP			
COST (\$ in Millions)		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost		9.264	8.972					
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Current P-3C aircraft fatigue life estimates (from 20,000 to 24,000 flight hours) are based on analysis alone. The P-3 Service Life Assessment Program (SLAP) performed a full scale fatigue test on a P-3 test article in order to more accurately determine the aircraft fatigue life. Subsequent test article teardown is comparing post-test results with the original P-3 FLE predictions. SLAP will identify specific components that require inspection, repair, or replacement during Specific Structural Inspections (SSI), Enhanced Special Structural Inspections (ESSI), and Special Structural Inspections - Kits (SSI-K) in order to ensure safe operations. This SLAP effort was previously budgeted under APN-5 (BLI 053800) funding within OSIP 02-99.

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(U) B. Accomplishments/Planned Program				
		FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		9.264	8.972	
RDT&E Articles Quantity				
Fatigue testing, engineering, quality assurance, cost/schedule status reports, NAWC field support and contract support services. Test Rig Teardown, Test Article Teardown, Test article engineering analysis, Fatigue Life Expended Rebaselining, Structural Data Recording Set (SDRS) Tracking Algorithm, SSI-K definition/prototyping, and P-3 Inventory Fatigue Life management.				

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(U) C. PROGRAM CHANGE SUMMARY:

(U) Funding:	FY 2003	FY 2004	FY 2005
Previous President's Budget:	5.006	9.073	0.000
Current BES/President's Budget	9.264	8.972	0.000
Total Adjustments	4.258	-0.101	0.000
Summary of Adjustments			
Congressional program reductions			
Congressional undistributed reductions		-0.101	
Congressional rescissions			
SBIR/STTR Transfer	-0.117		
Economic Assumptions			
Reprogrammings	4.375		
Other Navy/OSD Adjustments			
Congressional increases			
Subtotal	4.258	-0.101	0.000

(U) Schedule:

Schedule changed to add the following items: Landing gear test complete 2Q/02; Complete Full Scale Fatigue Test (FSFT) 1Q/03.

The following milestones were previously reported incorrectly: Test Article Teardown initiation 2Q/03; Commence Post Test Analysis 3Q/03; Initiate Fatigue Life Expended Rebaseline 3Q/03 ; complete SDRS Tracking Algorithm 1Q/04. Completion of fatigue life expended rebaseline moved from 1Q/04 to 4Q/04 due to extensive failures to test article during fatigue test article teardown.

(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 0702207N Depot Maintenance (Non-IF)			PROJECT NUMBER AND NAME H2451 P-3 SLAP				
(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>	To <u>Complete</u>	Total <u>Cost</u>
Line Item #34 P-3/EP-3 SSI-K (OSIP 05-05)			18.065	33.392	37.852	37.495	32.652	165.937	325.393
 (U) E. ACQUISITION STRATEGY:									
<p>SLAP was a full and open competition for a fatigue article test. The contract is a cost plus incentive fee (CPIF), therefore providing an incentive to the contractor to effectively manage program cost and schedule. Contract award was March 1999. SLAP supports the Secretary of the Navy's Maritime Patrol Aircraft Ten Year Plan.</p>									

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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-7			0702207N Depot Maintenance (Non-IF)			H2451 P-3 SLAP						
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s 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, GA	70.100	6.080	01/03	4.960	01/04				81.140	81.140
Systems Engineering	WX	NRL		0.050	03/03						0.050	
Systems Engineering	C/CPIF	NLR		0.800	07/03						0.800	0.800
Govt Engineering Support	WX	NADEP Jax		0.870	12/02	0.799	12/03				1.669	
Govt Engineering Support	WX	NAWCAD		0.600	01/03	1.700	12/03				2.300	
Subtotal Product Development			70.100	8.400		7.459		0.000		0.000	85.959	
Remarks:												
Subtotal Support			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-7			PROGRAM ELEMENT 0702207N Depot Maintenance (Non-IF)			PROJECT NUMBER AND NAME H2451 P-3 SLAP						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s 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			0.000	
Remarks:												
Program Management Support	C/CPIF	Various	2.147	0.737	12/02	0.713	12/03				3.597	3.597
Government Engineering Support	WX	NAWCAD	4.538	0.127	12/02	0.800	12/03				5.465	
Subtotal Management			6.685	0.864		1.513		0.000		0.000	9.062	
Remarks:												
Total Cost			76.785	9.264		8.972		0.000		0.000	95.021	
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-7										0702207N Depot Maintenance (Non-IF)												H2451 P-3 SLAP													
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						
Test & Evaluation Milestones																																			
Full Scale Fatigue Test																																			
Landing Gear Test																																			
Fatigue Life Expended (FLE) Rebaseline																																			
SDRS Tracking Algorithm																																			
Test Article Teardown																																			
Post Test Analysis																																			

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* Not required for Budget Activities 1, 2, 3, and 6

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Exhibit R-4a, Schedule Detail
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