EXHIBIT R-2, RDT&E Budget Item Justification							DATE: May 2009	
APPROPRIATION/BUDGET ACTIVITY **RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-7**					R-1 ITEM NOMENCLATURE 0702207N Depot Maintenance (NON-IF)			
COST ($ in Millions)	FY 2008	FY 2009	FY 2010					
Total PE Cost	20.943	11.093	14.675					
3030 F/A-18 SLAP	17.873	7.154	13.688					
3182 T-45 SLAP	3.070	3.939	0.987					

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

3030: The F/A-18A-F Service Life Assessment Program (SLAP) is assessing the structural condition of the F/A-18 fleet in order to determine what modifications are necessary to extend the aircraft designed life limits to allow it to achieve Chief of Naval Operations (CNO) inventory requirements. The goal of the SLAP program is to identify critical structures and components that can achieve the extended service life limit goals for all models. An increase in total landings and flight hours would allow the F/A-18E/F to meet CNO inventory requirements, to include planning for the announced one year Joint Strike Fighter slide. This effort is required to be conducted for these airframes to ascertain what actions and modifications must be taken to safely operate each system beyond its designed life until the targeted end of service life.

3182: The T-45 SLAP is assessing the structural condition of the T-45 Fleet in order to determine structural modifications necessary to extend the aircraft designed service life to support Pilot Training Requirements (PTR) and Naval Flight Officer Training Requirements (NTR) until 2021. The T-45 aircraft structure is currently fatigue limited to 14,400 flight hours based on initial full-scale fatigue tests conducted from 1992-1996. This service life limit prevents the T-45 fleet from meeting PTR/NTR requirements past 2016. Recent studies have determined that the fleet squadrons have not been flying the T 45 aircraft as aggressively as the initial fatigue studies predicted. These studies demonstrate that the 14,400 flight hour service life can likely be extended to 21,600 flight hours, which will support meeting PTR/NTR until 2021. A T-45 SLAP is required to assess the critical areas within the structure that require modifications to achieve a 21,600 flight hour service life. This assessment will be based on the updated fleet aircraft usage spectrum and future predicted training missions of the T-45 aircraft. The assessment will address critical structural areas that are either landing and/or flight hour limited. To maintain PTR/NTR beyond 2021, analysis and studies will be conducted to outline improvements, assess manufacturing capabilities and develop specifications for future trainer aircraft.

EXHIBIT R-2, RDT&E Budget Item Justification	DATE: May 2009
APPROPRIATION/BUDGET ACTIVITY **RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY BA-7**	R-1 ITEM NOMENCLATURE 0702207N Depot Maintenance (NON-IF)

B. PROGRAM CHANGE SUMMARY:

Funding:	FY 2008	FY 2009	FY 2010
FY2009 President's Budget:	18.988	21.130	9.577
Current President's Budget:	20.943	11.093	14.675
Total Adjustments	1.955	-10.037	5.098
Summary of Adjustments			
Congressional Reductions			
Congressional Adjustments		-10.007	
SBIR/STTR/FTT Assessments	-0.145		
Program Adjustments	2.100		5.120
Rate/Misc Adjustments		-0.030	-0.022
Subtotal	1.955	-10.037	5.098

Schedule:

3030 F/A-18 SLAP schedule changes in FY08-FY10 are a result of the Phase A contract award for F/A-18 E/F SLAP moving from first quarter FY08 to third quarter FY08. Contract award was delayed due to extended Technical Evaluation review period for the proposed contract. The addition of SLAP Phase B and Phase C are due to additional Navy funding and efforts associated with service life extension of the F/A-18 E/F fleet.

3182 T-45 SLAP Phase I schedule shifted from 2nd Quarter to 3rd Quarter FY2008 due to substantiation of subcontractor costs. The delay will have a negligible effect on expenditures and allow the FY09 increment of funding to award in 2nd Quarter FY09 as planned.

Technical:

Not Applicable

EXHIBIT R-2a, RDT&E Project Justification							DATE: **May 2009**	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-7**	PROGRAM ELEMENT NUMBER AND NAME 0702207N Depot Maintenance (NON-IF)				PROJECT NUMBER AND NAME 3030 F/A-18 SLAP			
COST ($ in Millions)	FY 2008	FY 2009	FY 2010					
3030 F/A-18 SLAP	17.873	7.154	13.688					
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The F/A-18E/F Service Life Assessment Program (SLAP) is assessing the structural condition of the F/A-18 fleet in order to determine what modifications are necessary to extend the aircraft designed life limits to allow it to achieve Chief of Naval Operations (CNO) inventory requirements. The goal of the SLAP program is to identify critical structures and components that can achieve the extended service life limit goals for all models. An increase in total landings and flight hours would allow the F/A-18E/F to meet CNO inventory requirements, to include planning for the announced one year Joint Strike Fighter slide. This effort is required to be conducted for these airframes to ascertain what actions and modifications must be taken to safely operate each system beyond its designed life until the targeted end of service life.

EXHIBIT R-2a, RDT&E Project Justification		DATE: May 2009
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-7	0204136N F/A-18 SQUADRONS	3030 F/A-18 SLAP

B. Accomplishments/Planned Program

F/A-18E-F SLAP	FY 08	FY 09	FY10	
Accomplishments/Effort/Subtotal Cost	17.873	7.154	13.688	
RDT&E Articles Quantity				

Begin analysis of numerous data points to provide exploitation of complete structural fatigue testing with the expectation of extending the current service life of F/A-18E/F flight hours from 6,000 to 9,000 hours.

EXHIBIT R-2a, RDT&E Project Justification		DATE: May 2009
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-7	0702207N Depot Maintenance (NON-IF)	3030 F/A-18 SLAP

C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2008	FY 2009	FY 2010
APN-5 P-1#33 F/A-18 OSIP (11-99)	86.371	113.978	118.100

D. ACQUISITION STRATEGY:

The Service Life Assessment Program (SLAP) program employs sole source contracts with Boeing, the aircraft prime manufacturer. SLAP consists of structural analyses of the main landing gear, arresting hook and catapult back-up structures, vertical tails, wings and fuselage. The current life limits for the F/A-18 E/F are 6,000FH, 2,250 Cat/Traps and 15,750 total landings. The F/A-18 E/F SLAP program of record states the SLAP goals as 12,000FH, 3,500 Cat/Traps and 22,500 total landings. The primary objective of F/A-18 E/F SLAP is to determine if the stated SLAP goals are feasible. These analyses will provide for the development of aircraft modifications necessary to extend total aircraft landings, catapults /arrestments, and flight hours. The F/A-18 E/F SLAP Program is broken into three phases: Phase A , Phase B, and Phase C. Completion of F/A-18 E/F Phase A will select, but not provide, the fatigue lives for the "Hot-Spots." Phase B of the F/A-18 E/F will provide the fatigue lives for all "Hot-Spots." Phase C will provide a set of fatigue lives for "Hot-Spots" across the entire fuselage and wing. Engineering Change Proposals (ECPs) generated by the SLAP analyses will be incorporated into the Service Life Management Program (SLMP) under OSIP (11-99). The program will consist of exploitation of complete structural fatigue testing with the expectation of extending the current service life of the F/A-18E/F. Conducting F/A-18E/F SLAP to study the aircraft lifetime will provide a better estimate of aircraft service life and a follow on Service Life Extension Program (SLEP).

Exhibit R-3 Cost Analysis (page 1)						DATE: May 2009						
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-7**			PROGRAM ELEMENT 0702207N Depot Maintenance (NON-IF)			PROJECT NUMBER AND NAME 3030 F/A-18 SLAP						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 09 Cost	FY 09 Award Date	FY 10 Cost	FY 10 Award Date					
Prod Development SLAP F/A-18A-D	SS/CPFF	Boeing-St. Louis, MO	28.775									
Prod Development SLAP F/A-18E/F	SS/CPFF	Boeing-St. Louis, MO	16.906	5.871	03/09	11.986	03/10					
Subtotal Product Development			45.681	5.871		11.986						
Remarks:												
Subtotal Support			0.000	0.000		0.000						
Remarks:												

Exhibit R-3 Cost Analysis (page 2)							DATE: **May 2009**					
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-7**			PROGRAM ELEMENT 0702207N Depot Maintenance (NON-IF)			PROJECT NUMBER AND NAME 3030 F/A-18 SLAP						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 09 Cost	FY 09 Award Date	FY 10 Cost	FY 10 Award Date					
Subtotal T&E			0.000	0.000		0.000						
Remarks:												
Cont ETS SLAP-F/A-18E/F	TBD	NAWCAD, Pax River, MD	0.377	0.359	12/08	0.380	12/09					
Govt ETS SLAP-F/A-18E/F	WX	NAWCAD, Pax River, MD	0.436	0.458	12/08	0.461	12/09					
Govt ETS SLAP-F/A-18E/F	WX	FRC, North Island, CA	0.154	0.466	12/08	0.861	12/09					
Subtotal Management			0.967	1.283		1.702						
Remarks:												
Total Cost			46.648	7.154		13.688						

EXHIBIT R4, Schedule Profile			DATE: **May 2009**
APPROPRIATION/BUDGET ACT	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME
RDT&E, N / BA-7	0702207N Depot Maintenance (NON-IF)		3030 F/A-18 SLAP E/F

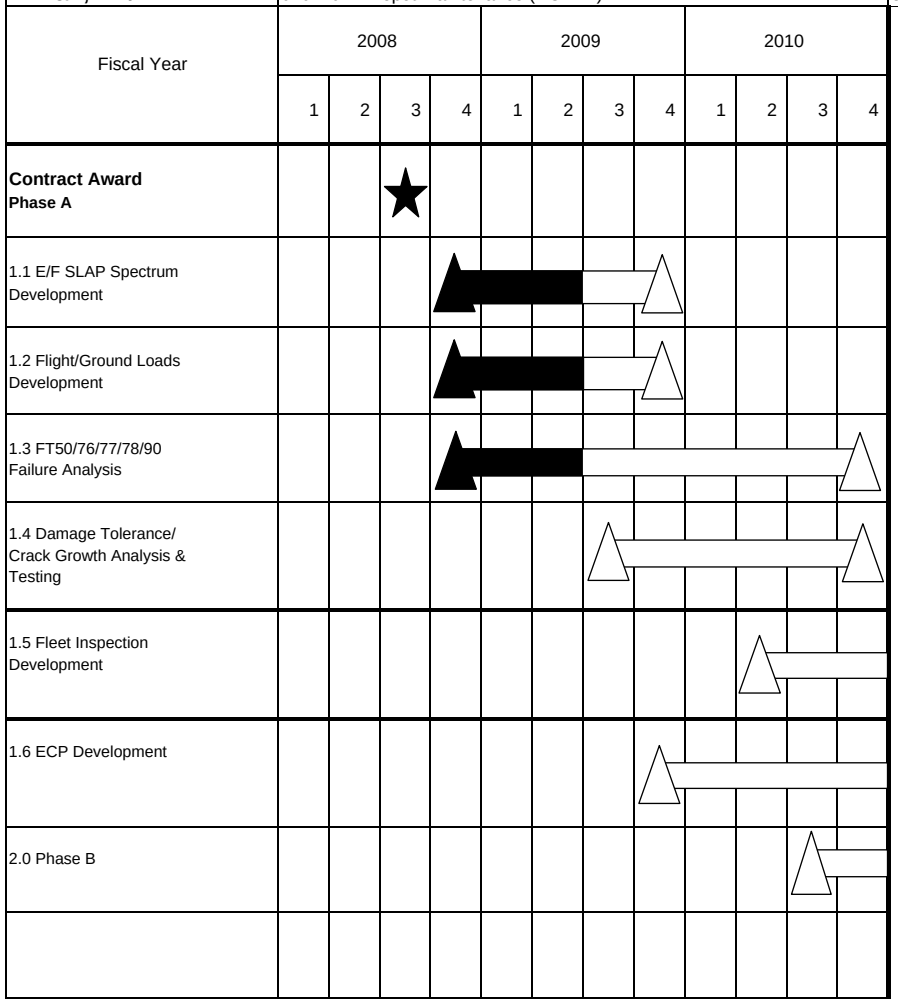

Exhibit R-4a, Schedule Detail			DATE: **May 2009**					
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-7**			PROJECT NUMBER AND NAME 3030 F/A-18 SLAP					
Schedule Profile F/A-18 SLAP E/F	FY 2008	FY 2009	FY 2010					
Phase A Contract Award	3Q							
E/F SLAP Spectrum Development	4Q	1Q-4Q						
Flight/Ground Loads Development	4Q	1Q-4Q						
FT50/FT76/FT77/FT78/FT90 Failure Analysis	4Q	1Q-4Q	1Q-4Q					
Damage Tolerance/Crack Growth Analysis		3Q-4Q	1Q-4Q					
Fleet Inspection Development			2Q-4Q					
ECP Development		4Q	1Q-4Q					
Phase B			3Q-4Q					

EXHIBIT R-2a, RDT&E Project Justification							DATE: May 2009	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-7**	PROGRAM ELEMENT NUMBER AND NAME 0702207N, DEPOT MAINTENANCE (NON-IF)				PROJECT NUMBER AND NAME 3182, T-45 SLAP			
COST ($ in Millions)	FY 2008	FY 2009	FY 2010					
3182 T-45 SLAP	3.070	3.939	0.987					
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The T-45 Service Life Assessment Program (SLAP) is assessing the structural condition of the T-45 fleet in order to determine structural modifications necessary to extend the aircraft designed service life to support Pilot Training Requirements (PTR) and Naval Flight Officer Training Requirements (NTR) until 2021. The T-45 aircraft structure is currently fatigue limited to 14,400 flight hours based on initial full-scale fatigue tests conducted from 1992-1996. This service life limit prevents the T-45 fleet from meeting PTR/NTR requirements past 2016. Recent studies have determined that the fleet squadrons have not been flying the T-45 aircraft as aggressively as the initial fatigue studies predicted. These studies demonstrate that the 14,400 flight hour service life can likely be extended to 21,600 flight hours, which will support meeting PTR/NTR until 2021. A T-45 Service Life Assessment Program (SLAP) is required to assess the critical areas within the structure that require modifications to achieve a 21,600 flight hour service life. This assessment will be based on the updated fleet aircraft usage spectrum and future predicted training missions of the T-45 aircraft. The assessment will address critical structural areas that are either landing and/or flight hour limited.Provide a description of the project and narrative justification. To maintain PTR/NTR beyond 2021, analysis and studies willl be conducted to outline improvements, assess manufacturing capabilities and develop specifications for future trainer aircraft.

EXHIBIT R-2a, RDT&E Project Justification		DATE: May 2009
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-7	Program Element (PE) No. and Name	3182, T-45 SLAP

B. Accomplishments/Planned Program

Analysis of T-45 structural condition	FY 08	FY 09	FY 10	
Accomplishments/Effort/Subtotal Cost	3.070	3.939	0.987	
RDT&E Articles Quantity				

The T-45 Service Life Assessment Program will analyze structural critical areas requiring modification to increase service life from 14,400 flight hours to 21,600 flight hours, publishing results in three separate reports (Updated Finite Element Model report, SLAP Internal Loads Methodology report, and SLAP Fatigue Analysis report).

EXHIBIT R-2a, RDT&E Project Justification		DATE: May 2009
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-7	0702207N, DEPOT MAINTENANCE (NON-IF)	3182, T-45 SLAP

C. OTHER PROGRAM FUNDING SUMMARY:

Not Applicable

D. ACQUISITION STRATEGY:

The SLAP is a sole source contract with Boeing, the aircraft prime contractor. SLAP consists of structural analyses of landing gear, arresting hook and catapult back-up structure, vertical tail, wings and fuselage. These analyses will facilitate the development of aircraft modifications necessary to extend total aircraft service life from 14,400 to 21,600 flight hours