Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy										DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 7: *Operational Systems Development*				R-1 ITEM NOMENCLATURE PE 0702207N: *Depot Maintenance (NON-IF)*							
COST ($ in Millions)	**FY 2011**	**FY 2012**	**FY 2013 Base**	**FY 2013 OCO**	**FY 2013 Total**	**FY 2014**	**FY 2015**	**FY 2016**	**FY 2017**	**Cost To Complete**	**Total Cost**
Total Program Element	17.750	21.446	27.391	-	27.391	29.762	29.110	19.659	20.029	Continuing	Continuing
3030: *FA-18 SLAP*	17.750	21.446	10.961	-	10.961	23.494	21.669	19.659	20.029	Continuing	Continuing
3182: *T-45 SLAP*	-	-	16.430	-	16.430	6.268	7.441	-	-	0.000	30.139

A. Mission Description and Budget Item Justification

3030: The F/A-18 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 inventory requirements.

3182: The T-45 SLAP Project involves the prototype design and development of a new tail hook that is capable of supporting Pilot and Naval Flight Officer (NFO) training in an aircraft carrier environment through 2035. The project also includes an assessment of the aircraft subsystem condition of the T-45 fleet in order to determine what modifications are necessary to extend the aircraft subsystem design life limits to support the Pilot Integrated Production Plan (IPP) and NFO through 2035.

B. Program Change Summary ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	18.649	21.609	15.828	-	15.828
Current President's Budget	17.750	21.446	27.391	-	27.391
Total Adjustments	-0.899	-0.163	11.563	-	11.563
• Congressional General Reductions	-	-0.163			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.262	-			
• SBIR/STTR Transfer	-0.388	-			
• Program Adjustments	-	-	11.724	-	11.724
• Rate/Misc Adjustments	-	-	-0.161	-	-0.161
• Congressional General Reductions Adjustments	-0.249	-	-	-	-

Change Summary Explanation

Technical: Not applicable.

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0702207N: *Depot Maintenance (NON-IF)*

Schedule: 3030: The Structures Phase B effort is extended to 3rd Quarter 2016. The Structures Phase C effort will begin in 2nd Quarter 2015. Phase B is updated to reflect a larger scope of work required to complete Structures tasking. Structures Phase C schedule movement is a product of the Structures Phase B schedule change.

The Subsystems Phase B effort will be completed in 3rd Quarter 2013 and Subsystems Phase C will start in 4th Quarter 2013 and end in 1st Quarter 2016. This change reflects a more narrow scope of work required to complete Subsystems Phase B Tasking. Subsystems Phase C schedule movement is a product of the Subsystems Phase B schedule change.

3182: Not Applicable

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy			DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0702207N: *Depot Maintenance (NON-IF)*	PROJECT 3030: *FA-18 SLAP*	

COST ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
3030: *FA-18 SLAP*	17.750	21.446	10.961	-	10.961	23.494	21.669	19.659	20.029	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The F/A-18 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. An increase in total landings and flight hours would allow the F/A-18 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.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Title: F/A-18 SLAP	17.750	21.446	10.961
Articles:	0	0	0
Description: Funding supports 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 CNO inventory requirements. ***FY 2011 Accomplishments:*** Continue 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. ***FY 2012 Plans:*** Continue 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. ***FY 2013 Plans:*** Continue 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.			
Accomplishments/Planned Programs Subtotals	17.750	21.446	10.961

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0702207N: *Depot Maintenance (NON-IF)*	PROJECT 3030: *FA-18 SLAP*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
• APN/0525: *F-18 Series (OSIP 011-99)*	84.328	109.409	151.418	0.000	151.418	204.406	314.493	491.057	413.080	105.665	2,574.019

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 6,000 Flight Hours (FH), 2,250 catapults/arrestments (Cat/Traps) and 15,750 total landings. The F/A-18 SLAP program of record states the SLAP goals as 12,000 FH, 3,500 Cat/Traps and 22,500 total landings. The primary objective of F/A-18 SLAP is to determine if the stated SLAP goals are feasible. SLAP further decomposes program of record goals into smaller discreet steps, analyzing requirements to extend FH from 6,000 to 9,000 first. These analyses will provide for the development of aircraft modifications necessary to extend total aircraft landings, Cat/Traps, and FH. The F/A-18 SLAP Program consists of two major engineering efforts: the aircraft structural assessment and the aircraft subsystems assessment. Both efforts are broken into multiple phases which develop tools and models, assess current aircraft usage, and develop concepts to extend aircraft life to meet CNO objectives. The program will combine exploitation of complete structural fatigue testing and actual fleet usage with the expectation of extending the service life of the F/A-18 aircraft. Conducting F/A-18 SLAP to study the aircraft lifetime will provide a better estimate of aircraft service life and a follow on Service Life Extension Program (SLEP).

E. Performance Metrics

The SLAP provides an assessment of aircraft structure fatigue life as affected by flight maneuver, Cat/Traps and landings, based on actual usage and identifies the efforts required to extend the aircraft life to SLAP goals. During SLAP Phase A (FY08-FY12) tools and modeling necessary to assess usage and fatigue life are developed. During SLAP Phase B (FY11-FY13) specific structural locations which do not meet SLAP goals are identified and analyzed. Flight Control Surface and Subsystems SLAP is also initiated concurrently with Structures Phase B. Retrofit concepts and repairs for deficient locations are developed during SLAP Phase C (FY13-FY17). SLAP is followed by the SLEP during which the actual retrofit and repairs are performed under a future OSIP to be established in FY14.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0702207N: *Depot Maintenance (NON-IF)*	PROJECT 3030: *FA-18 SLAP*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Product Development Service Life Assessment Program (SLAP) F/A-18A-D	SS/CPFF	Boeing:St. Louis, MO	28.775	-		-		-		-	0.000	28.775	28.775
Product Development SLAP F/A-18E-F	SS/CPFF	Boeing:St. Louis, MO	42.390	14.973	Mar 2012	5.499	Mar 2013	-		5.499	61.185	124.047	124.047
		Subtotal	71.165	14.973		5.499		-		5.499	61.185	152.822	152.822

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
SLAP Inventory Model	WR	ONR:Arlington, VA	2.250	-		-		-		-	0.000	2.250	
SLAP F/A-18 E/F	WR	NAWCAD:Patuxent River, MD	4.935	1.600	Dec 2011	1.371	Dec 2012	-		1.371	2.849	10.755	
SLAP F/A-18 E/F	WR	FRC Southwest:San Diego, CA	3.476	3.800	Dec 2011	2.589	Dec 2012	-		2.589	21.961	31.826	
		Subtotal	10.661	5.400		3.960		-		3.960	24.810	44.831	

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Development Test & Evaluation - SLAP E/F	WR	NAWCAD:Pax River, MD	0.500	0.500	Dec 2011	0.282	Dec 2012	-		0.282	0.500	1.782	
		Subtotal	0.500	0.500		0.282		-		0.282	0.500	1.782	

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0702207N: *Depot Maintenance (NON-IF)*	PROJECT 3030: *FA-18 SLAP*

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Government Engineering and Technical Support SLAP F/ A-18 E/F	WR	NAWCAD:Pax River, MD	0.865	0.573	Jan 2012	0.252	Jan 2013	-		0.252	0.000	1.690	
Travel	Various	NAVAIR:Pax River, MD	-	-		0.030	Oct 2012	-		0.030	0.000	0.030	
Program Management Support (Seaport-CSS)	C/CPFF	WYLE LAB:Pax River, MD	-	-		0.638	Nov 2012	-		0.638	0.000	0.638	0.638
Program Management Support	Various	NAWCAD:Pax River, MD	-	-		0.300	Dec 2012	-		0.300	0.000	0.300	
		Subtotal	0.865	0.573		1.220		-		1.220	0.000	2.658	

	Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	83.191	21.446		10.961		-		10.961	86.495	202.093	

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0702207N: *Depot Maintenance (NON-IF)*	**PROJECT** 3030: *FA-18 SLAP*

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0702207N: *Depot Maintenance (NON-IF)*	**PROJECT** 3030: *FA-18 SLAP*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Service Life Assessment Program F/A-18				
Structures: 1.0 Structures Phase A	1	2011	1	2013
Structures: 2.0 Structures Phase B	1	2012	3	2016
Structures: 3.0 Structures Phase C	2	2015	1	2017
Subsystems: 5.0 Subsystems Phase B	1	2011	3	2013
Subsystems: 6.0 Subsystems Phase C	4	2013	1	2016

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy			DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0702207N: *Depot Maintenance (NON-IF)*	PROJECT 3182: *T-45 SLAP*	

COST ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
3182: *T-45 SLAP*	-	-	16.430	-	16.430	6.268	7.441	-	-	0.000	30.139
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

3182: 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 Integrated Production Plan (IPP), previously Pilot Training Requirements, past 2025. 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, with a Service Life Extension Program (SLEP), to 21,600 flight hours, which will support meeting IPP until 2035. A T-45 Structural Service Life Assessment Program (SLAP) is due to complete in February 2012. The results will be used to provide guidance on what structural areas to SLEP. In order for the T-45 to meet IPP until 2035, it is also necessary to assess the sub-systems of the T-45 in their ability to remain viable. The T-45 Sub-Systems SLAP is assessing the sub-system condition of the T-45 fleet in order to determine sub-system modifications and/or redesign necessary to extend the aircraft designed service life to support IPP and Naval Flight Officer Training Requirements (NTR) until 2035. This sub-system 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 all critical sub-systems required and their ability to maintain IPP/NTR until 2035, analysis and studies will be conducted to outline improvements, assess manufacturing capabilities, prototype redesign and test of sub-systems for trainer aircraft. The T-45 aircraft is the U.S. Navy's only training aircraft capable of providing carrier capable jet training. The T-45 arrestment tail hook assembly is an integral component required to support this training capability. The T-45 tail hook assembly is a "life-limited" component which is scrapped after attaining its maximum safe life limit of 600 or 1020 arrestments (based on part number), becomes damaged, or is severely corroded. Due to Diminishing Manufacturing Sources & Material Shortages issues resulting in no current tail hook assembly manufacturer, it is necessary to design, develop, qualify and test an alternate prototype tail hook. This will allow the T-45 to remain operationally available in providing the DON with carrier capable jet training.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Title: T-45 SLAP	-	-	16.430
Articles:			0
Description: Funding supports development of a new tail hook and conducting a Subsystem SLAP to determine modifications necessary to extend service life through 2035.			
FY 2013 Plans: Begin the design and development of new tail hook and initiate subsystem SLAP activities and engineering studies with the expectation of extending the T-45 service life to 2035.			
Accomplishments/Planned Programs Subtotals	-	-	16.430

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0702207N: *Depot Maintenance (NON-IF)*	PROJECT 3182: *T-45 SLAP*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
• APN/05690: *T-45 Series OSIP 00895*	12.056	15.016	25.829	0.000	25.829	61.497	62.000	70.319	68.742	676.581	1,167.035

D. Acquisition Strategy

The Subsystem SLAP is a sole source contract effort with Boeing, the aircraft prime contractor. SLAP consists of an analysis of the aircraft subsystems (e.g., Global Positioning System Inertial Navigation Assembly or Mission Data Processor). The analysis will facilitate the future development of subsystem modifications and/or redesigns necessary to extend their life until 2035. The development and prototyping of a new tail hook is anticipated to be a competitively awarded contract. The effort will involve the design, development and qualification of a tail hook capable of meeting T-45 carrier based training requirements until 2035.

E. Performance Metrics

SLAP provides an assessment of aircraft component life as affected by flight maneuver, catapults, arrestments, landings, and obsolescence based on actual usage and identifies the efforts required to extend the aircraft life to SLAP goals (2035). Effort delineates tasking incrementally to include; Tools and modeling necessary to assess usage and life are developed, specific designs which do not meet SLAP goals are identified and analyzed. Retrofit concepts and redesigns for problem areas are developed, followed by the SLEP during which the actual retrofits are undertaken.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0702207N: *Depot Maintenance (NON-IF)*	PROJECT 3182: *T-45 SLAP*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Prod Dev SLAP T-45A/C	SS/CPFF	Boeing:St. Louis, MO	-	-		3.300	Jan 2013	-		3.300	6.300	9.600	9.600
Prod Dev T-45 Tail Hook	C/CR	TBD:TBD	-	-		3.200	Jan 2013	-		3.200	4.000	7.200	7.200
		Subtotal	-	-		6.500		-		6.500	10.300	16.800	16.800

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Engineering Technical Support	WR	NAWCAD:Patuxent River, MD	-	-		7.900	Jan 2013	-		7.900	2.809	10.709	
SLAP Engineering Study	SS/BOA	JHU/APL:Laurel, MD	-	-		1.850	Jan 2013	-		1.850	0.200	2.050	2.050
		Subtotal	-	-		9.750		-		9.750	3.009	12.759	

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Travel	WR	NAWCAD:Patuxent River, MD	-	-		0.180	Jan 2013	-		0.180	0.400	0.580	
		Subtotal	-	-		0.180		-		0.180	0.400	0.580	

	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	-		16.430		-		16.430	13.709	30.139	

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0702207N: *Depot Maintenance (NON-IF)*	PROJECT 3182: *T-45 SLAP*

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0702207N: *Depot Maintenance (NON-IF)*	PROJECT 3182: *T-45 SLAP*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
T-45 SLAP				
Product Develpment: SLAP T-45C	1	2013	4	2015
Product Develpment: T-45 Tail Hook	2	2013	4	2015