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Exhibit R-2, RDT&E Budget Item Justification: PB 2017 Navy **Date:** February 2016

Appropriation/Budget Activity 1319: <i>Research, Development, Test & Evaluation, Navy / BA 7: Operational Systems Development</i>	R-1 Program Element (Number/Name) PE 0702207N / <i>Depot Maintenance (NON-IF)</i>
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COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
Total Program Element	153.681	20.678	24.185	49.322	-	49.322	45.174	34.694	34.212	25.109	Continuing	Continuing
3030: <i>FA-18 SLAP</i>	139.224	13.499	19.685	38.277	-	38.277	28.291	27.897	23.921	17.816	Continuing	Continuing
3182: <i>T-45 SLAP</i>	14.457	7.179	4.500	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	26.136
3384: <i>MH-60 SLAP</i>	0.000	0.000	0.000	11.045	-	11.045	16.883	6.797	10.291	7.293	Continuing	Continuing

Note

The MH-60 Service Life Assessment Program (SLAP) is not a new start in FY 2017. This work was commenced under PE 0604212N Other Helicopter Development, Project Unit 2415 H-60 Development.

A. Mission Description and Budget Item Justification

Decrease in Depot Maintenance (NON-IF) by \$0.466M as required for the Department of the Navy to comply with the Bipartisan Budget Act of 2015.

3030: A significant portion of the F/A-18 airframe is believed to have additional inherent capability and a life extension may be possible for many portions of the airframe. The F/A-18 Service Life Assessment Program (SLAP) is assessing the structural and subsystem conditions 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. Without SLAP and the follow on Service Life Extension Program, aircraft are retired from the USN inventory when a design service life metric is reached. The FY17 budget request increased due to Resource Sponsor funding for increased depot capacity, Engineering Change Proposal (ECP) development, kit creation and installation to support service life extensions. RDTE funds will support aircraft teardown to validate SLAP analysis, identify unknown fatigue areas and assess the aircraft's material condition.

3182: The T-45 SLAP is assessing the subsystem condition of the T-45 fleet in order to determine what modifications are necessary to extend the aircraft subsystem design life limits to allow it to meet Chief of Naval Air Training Pilot and Naval Flight Officer training requirements through 2035.

3384: The MH-60 SLAP is assessing the primary aircraft structure and subsystem condition of the MH-60S fleet in order to determine what efforts are necessary to extend the aircraft design life limits to allow it to meet Chief of Naval Operations operational inventory requirements through FY 2035. Without SLAP, aircraft are retired from the USN inventory when design service life limits are reached directly impacting fleet surface warfare, mine countermeasures, search and rescue, and vertical replenishment operational capabilities.

JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under OPERATIONAL SYSTEMS DEVELOPMENT because it includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate funding in the current or subsequent fiscal year.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2017 Navy	Date: February 2016
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Appropriation/Budget Activity 1319: <i>Research, Development, Test & Evaluation, Navy / BA 7: Operational Systems Development</i>	R-1 Program Element (Number/Name) PE 0702207N / <i>Depot Maintenance (NON-IF)</i>
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B. Program Change Summary (\$ in Millions)	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Previous President's Budget	21.168	24.185	19.386	-	19.386
Current President's Budget	20.678	24.185	49.322	-	49.322
Total Adjustments	-0.490	0.000	29.936	-	29.936
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.490	0.000			
• Program Adjustments	0.000	0.000	16.173	-	16.173
• Rate/Misc Adjustments	0.000	0.000	13.763	-	13.763

Change Summary Explanation

Technical: Not applicable.

Schedule: Not applicable.

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Navy										Date: February 2016		
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0702207N / Depot Maintenance (NON-IF)				Project (Number/Name) 3030 / FA-18 SLAP			
COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
3030: FA-18 SLAP	139.224	13.499	19.685	38.277	-	38.277	28.291	27.897	23.921	17.816	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The F/A-18 Service Life Assessment Program (SLAP) is assessing the structural and subsystem conditions 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 F/A-18 SLAP program is to identify critical structures and components that can achieve the extended service life limit goals. SLAP consists of structural analyses of the main landing gear, arresting hook and catapult back-up structures, vertical tails, wings and fuselage. A second effort is to assess the subsystem components (hydraulics, wiring, actuators, etc) to identify over and above inspections, overhaul intervals or replacement schedules to fly past design of 6,000 hours. 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. An increase in total landings and flight hours would allow the F/A-18 to meet CNO inventory requirements. The requirements are integrated with the Joint Strike Fighter planned introduction. This effort is required to be conducted for these airframes and subsystems 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 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Title: F/A-18 SLAP	13.499	19.685	38.277	0.000	38.277
Articles:	-	-	-	-	-
Description: The current design life limits do not support USN inventory requirements. 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 2015 Accomplishments: Continued stress 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 from the design limits to the SLAP goals. Locations encompass the forward, center and aft fuselage, inner and outer wings, as well as landing gear.					
FY 2016 Plans: Continue stress 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 from the design limits to the SLAP goals. Locations encompass the forward, center and aft fuselage, inner and outer wings, as well as landing gear.					
FY 2017 Base Plans:					

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Navy		Date: February 2016
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0702207N / <i>Depot Maintenance (NON-IF)</i>	Project (Number/Name) 3030 / <i>FA-18 SLAP</i>

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Continue stress 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 from the design limits to the SLAP goals. Locations encompass the forward, center and aft fuselage, inner and outer wings, as well as landing gear. Sonic and Thermal analysis will be performed on numerous structural and composite skin locations to assess elevated temperatures with the expectation of extending the current life of the F/A-18E/F Super Hornet. Aircraft Teardown assessments will be performed to analyze the fatigue and material condition of fleet aircraft to determine what modifications or inspections are required to extend the current life of the aircraft. FY 2017 OCO Plans: N/A					
Accomplishments/Planned Programs Subtotals	13.499	19.685	38.277	0.000	38.277

C. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017 Base</u>	<u>FY 2017 OCO</u>	<u>FY 2017 Total</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• APN/0525: <i>F-18 Series (OSIP 020-14)</i>	10.940	11.057	34.521	-	34.521	60.861	93.704	92.909	100.884	1,932.653	2,347.430

Remarks

D. Acquisition Strategy

The Service Life Assessment Program (SLAP) program employs sole source contracts with Boeing, the aircraft prime manufacturer. SLAP further decomposes program of record goals into smaller discrete steps, analyzing requirements to extend flight hours (FH) from 6,000 to 9,000 first. These analyses will provide the raw engineering data to develop aircraft modifications 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 F/A-18 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 Structures Phase A (FY08-FY13) tools and modeling necessary to assess usage and fatigue life are developed. During SLAP Structures Phase B (FY11-FY18) specific structural locations which do not meet SLAP goals are identified and analyzed. Subsystem SLAP is also initiated concurrently with Structures Phase (B). A Flight Control Surface SLAP, SLEP retrofit concepts and repairs for deficient locations are developed

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Navy **Date:** February 2016

Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (Number/Name)
1319 / 7	PE 0702207N / <i>Depot Maintenance (NON-IF)</i>	3030 / <i>FA-18 SLAP</i>

during SLAP Structures and Sub-Systems Phase C (FY14-FY21). SLAP is followed by the SLEP during which the actual retrofit and repairs are performed under OSIP 020-14 established in FY14.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Navy **Date:** February 2016

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0702207N / Depot Maintenance (NON-IF)	Project (Number/Name) 3030 / FA-18 SLAP
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Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Product Development SLAP F/A-18E-F	SS/CPFF	Boeing : St. Louis, MO	85.228	9.281	Dec 2014	15.630	Dec 2015	34.883	Dec 2016	-		34.883	Continuing	Continuing	Continuing
Prior Year Prod Dev cost no longer funded in FYDP	SS/CPFF	Boeing : St. Louis, MO	28.775	0.000		0.000		0.000		-		0.000	0.000	28.775	28.775
Subtotal			114.003	9.281		15.630		34.883		-		34.883	-	-	-

Remarks
FY17 funding provided to increase the F/A-18 E/F depot capacity.

Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
SLAP Inventory Model	WR	ONR : Arlington, VA	6.525	0.000		0.000		0.000		-		0.000	0.000	6.525	-
SLAP F/A-18 E/F	WR	NAWCAD : Patuxent River, MD	7.015	0.795	Dec 2014	0.795	Dec 2015	0.586	Dec 2016	-		0.586	Continuing	Continuing	Continuing
SLAP F/A-18 E/F	WR	FRC Southwest : San Diego, CA	5.187	0.693	Dec 2014	0.693	Dec 2015	0.766	Dec 2016	-		0.766	Continuing	Continuing	Continuing
Subtotal			18.727	1.488		1.488		1.352		-		1.352	-	-	-

Test and Evaluation (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Development Test & Evaluation - SLAP E/F	WR	NAWCAD : Pax River, MD	0.657	0.157	Dec 2014	0.157	Dec 2015	0.157	Dec 2016	-		0.157	Continuing	Continuing	Continuing
Subtotal			0.657	0.157		0.157		0.157		-		0.157	-	-	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Navy												Date: February 2016			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)						Project (Number/Name)					
1319 / 7				PE 0702207N / Depot Maintenance (NON-IF)						3030 / FA-18 SLAP					
Management Services (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	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	2.581	1.177	Dec 2014	1.177	Dec 2015	1.177	Dec 2016	-		1.177	Continuing	Continuing	Continuing
Travel	Various	NAVAIR : Pax River, MD	0.100	0.050	Dec 2014	0.050	Dec 2015	0.075	Jun 2017	-		0.075	Continuing	Continuing	Continuing
Program Management Support (Seaport-CSS)	C/CPFF	WYLE LAB : Pax River, MD	1.651	0.508	Dec 2014	0.508	Dec 2015	0.000		-		0.000	Continuing	Continuing	Continuing
Program Management Support	Various	NAWCAD : Pax River, MD	1.244	0.838	Dec 2014	0.675	Dec 2015	0.040	Dec 2016	-		0.040	Continuing	Continuing	Continuing
Program Management Support	C/CPFF	Engility : Pax River, MD	0.261	0.000		0.000		0.593	Dec 2016	-		0.593	0.000	0.854	0.854
Subtotal			5.837	2.573		2.410		1.885		-		1.885	-	-	-
Project Cost Totals			139.224	13.499		19.685		38.277		-		38.277	-	-	-
Remarks															

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Exhibit R-4A, RDT&E Schedule Details: PB 2017 Navy		Date: February 2016
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0702207N / <i>Depot Maintenance (NON-IF)</i>	Project (Number/Name) 3030 / <i>FA-18 SLAP</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Service Life Assessment Program F/A-18				
Structures: 2.0 Structures Phase B3	1	2015	4	2015
Structures: 2.0 Structures Phase B4	3	2015	4	2018
Structures: 3.0 Structures Phase C	2	2015	4	2021
Subsystems: 6.0 Subsystems Phase C	1	2015	4	2021

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Navy										Date: February 2016		
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0702207N / Depot Maintenance (NON-IF)				Project (Number/Name) 3182 / T-45 SLAP			
COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
3182: T-45 SLAP	14.457	7.179	4.500	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	26.136
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

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) was completed in February 2012. The results are being 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. Beginning in FY13, the T-45 sub-systems SLAP effort will assess 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 original funding within the T-45 SLAP budget programmed for T-45 tail hook has been absorbed into the overarching SLAP effort due to the success of T-45 additional tail hook life extension efforts.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Title: T-45 SLAP	7.179	4.500	0.000	0.000	0.000
Articles:	-	-	-	-	-
Description: Funding supports conducting a Subsystem SLAP to determine modifications necessary to extend service life through 2035.					
FY 2015 Accomplishments: Continue Subsystem SLAP activities and engineering studies with the expectation of extending the T-45 service life to 2035.					
FY 2016 Plans: Complete the Subsystem SLAP activities and engineering studies with the expectation of extending the T-45 service life to 2035.					
FY 2017 Base Plans:					

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Navy		Date: February 2016
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0702207N / <i>Depot Maintenance (NON-IF)</i>	Project (Number/Name) 3182 / <i>T-45 SLAP</i>

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
N/A					
FY 2017 OCO Plans:					
N/A					
Accomplishments/Planned Programs Subtotals	7.179	4.500	0.000	0.000	0.000

C. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017 Base</u>	<u>FY 2017 OCO</u>	<u>FY 2017 Total</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• APN/05690: <i>T-45 Series OSIP 008-95/022-14</i>	26.338	26.257	29.449	-	29.449	41.087	38.560	53.094	57.444	306.813	824.516

Remarks
Prior years were budgeted under OSIP 008-95. Fiscal years 2014 and out are funded under OSIP 022-14

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 original funding within the T-45 SLAP budget programmed for T-45 tail hook has been absorbed into the overarching SLAP effort due to the alternate path success of T-45 tail hook life extension efforts.

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 Service Life Extension Program during which the actual retrofits are undertaken.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Navy **Date:** February 2016

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0702207N / Depot Maintenance (NON-IF)	Project (Number/Name) 3182 / T-45 SLAP
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Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Prod Dev SLAP T-45A/C	SS/CPFF	Boeing : St. Louis, MO	6.929	3.952	Jan 2015	3.500	Nov 2015	0.000		-		0.000	0.000	14.381	14.381
Prod Dev SLAP T-45A/C NACES	C/FFP	Martin Baker : United Kingdom	0.000	0.450	Sep 2015	0.000		0.000		-		0.000	0.000	0.450	0.450
Subtotal			6.929	4.402		3.500		0.000		-		0.000	0.000	14.831	14.831

Remarks
NACES SLAP product development added in FY 2015

Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Engineering Technical Support	WR	NAWCAD : Patuxent River, MD	3.016	1.419	Jan 2015	0.500	Nov 2015	0.000		-		0.000	0.000	4.935	-
Engineering Technical Support	WR	NADEP : Jacksonville, FL	1.920	0.220	Jan 2015	0.180	Nov 2015	0.000		-		0.000	0.000	2.320	-
Engineering Technical Support	WR	NAWCAD : Various	0.961	0.180	Jan 2015	0.180	Nov 2015	0.000		-		0.000	0.000	1.321	-
SLAP Engineering Study	SS/BOA	JHU/APL : Laurel, MD	1.289	0.680	Jan 2015	0.120	Feb 2016	0.000		-		0.000	0.000	2.089	2.089
SLAP ETS Support	SS/BOA	ASI : Virginia Beach, VA	0.000	0.158	May 2015	0.000		0.000		-		0.000	0.000	0.158	0.158
Subtotal			7.186	2.657		0.980		0.000		-		0.000	0.000	10.823	-

Remarks
In FY15 \$1.435 realigned from NAWCAD to JHU/APL for SLAP Engineering Study requirements, SLAP ETS Support, and the Product Development line.

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Exhibit R-4, RDT&E Schedule Profile: PB 2017 Navy **Date:** February 2016

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0702207N / Depot Maintenance (NON-IF)	Project (Number/Name) 3182 / T-45 SLAP
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T-45 SLAP	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021							
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q				
Product Development																																
	1.0 Product Development																															

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Exhibit R-4A, RDT&E Schedule Details: PB 2017 Navy		Date: February 2016
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0702207N / <i>Depot Maintenance (NON-IF)</i>	Project (Number/Name) 3182 / T-45 SLAP

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
T-45 SLAP				
Product Development: SLAP T-45C	1	2015	2	2016

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Navy **Date:** February 2016

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0702207N / Depot Maintenance (NON-IF)	Project (Number/Name) 3384 / MH-60 SLAP
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COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
3384: MH-60 SLAP	0.000	0.000	0.000	11.045	-	11.045	16.883	6.797	10.291	7.293	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The MH-60 Service Life Assessment Program (SLAP) is assessing the primary aircraft structure and subsystem condition of the MH-60S fleet in order to determine what efforts are necessary to extend the aircraft design life limits to allow it to meet Chief of Naval Operations (CNO) operational inventory requirements through FY 2035. The goal of the MH-60S SLAP program is to identify critical structures, components, and subsystems that can achieve the extended service life limit goals. The current life limits for the MH-60S is 10,000 hours, however, a full scale fatigue test was never conducted and therefore, the MH-60S is in an on-condition state requiring additional structural inspections beginning at 6,500 hours.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Title: MH-60 SLAP	0.000	0.000	11.045	0.000	11.045
Articles:	-	-	-	-	-
Description: The current design life limits do not support United States Navy (USN) inventory requirements through FY 2035. Funding supports assessing the structural and subsystem condition of the MH-60S fleet in order to determine what modifications are necessary to extend the aircraft designed life limits to allow it to achieve CNO inventory requirements through FY 2035.					
FY 2015 Accomplishments: N/A					
FY 2016 Plans: N/A					
FY 2017 Base Plans: Collect aircraft historical regime and usage data for assessment and initiate airframe external loads analysis and fatigue analysis. Perform analytical service life risk assessments of aircraft subsystems, develop initial dispositions for safety critical items.					
FY 2017 OCO Plans: N/A					
Accomplishments/Planned Programs Subtotals	0.000	0.000	11.045	0.000	11.045

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Navy		Date: February 2016
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0702207N / <i>Depot Maintenance (NON-IF)</i>	Project (Number/Name) 3384 / <i>MH-60 SLAP</i>

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

The Service Life Assessment Program (SLAP) program employs sole source contracts with Sikorsky, the aircraft prime manufacturer, government engineering and logistics expertise at Naval Air Station (NAS) Patuxent River and the H-60 Fleet Support Team at Cherry Point, NC. Analyses will provide the engineering data to develop aircraft structural, component, and subsystem modifications to extend service life flight hour limits. The MH-60S SLAP 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 Chief of Naval Operations (CNO) objectives. The program will combine exploitation of complete aircraft teardown inspections and actual historical fleet usage. Conducting MH-60S SLAP to study the aircraft lifetime will provide a better estimate of aircraft service life and is required to determine scope of the follow-on Service Life Extension Program (SLEP).

E. Performance Metrics

The MH-60 SLAP Fatigue Life Analysis (FLA) provides an assessment of aircraft structure fatigue life as affected by flight maneuver and Ground-Air-Ground cycles, based on Government furnished usage spectra and identifies the efforts required to extend the aircraft life to SLAP goals. During the FLA External Loads Analysis (FY 2017), external loads for all fatigue conditions are identified from the three usage spectra. During the FLA Fatigue Analysis (FY 2017-FY 2020), the fatigue analysis results and calculated fatigue lives are documented and areas for future improvements to extend the A/C service life are identified. During the FLA Structural Analysis (FY 2019-FY 2021), static fail-safety analyses of specific airframe sites are conducted to substantiate continued safe flight and identify areas for future service life extensions. Subsystem SLAP Phase B is initiated concurrently with the FLA. During Subsystems SLAP Phase B (FY 2017-FY 2019), analytical service life risk assessments of aircraft subsystems are conducted and initial dispositions for safety-critical items are developed. During Subsystems SLAP Phase C (FY 2019-FY 2020), dispositions of Phase B are executed by performing component tests, aircraft inspections, and assembly teardowns and SLEP dispositions are developed for safety critical components based on new data.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Navy												Date: February 2016				
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)								
1319 / 7				PE 0702207N / Depot Maintenance (NON-IF)				3384 / MH-60 SLAP								
Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Fatigue Life Assessment MH-60S	SS/FFP	Sikorsky : Stratford, CT	0.000	0.000		0.000		6.125	Dec 2016	-		6.125	5.667	11.792	12.000	
Subsystem Life Assessment MH-60S	SS/CPIF	Sikorsky : Stratford, CT	0.000	0.000		0.000		3.000	Dec 2016	-		3.000	8.833	11.833	12.000	
Subtotal			0.000	0.000		0.000		9.125		-		9.125	14.500	23.625	24.000	
Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
SLAP MH-60S	WR	NAWCAD : Patuxent River, MD	0.000	0.000		0.000		1.238	Dec 2016	-		1.238	Continuing	Continuing	Continuing	
SLAP MH-60S	WR	FRC : Various	0.000	0.000		0.000		0.407	Dec 2016	-		0.407	Continuing	Continuing	Continuing	
Eng & Tech Svc (Non FFRDC)	Various	Various : Various	0.000	0.000		0.000		0.101	Dec 2016	-		0.101	0.000	0.101	-	
Subtotal			0.000	0.000		0.000		1.746		-		1.746	-	-	-	
Management Services (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Technical Support SLAP MH-60S	WR	NAWCAD : Patuxent River, MD	0.000	0.000		0.000		0.055	Dec 2016	-		0.055	Continuing	Continuing	Continuing	
Mgmt Supt Services (Non FFRDC)	Various	Various : Various	0.000	0.000		0.000		0.101	Dec 2016	-		0.101	0.000	0.101	-	
Travel	Various	NAVAIR : Patuxent River, MD	0.000	0.000		0.000		0.018	Dec 2016	-		0.018	0.000	0.018	-	
Subtotal			0.000	0.000		0.000		0.174		-		0.174	-	-	-	

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Navy								Date: February 2016					
Appropriation/Budget Activity 1319 / 7				R-1 Program Element (Number/Name) PE 0702207N / Depot Maintenance (NON-IF)				Project (Number/Name) 3384 / MH-60 SLAP					
	Prior Years	FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	0.000		0.000		11.045		-		11.045	-	-	-

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2017 Navy **Date:** February 2016

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0702207N / Depot Maintenance (NON-IF)	Project (Number/Name) 3384 / MH-60 SLAP
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Proj 3384	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021											
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q								
									External Loads Analysis																											
									Fatigue Analysis																											
																	Structural Analysis																			
									Subsystems Risk Assessments																											
																					Subsystems Dispositions															

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Exhibit R-4A, RDT&E Schedule Details: PB 2017 Navy		Date: February 2016
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0702207N / <i>Depot Maintenance (NON-IF)</i>	Project (Number/Name) 3384 / <i>MH-60 SLAP</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Proj 3384</i>				
External Loads Analysis	2	2017	2	2018
Fatigue Analysis	2	2017	2	2020
Structural Analysis	2	2019	2	2021
Subsystems Risk Assessments	2	2017	4	2019
Subsystems Dispositions	2	2019	2	2020

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