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Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Navy										Date: March 2019		
Appropriation/Budget Activity 1319: Research, Development, Test & Evaluation, Navy / BA 7: Operational Systems Development					R-1 Program Element (Number/Name) PE 0702207N / Depot Maintenance (NON-IF)							
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
Total Program Element	234.849	35.463	46.560	38.182	-	38.182	40.313	48.889	49.609	27.823	Continuing	Continuing
3030: FA-18 SLAP	208.844	25.932	24.334	25.952	-	25.952	26.430	38.116	44.334	22.441	Continuing	Continuing
3182: T-45 SLAP	26.005	0.000	5.400	6.700	-	6.700	6.800	5.600	0.000	0.000	0.000	50.505
3384: MH-60 SLAP	0.000	9.531	6.826	5.530	-	5.530	7.083	5.173	5.275	5.382	Continuing	Continuing
9999: Congressional Adds	0.000	0.000	10.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	10.000

A. Mission Description and Budget Item Justification

3030: A significant portion of the F/A-18 and EA-18G 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 (CNO) inventory requirements. Without SLAP and the follow on Service Life Extension Program (SLEP), aircraft are retired from the USN inventory when a design service life metric is reached. 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 aircraft structure is currently fatigue limited to 14,400 flight hours based on initial full-scale fatigue tests. This service life limit prevents the T-45 fleet from meeting Integrated Production Plan (IPP) past 2025. Studies demonstrate that the 14,400 flight hour service life can 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. In order for the T-45 to meet IPP until 2035, it is also necessary to assess the subsystems of the T-45 in their ability to remain viable.

In FY13 an initial subsystem assessment, based on the updated fleet aircraft usage spectrum and future predicted training missions of the T-45 aircraft, found 79 dispositions requiring further analysis, teardowns, age explorations, recertification and/or testing . The assessment of the subsystems that make up these 79 dispositions will address all critical subsystems 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 subsystems for trainer aircraft.

3384: The MH-60 SLAP is assessing the primary aircraft structure and subsystem condition of the MH-60S fleet in order to assess the airframe's ability to meet its designed service life of 10,000 hours and 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. 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. FY 2020 budget request funds the completion of external loads analysis, continuation of fatigue analysis, and development of initial dispositions for safety critical items. This initial analysis, assessment and disposition will be further refined throughout the SLAP effort, augmented with specific system teardown, inspection and test, culminating in a follow-on SLEP recommendation, which will design and implement the solutions resulting from the SLAP findings.

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Appropriation/Budget Activity 1319: Research, Development, Test & Evaluation, Navy I BA 7: Operational Systems Development		R-1 Program Element (Number/Name) PE 0702207N I Depot Maintenance (NON-IF)				
9999: FY 2019 Congressional Add funds MH-60S analysis and development of the 401D engine; the procurement of MH-60 alignment, tail cone, and pylon fixtures to support SLAP analysis, development of engineering technical data, drawings/models and associated lists from the Original Equipment Manufacturer (OEM) in support of SLAP deep look inspections.						
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.						
The FY 2020 funding request was increased by \$1.668 million to add EA-18G SLAP tasking to the budget.						
B. Program Change Summary (\$ in Millions)		FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Previous President's Budget		38.227	36.560	41.525	-	41.525
Current President's Budget		35.463	46.560	38.182	-	38.182
Total Adjustments		-2.764	10.000	-3.343	-	-3.343
• Congressional General Reductions		-	-			
• Congressional Directed Reductions		-	-			
• Congressional Rescissions		-	-			
• Congressional Adds		-	10.000			
• Congressional Directed Transfers		-	-			
• Reprogrammings		-1.593	0.000			
• SBIR/STTR Transfer		-1.172	0.000			
• Program Adjustments		0.000	0.000	-3.295	-	-3.295
• Rate/Misc Adjustments		0.001	0.000	-0.048	-	-0.048
Congressional Add Details (\$ in Millions, and Includes General Reductions)					FY 2018	FY 2019
Project: 9999: Congressional Adds						
Congressional Add: MH-60 SLAP					0.000	10.000
Congressional Add Subtotals for Project: 9999					0.000	10.000
Congressional Add Totals for all Projects					0.000	10.000
Change Summary Explanation						
Technical: PU 3182: Increase from FY2018 to FY2019 due to the T-45 SLAP Aviation Technical Corrections.						
PU 3030: Funding increase of \$1.668 million from FY 2019 to FY 2020 for addition of EA-18G SLAP tasking.						

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<p>PU 3384: Decrease from FY 2019 to FY 2020 due to the completion of Subsystem Life Assessment.</p> <p>PU 9999: Decrease from FY 2019 to FY 2020 due to the T-700-401D Software development and MH-60 alignment tool to support SLAP analysis being a one time FY19 Congressional add.</p> <p>Schedule: PU 3030: Changes to the schedule to reflect the addition of EA-18G SLAP.</p> <p>PU 3182: Changes support product development beginning in FY19 for Subsystem SLAP C to include teardown, inspection, detailed analysis and recertification testing required to safely extend the service life of critical subsystems.</p> <p>PU 9999: Changes to the schedule to reflect the addition of T-700-401D Software development and MH-60 alignment tool.</p>		

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy										Date: March 2019		
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 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
3030: FA-18 SLAP	208.844	25.932	24.334	25.952	-	25.952	26.430	38.116	44.334	22.441	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The F/A-18 and EA-18G 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 investigations of the main landing gear, arresting hook and catapult back-up structures, vertical tails, wings and fuselage. A second effort is to evaluate the subsystem components (hydraulics, wiring, actuators, etc) to identify over and above inspections, overhaul intervals or replacement schedules to fly past design life limits. 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 and EA-18G 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 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Title: F/A-18 SLAP	21.202	20.097	9.298	0.000	9.298
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 2019 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. 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 continue to be performed to analyze the fatigue and material condition of fleet aircraft to determine					

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Appropriation/Budget Activity 1319 / 7		R-1 Program Element (Number/Name) PE 0702207N / Depot Maintenance (NON-IF)		Project (Number/Name) 3030 / FA-18 SLAP		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
what modifications or inspections are required to extend the current life of the aircraft. Crack growth analysis will be performed to determine recurring requirements to extend the platform beyond its current service life limits. FY 2020 Base 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. 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 continue to 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. Crack growth analysis will be performed to determine recurring requirements to extend the platform beyond its current service life limits. Several ECPs have been developed and are being executed to address changes to the Aircraft fuselage and wing structure to meet a service life of 10,000 hours. FY 2020 OCO Plans: N/A FY 2019 to FY 2020 Increase/Decrease Statement: The F/A-18 E/F SLAP program is ramping down and the funding for this effort decreases from FY19 to FY20.						
Title: EA-18G SLAP <div>Articles:</div> Description: The current design life limits do not support USN inventory requirements. Funding supports assessing the structural condition of the EA-18G fleet in order to determine what modifications are necessary to extend the aircraft designed life limits to allow it to achieve CNO inventory requirements. The EA-18G SLAP program leveraged lessons learned from the F/A-18 A-F Slap program in order to achieve efficiencies in continuity of operations. FY 2019 Plans: Stress analysis of numerous data points to provide exploitation of complete structural fatigue testing with the expectation of extending the current service life of EA-18G 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 EA-18G Growler. Aircraft Teardown		4.730 -	4.237 -	16.654 -	0.000 -	16.654 -

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)											
				FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total			
assessments continue to 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. Crack growth analysis will be performed to determine recurring requirements to extend the platform beyond its current service life limits. <i>FY 2020 Base Plans:</i> Continuation of ongoing stress analysis of numerous data points to provide exploitation of complete structural fatigue testing with the expectation of extending the current service life of EA-18G 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 EA-18G Growler. Aircraft Teardown assessments continue to 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. Crack growth analysis will be performed to determine recurring requirements to extend the platform beyond its current service life limits. These engineering results will be used in development of Engineering Change Proposals (ECPs) that will address aircraft fuselage and wing structure changes required to meet service life beyond 7,500 hours. <i>FY 2020 OCO Plans:</i> N/A <i>FY 2019 to FY 2020 Increase/Decrease Statement:</i> Increase is to account for the ramping up of EA-18G specific SLAP efforts. The majority of prior-year SLAP efforts for the F/A-18 E/F and EA-18Gs were accomplished for the F/A-18 E/Fs first, with the expectation that EA-18Gs would follow. This increase reflects that transition period.											
Accomplishments/Planned Programs Subtotals				25.932	24.334	25.952	0.000	25.952			
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
• APN/05250: <i>F-18 Series (OSIP 020-14)</i>	90.069	150.396	133.567	-	133.567	187.801	243.414	461.418	387.300	2,824.885	4,558.868
Remarks											

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<p><u>D. Acquisition Strategy</u></p> <p>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, developing requirements to extend flight hours (FH) from 6,000 to 9,000 first. These efforts will provide the raw engineering data to develop aircraft modifications to extend total aircraft landings, Cat/Traps, and FH. The F/A-18 and EA-18G 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, evaluate 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 both F/A-18E/F and EA-18G SLAP to study the aircraft lifetime will provide a better estimate of aircraft service life and a follow on Service Life Extension Program (SLEP).</p> <p><u>E. Performance Metrics</u></p> <p>The F/A-18 and EA-18G 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 FA-18 E/F SLAP Structures Phase A (FY08-FY13) and EA-18G SLAP Structures Phase A (FY18-FY20) tools and modeling necessary to assess usage and fatigue life are developed. During FA-18 E/F SLAP Structures Phase B (FY11-FY18) and EA-18G SLAP Structures Phase B (FY20-FY23) specific structural locations which do not meet SLAP goals are identified and evaluated. 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 during SLAP Structures and Sub-Systems Phase C (FY17-FY24). SLAP is followed by the SLEP during which the actual retrofit and repairs are performed under OSIP 020-14 established in FY14.</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Navy **Date:** March 2019

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>
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Product Development (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
Product Development SLAP F/A-18 E/F	SS/CPFF	Boeing : St. Louis, MO	143.353	18.317	Dec 2017	14.253	Dec 2018	7.286	Dec 2019	-		7.286	Continuing	Continuing	Continuing
Product Development SLAP EA-18G	SS/CPFF	Boeing : St. Louis, MO	0.000	4.730	Sep 2018	4.237	Dec 2018	15.454	Dec 2019	-		15.454	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			172.128	23.047		18.490		22.740		-		22.740	Continuing	Continuing	N/A

Remarks

Increase in FY 2020 reflects the addition of \$1.4 million and the realignment of EA-18G SLAP Product Development tasking.

Support (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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 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	9.224	0.769	Dec 2017	3.005	Dec 2018	0.365	Dec 2019	-		0.365	Continuing	Continuing	Continuing
SLAP F/A-18 E/F	WR	FRC Southwest : San Diego, CA	7.495	0.592	Dec 2017	0.403	Dec 2018	0.214	Dec 2019	-		0.214	Continuing	Continuing	Continuing
SLAP EA-18G	WR	NAWCAD : Patuxent River, MD	0.000	0.000		0.700	Dec 2018	0.700	Dec 2019	-		0.700	Continuing	Continuing	Continuing
SLAP EA-18G	WR	FRC Southwest : San Diego, CA	0.000	0.000		0.200	Dec 2018	0.400	Dec 2019	-		0.400	Continuing	Continuing	Continuing
Subtotal			23.244	1.361		4.308		1.679		-		1.679	Continuing	Continuing	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Navy												Date: March 2019			
Appropriation/Budget Activity 1319 / 7						R-1 Program Element (Number/Name) PE 0702207N / Depot Maintenance (NON-IF)				Project (Number/Name) 3030 / FA-18 SLAP					
Test and Evaluation (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
Development Test & Evaluation F/A-18 E/F	WR	NAWCAD : Patuxent River, MD	1.128	0.157	Dec 2017	0.100	Dec 2018	0.060	Dec 2019	-		0.060	Continuing	Continuing	Continuing
Development Test & Evaluation EA-18G	WR	NAWCAD : Patuxent River, MD	0.000	0.000		0.057	Dec 2018	0.100	Dec 2019	-		0.100	0.000	0.157	-
Subtotal			1.128	0.157		0.157		0.160		-		0.160	Continuing	Continuing	N/A
Management Services (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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 : Patuxent River, MD	5.954	1.036	Dec 2017	1.055	Dec 2018	1.074	Dec 2019	-		1.074	Continuing	Continuing	Continuing
Travel	Various	NAVAIR : Patuxent River, MD	0.275	0.075	Jun 2018	0.075	Jun 2019	0.075	Jun 2020	-		0.075	Continuing	Continuing	Continuing
Program Management Support (Seaport-CSS)	C/CPFF	WYLE LAB : Patuxent River, MD	2.687	0.050	Dec 2017	0.051	Dec 2018	0.052	Dec 2019	-		0.052	Continuing	Continuing	Continuing
Program Management Support	Various	NAWCAD : Patuxent River, MD	2.797	0.050	Dec 2017	0.051	Dec 2018	0.052	Dec 2019	-		0.052	Continuing	Continuing	Continuing
Program Management Support	C/CPFF	Engility : Patuxent River, MD	0.631	0.156	Dec 2017	0.147	Dec 2018	0.120	Feb 2020	-		0.120	Continuing	Continuing	Continuing
Subtotal			12.344	1.367		1.379		1.373		-		1.373	Continuing	Continuing	N/A
			Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			208.844	25.932		24.334		25.952		-		25.952	Continuing	Continuing	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2020 Navy												Date: March 2019																						
Appropriation/Budget Activity 1319 / 7												R-1 Program Element (Number/Name) PE 0702207N / Depot Maintenance (NON-IF)								Project (Number/Name) 3030 / FA-18 SLAP														
Service Life Assessment Program F/A-18 & EA-18G		FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024								
		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					
F/A-18E/F SLAP		Structures	2.0 Structures Phase B4																															
			3.0 Structures Phase C (Stress Analysis, Flight Test, Fatigue Testing, etc.)																															
		Subsystems	6.0 Subsystems Phase C (Stress Analysis, NDI, Bench Testing, etc)																															
EA-18G SLAP		Structures																																
	Structures Phase A																																	
									Structures Phase B																									
																					Structures Phase C (Stress Analysis, Fatigue Testing, etc.)													
2020OSD - 0702207N - 3030																																		

2020OSD - 0702207N - 3030

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Exhibit R-4A, RDT&E Schedule Details: PB 2020 Navy			Date: March 2019
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
<i>Service Life Assessment Program F/A-18 & EA-18G</i>				
F/A-18E/F SLAP: Structures: 2.0 Structures Phase B4	1	2018	4	2018
F/A-18E/F SLAP: Structures: 3.0 Structures Phase C	1	2018	4	2023
F/A-18E/F SLAP: Subsystems: 6.0 Subsystems Phase C	1	2018	4	2024
EA-18G SLAP: Structures: Phase A	4	2018	1	2020
EA-18G SLAP: Structures: Phase B	1	2020	4	2023
EA-18G SLAP: Structures: Phase C	4	2023	4	2024

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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 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
3182: T-45 SLAP	26.005	0.000	5.400	6.700	-	6.700	6.800	5.600	0.000	0.000	0.000	50.505
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
The T-45 Service Life Assessment Program (SLAP) is assessing the structural and subsystem conditions of the T-45fleet 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 T-45 SLAP program is to identify critical structures and components that can extend the aircraft designed service life to support IPP and Naval Flight Officer Training Requirements (NTR) until 2035. This initial subsystem assessment, based on the updated fleet aircraft usage spectrum and future predicted training missions of the T-45 aircraft, found 79 dispositions requiring further analysis, teardowns, age explorations, recertification and/or testing . The assessment of the subsystems that make up these 79 dispositions will address all critical subsystems 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 subsystems for trainer aircraft. The current life limits for the T-45 is 14,400 Flight Hours (FH). The T-45 SLAP program of record states the SLAP goals is 21,600 FH. This effort is required to be conducted for these 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 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Title: T-45 SLAP Articles: Description: Funding supports development, integration, test, and certification of a Subsystem SLAP to determine modifications necessary to extend service life through 2035. FY 2019 Plans: Begin Subsystem SLAP activities including the initial analytical assessment of approximately 50 subsystem parts; component test setup for approximately 20 other parts; and engineering studies with the expectation of extending the T-45 service life to 2035. FY 2020 Base Plans: Continue Subsystem SLAP activities and engineering studies as well as the beginning of fatigue, endurance, and cyclic testing of actual parts with the expectation of extending the T-45 service life to 2035. FY 2020 OCO Plans: N/A FY 2019 to FY 2020 Increase/Decrease Statement:								0.000	5.400	6.700	0.000	6.700
								-	-	-	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy				Date: March 2019	
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 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
The FY2020 funding request was increased by \$1.3M to support the beginning of fatigue, endurance, and cyclic testing of actual parts with the expectation of extending the T-45 service life to 2035.					
Accomplishments/Planned Programs Subtotals	0.000	5.400	6.700	0.000	6.700

C. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020 Base</u>	<u>FY 2020 OCO</u>	<u>FY 2020 Total</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• APN/0569: <i>T-45 Service Life Ext Prg (SLEP) OSIP 022-14</i>	16.160	26.095	26.530	-	26.530	27.023	29.637	31.042	28.546	132.425	458.278

Remarks

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.

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. SLAP is followed by the Service Life Extension Program (SLEP) during which the actual retrofit and repairs are performed under OSIP 022-14.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Navy												Date: March 2019			
Appropriation/Budget Activity 1319 / 7						R-1 Program Element (Number/Name) PE 0702207N / Depot Maintenance (NON-IF)				Project (Number/Name) 3182 / T-45 SLAP					
Product Development (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
Product Development SLAP T-45	SS/CPFF	Boeing : St. Louis, MO	12.882	0.000		4.505	Feb 2019	5.790	Feb 2020	-		5.790	10.593	33.770	33.770
Product Development SLAP T-45 NACES	C/FFP	Martin Baker : United Kingdom	0.450	0.000		0.000		0.000		-		0.000	0.000	0.450	0.450
Subtotal			13.332	0.000		4.505		5.790		-		5.790	10.593	34.220	N/A
Support (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
Engineering Technical Support	WR	NAWCAD : Patuxent River, MD	6.270	0.000		0.635	Nov 2018	0.646	Nov 2019	-		0.646	1.283	8.834	-
Engineering Technical Support	WR	NADEP : Jacksonville, FL	2.472	0.000		0.180	Nov 2018	0.183	Nov 2019	-		0.183	0.365	3.200	-
Engineering Technical Support	WR	NAWCAD : Various	1.213	0.000		0.000		0.000		-		0.000	0.000	1.213	-
SLAP Engineering Study	SS/BOA	JHU/APL : Laurel, MD	1.969	0.000		0.000		0.000		-		0.000	0.000	1.969	1.969
SLAP ETS Support	SS/BOA	ASI : Virginia Beach, VA	0.267	0.000		0.000		0.000		-		0.000	0.000	0.267	0.267
Subtotal			12.191	0.000		0.815		0.829		-		0.829	1.648	15.483	N/A
Management Services (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
Travel	Various	NAVAIR : Patuxent River, MD	0.482	0.000		0.080	Nov 2018	0.081	Nov 2019	-		0.081	0.159	0.802	-
Subtotal			0.482	0.000		0.080		0.081		-		0.081	0.159	0.802	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Navy										Date: March 2019			
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0702207N / Depot Maintenance (NON-IF)					Project (Number/Name) 3182 / T-45 SLAP			
	Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	26.005	0.000		5.400		6.700		-		6.700	12.400	50.505	N/A
Remarks													

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PE 0702207N: *Depot Maintenance (NON-IF)*
Navy

R-1 Line #257

R-1 Program Element (Number/Name)
PE 0702207N / *Depot Maintenance (NON-IF)*

Project (Number/Name)
3182 / T-45 SLAP

T-45 SLAP	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
	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																												

2020PB - 0702207N - 3182

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Exhibit R-4A, RDT&E Schedule Details: PB 2020 Navy		Date: March 2019
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>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>T-45 SLAP</i>				
Product Development: SLAP T-45C	2	2019	4	2022

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy										Date: March 2019		
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0702207N / Depot Maintenance (NON-IF)				Project (Number/Name) 3384 / MH-60 SLAP			
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
3384: MH-60 SLAP	0.000	9.531	6.826	5.530	-	5.530	7.083	5.173	5.275	5.382	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
<p>MH-60 SLAP is assessing the primary aircraft structure and subsystem condition of the MH-60S fleet in order to assess the airframe's ability to meet its designed service life of 10,000 hours and 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 to bridge to a follow-on program procurement. The highest flight time MH-60S helicopters are expected to exceed the currently assumed design life limit of 10,000 flight hours in 2024, at which time as many as 30 aircraft per year could be downed without a SLAP and Service Life Extension Program (SLEP). The MH-60S has experienced significant structural issues since Initial Operational Capability in August 2002, resulting in downed aircraft and additional inspections for the operational fleet. Similar issues could very well precede the 10,000 flight hour life limit, particularly without the insight provided by a SLAP effort commenced as soon as possible. The MH-60 SLAP is comprised of two distinct assessments: Fatigue Life Assessment (FLA), which will establish the fatigue life of the aircraft and air vehicle systems and Subsystem Life Assessment (SLA), which will determine subsystem components that are critical to safe flight and ground operations and identify safety risk and risk mitigation strategies for critical components. FLA consists of structural investigations of the cockpit beams, main gearbox beams/frames, upper deck, engine mount, lower tub, main landing gear, tail landing gear, cargo hook, transition splice and tie-down fittings/structure, tailcone, tail gearbox, intermediate gearbox, stabilator, manufactured joints/splices, and flight controls support structure. SLA will evaluate engines, rotor brake, hydraulic, flight controls, avionics components and infrastructure, etc., to identify over-and-above inspections, overhaul intervals or replacement schedules to fly beyond the current design limit assumption.</p> <p>FY 2020 budget request funds the continuation of external loads analysis, fatigue analysis, and development of initial dispositions for safety critical items. This initial analysis, assessment and disposition will be further refined throughout the SLAP effort, augmented with specific system teardown, inspection and test, culminating in a follow-on SLEP, which will design and implement the solutions resulting from the SLAP findings.</p>												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Title: MH-60 SLAP Articles: Description: The current design life limits do not support United States Navy inventory requirements to bridge to a follow-on program procurement. 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 bridge that gap. FY 2019 Plans:								9.531	6.826	5.530	0.000	5.530
								-	-	-	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy				Date: March 2019		
Appropriation/Budget Activity 1319 / 7		R-1 Program Element (Number/Name) PE 0702207N / <i>Depot Maintenance (NON-IF)</i>		Project (Number/Name) 3384 / MH-60 SLAP		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)						
		FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Continue to collect aircraft historical regime and usage data for assessment, continue airframe external loads analysis and fatigue analysis, and finish non-destructive tear-down examinations of one (1) aircraft and remaining aircraft components. Continue analytical service life risk assessments of aircraft subsystems and the development of initial dispositions for safety critical items.						
FY 2020 Base Plans: Continue to collect aircraft historical regime and usage data for assessment, continue airframe external loads analysis and fatigue analysis. Continue development of initial dispositions for safety critical items. Commence identifying SLEP hardware kit designs.						
FY 2020 OCO Plans: N/A						
FY 2019 to FY 2020 Increase/Decrease Statement: Decrease of \$1.296 million from FY 2019 to FY 2020 is due to the completion of Subsystem Life Assessment.						
Accomplishments/Planned Programs Subtotals		9.531	6.826	5.530	0.000	5.530
C. Other Program Funding Summary (\$ in Millions) N/A						
Remarks						
D. Acquisition Strategy The SLAP program employs a sole source contract with Lockheed Martin; the aircraft prime manufacturer; a sole source contract with General Electric, the engine provider; and government engineering and logistics expertise at Naval Air Station Patuxent River, MD and the H-60 Fleet Support Team at Cherry Point, NC. Analyses from the SLAP efforts will provide the engineering data necessary to develop aircraft structural, component, and subsystem modifications to extend service life flight hour limits in order to avoid flight line inventory shortfalls. The MH-60S SLAP consists of two major engineering efforts: the FLA and the aircraft SLA. These 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 objectives. The program will combine exploitation of aircraft deep look inspections and actual historical fleet usage. Conducting MH-60S SLAP to study the aircraft lifetime will define aircraft service life and is required to determine scope of the future follow-on SLEP.						
E. Performance Metrics The MH-60 SLAP 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 2018-2019), external loads for all fatigue conditions are identified from the three usage spectra. During the FLA (FY 2018-FY 2022), the fatigue assessment results and calculated fatigue						

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy		Date: March 2019
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>
<p>lives are documented and areas for future improvements to extend the aircraft service life are identified. During the FLA Structural Analysis (FY 2020-FY 2022), static fail-safety analyses of specific airframe sites are conducted to substantiate continued safe flight and identify areas for future service life extensions. Subsystems Phase A utilizes an interdisciplinary team within the USN tasked to develop a methodology for service life assessment of safety critical subsystems. The resulting methodology will be based on a risk-focused approach that evaluates subsystems for potential safety critical failure modes, analyzes the associated hardware for age-related risk factors, and develops data-gathering or risk reduction dispositions. Subsystem SLAP Phase B is initiated concurrently with the FLA. During Subsystems SLAP Phase B (FY 2018-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 2020-FY 2023), dispositions of Phase B are executed by performing component tests, aircraft inspections, and assembly teardowns. Additionally, SLAP assessments are continued on components needing further investigation. Subsystem SLAP Phase C is defined as the execution of the disposition decision resulting from Phase B efforts and will include the performance of component tests, aircraft inspections, component level fatigue analysis, and assembly teardowns. During this Phase, Phase B dispositions will be refined for safety critical components based on new data.</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Navy												Date: March 2019			
Appropriation/Budget Activity 1319 / 7						R-1 Program Element (Number/Name) PE 0702207N / Depot Maintenance (NON-IF)				Project (Number/Name) 3384 / MH-60 SLAP					
Product Development (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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/CPFF	Lockheed Martin : Owego, NY	0.000	2.612	Aug 2018	2.700	Dec 2018	3.000	Dec 2019	-		3.000	1.388	9.700	9.700
Subsystem Life Assessment MH-60S	Various	Various : Various	0.000	1.910	Jun 2018	1.700	Jun 2019	0.000		-		0.000	0.000	3.610	3.610
Subtotal			0.000	4.522		4.400		3.000		-		3.000	1.388	13.310	N/A
Support (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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	2.578	Oct 2017	1.206	Nov 2018	1.320	Nov 2019	-		1.320	Continuing	Continuing	Continuing
SLAP MH-60S	WR	Various : Various	0.000	1.445	Oct 2017	0.750	Nov 2018	0.750	Nov 2019	-		0.750	Continuing	Continuing	Continuing
Eng & Tech Srvc (Non FFRDC)	Various	Various : Various	0.000	0.168	May 2018	0.172	May 2019	0.171	May 2020	-		0.171	0.000	0.511	Continuing
Subtotal			0.000	4.191		2.128		2.241		-		2.241	Continuing	Continuing	N/A
Remarks FY 2020 NAWCAD increase is due to HW/Subsystems Dispositions.															
Management Services (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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	0.220	Oct 2017	0.224	Nov 2018	0.228	Nov 2019	-		0.228	Continuing	Continuing	Continuing
Mgmt Supt Services (Non FFRDC)	Various	Various : Various	0.000	0.580	May 2018	0.056	May 2019	0.043	May 2020	-		0.043	0.000	0.679	Continuing
Travel	Various	NAVAIR : Patuxent River, MD	0.000	0.018	Oct 2017	0.018	Oct 2018	0.018	Oct 2019	-		0.018	0.000	0.054	-
Subtotal			0.000	0.818		0.298		0.289		-		0.289	Continuing	Continuing	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Navy											Date: March 2019				
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 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			0.000	9.531		6.826		5.530		-		5.530	Continuing	Continuing	N/A

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2020 Navy												Date: March 2019																									
Appropriation/Budget Activity 1319 / 7												R-1 Program Element (Number/Name) PE 0702207N / Depot Maintenance (NON-IF)								Project (Number/Name) 3384 / MH-60 SLAP																	
Proj 3384	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024												
	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 Life Assessment																																	
			Subsystems Life Assessments																																		
								Structural Analysis																													
								HW/Subsystems Dispositions																													

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Exhibit R-4A, RDT&E Schedule Details: PB 2020 Navy		Date: March 2019
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	4	2018	2	2022
Fatigue Life Assessment	4	2018	2	2022
Subsystems Life Assessments	3	2018	4	2019
Structural Analysis	1	2020	1	2022
HW/Subsystems Dispositions	3	2020	4	2024

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy										Date: March 2019		
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0702207N / <i>Depot Maintenance (NON-IF)</i>				Project (Number/Name) 9999 / <i>Congressional Adds</i>			
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
9999: <i>Congressional Adds</i>	0.000	0.000	10.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	10.000
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The MH-60 Service Life Analysis Program (SLAP) is assessing the primary aircraft structure and subsystem condition of the MH-60S fleet in order to assess the airframe's ability to meet its designed service life of 10,000 hours and 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 anti-surface warfare, mine countermeasures, search and rescue, and vertical replenishment operational capabilities. FY 2019 Congressional Add funds analysis and development of the 401D engine; the procurement of MH-60 alignment, tail cone, and pylon fixtures to support SLAP analysis, development of engineering technical data, drawings/models and associated lists from the Original Equipment Manufacturer (OEM) in support of SLAP deep look inspections.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2018	FY 2019
Congressional Add: MH-60 SLAP	0.000	10.000
FY 2018 Accomplishments: N/A		
FY 2019 Plans: Continue the assessment of the 401D engines program and began associated software assessment. Procure alignment, tail cone and pylon refurbishment fixtures. Provide Original Equipment Manufacturer technical support of the SLAP deep look inspections.		
Congressional Adds Subtotals	0.000	10.000

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

Remarks

D. Acquisition Strategy

The SLAP procurement employs a sole source contract with Lockheed Martin the aircraft prime manufacturer; a sole source contract with General Electric, the engine manufacturer; STADCO, the fixture manufacturer; and Government engineering and logistic expertise at Naval Air Station (NAS) Patuxent River, MD and the Government H-60 Fleet Support Team at Marine Corps Air Station (MCAS) Cherry Point, NC.

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy		Date: March 2019
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0702207N / Depot Maintenance (NON-IF)	Project (Number/Name) 9999 / Congressional Adds

E. Performance Metrics

Award STADCO a contract (FY 2019) and take delivery of MH-60 alignment, tail cone and pylon refurbishment fixtures (FY 2020). Develop the software and Engineering Change Proposal required for the T-700-401D engine (FY 2019 through FY 2021). Support aircraft deep look inspections and scope definition of a future follow-on Service Life Extension Program (SLEP) (FY 2019 through FY 2020).

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Navy												Date: March 2019			
Appropriation/Budget Activity 1319 / 7						R-1 Program Element (Number/Name) PE 0702207N / Depot Maintenance (NON-IF)				Project (Number/Name) 9999 / Congressional Adds					
Product Development (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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-60 Alignment Fixture	SS/FFP	STADCO : Los Angeles, CA	0.000	0.000		3.883	Mar 2019	0.000		-		0.000	0.000	3.883	3.883
Reliability Centered Maintenance	SS/CPFF	Andromeda Systems, Inc. : Virgina Beach, VA	0.000	0.000		0.500	Jun 2019	0.000		-		0.000	0.000	0.500	0.500
T-700-401D Software	SS/CPFF	GE : Lynn, MA	0.000	0.000		3.517	Mar 2019	0.000		-		0.000	0.000	3.517	3.517
SLAP Engineering & Logistics Support	SS/CPFF	Lockheed Martin : Owego, NY	0.000	0.000		2.100	Feb 2019	0.000		-		0.000	0.000	2.100	2.100
Subtotal			0.000	0.000		10.000		0.000		-		0.000	0.000	10.000	N/A
			Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			0.000	0.000		10.000		0.000		-		0.000	0.000	10.000	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2020 Navy																Date: March 2019												
Appropriation/Budget Activity 1319 / 7										R-1 Program Element (Number/Name) PE 0702207N / Depot Maintenance (NON-IF)										Project (Number/Name) 9999 / Congressional Adds								
Proj 9999	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
	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
						Fatigue Life Assessment MH-60 Alignment Fixture																						
						T-700-401D Software Development																						

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Exhibit R-4A, RDT&E Schedule Details: PB 2020 Navy			Date: March 2019
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0702207N / <i>Depot Maintenance (NON-IF)</i>	Project (Number/Name) 9999 / <i>Congressional Adds</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Proj 9999</i>				
Fatigue Life Assessment MH-60 Alignment Fixture	2	2019	4	2020
T-700-401D Software Development	2	2019	4	2020