Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Navy											Date: February 2020	
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)*							
COST ($ in Millions)	**Prior Years**	**FY 2019**	**FY 2020**	**FY 2021 Base**	**FY 2021 OCO**	**FY 2021 Total**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**Cost To Complete**	**Total Cost**
Total Program Element	268.905	36.961	48.182	45.168	-	45.168	65.513	64.323	64.248	45.707	Continuing	Continuing
3030: *FA-18 SLAP*	234.776	15.491	25.952	24.834	-	24.834	29.727	30.659	32.476	22.927	Continuing	Continuing
3182: *T-45 SLAP*	26.005	5.192	6.700	6.681	-	6.681	5.724	0.000	0.000	0.000	0.000	50.302
3384: *MH-60 SLAP*	8.124	6.624	5.530	13.653	-	13.653	30.062	33.664	31.772	22.780	Continuing	Continuing
9999: *Congressional Adds*	0.000	9.654	10.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	19.654

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 design 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: MH-60 SLAP is assessing the primary aircraft structure and subsystem condition of the MH-60S fleet in order to evaluate the airframe's ability to meet its designed service life of 10,000 hours. SLAP will determine the efforts necessary to extend the aircraft design life limits to meet Chief of Naval Operations (CNO) operational inventory requirements through FY 2035. Without SLAP, aircraft will be retired from USN inventory when design service life limits are reached, directly impacting Surface Warfare, Personnel Recovery, Special Operations Forces (SOF) Support, Mine Countermeasures, and Combat Logistics operational capabilities and capacity. The fatigue analysis and dispositions for safety critical items will continue to be further refined throughout SLAP effort, augmented with aircraft, specific system and wiring teardowns, inspections, and tests; data analysis; and development of models and tools, producing results that will inform SLEP activity. Design and development engineering will be performed to develop an Engineering Change Proposal (ECP) for a SLEP solution. Additionally, a plan will be developed to convert the MH-60S Block 1 aircraft to Block 3B aircraft, extending the mission profile for these aircraft and ultimately providing the fleet with more flight hours.

Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Navy	Date: February 2020
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. FY 2020 Congressional Add funds the continuation of aircraft historical regime and usage data assessment, airframe external loads analysis and fatigue analysis. Continue development of initial dispositions for safety critical items.

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.

B. Program Change Summary ($ in Millions)	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Previous President's Budget	46.560	38.182	40.313	-	40.313
Current President's Budget	36.961	48.182	45.168	-	45.168
Total Adjustments	-9.599	10.000	4.855	-	4.855
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	10.000			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-8.000	0.000			
• SBIR/STTR Transfer	-1.599	0.000			
• Program Adjustments	0.000	0.000	4.772	-	4.772
• Rate/Misc Adjustments	0.000	0.000	0.083	-	0.083

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2019	FY 2020
Project: 9999: *Congressional Adds*		
Congressional Add: *MH-60 SLAP*	9.654	0.000
Congressional Add: *MH-60 NRE*	0.000	10.000
Congressional Add Subtotals for Project: 9999	9.654	10.000
Congressional Add Totals for all Projects	9.654	10.000

Change Summary Explanation

Technical:
PU 3030: N/A

PU 3182: Decrease from FY2020 to FY 2021 accounts for the availability of prior year execution balances.

Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Navy	Date: February 2020
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)*

PU 3384: Increase from FY2020 to FY2021 to design and develop a plan to convert the MH-60S Block 1 aircraft to Block 3B aircraft and to design and develop an ECP for a SLEP solution.

Schedule:

PU 3030: EA-18G schedule changes capitalize on lessons learned from the F/A-18E/F SLAP analysis. This includes efficiencies and synergies gained from overlapping phases, as well as actual time required to conduct each phase. Schedule changes reflect the commencement of EA-18G Phase A analysis in FY2018 vice FY2019, the onset of EA-18G Phase B analysis changed from 1stQFY20-4QFY23 to 1QFY21-4thQ2025, and the EA-18G Phase C analysis is now planned to begin in 1QFY23-4thQFY25 instead of 4QFY23-4thQFY24.

PU 3182: Schedule updated to provide detailed schematic display of major program milestones, to include: contracting activities, engineering milestones, acquisition approvals, test and evaluation events, and other applicable program milestones.

PU 3384: Changes to the schedule to reflect the conversion of the MH-60S Block 1 to Block 3B Aircraft to extend the mission profile, ECP Development, and extended Fatigue Life Assessment (FLA) to conduct refined analysis based on initial results. FLA end date changed from 2QFY2022 to 4QFY2024.

PU 9999: Changes to the schedule to reflect the addition of Tired Wiring to begin 4QFY2019 and FY 2020 efforts for FLA Follow-On and Block 1 to Block 3 Conversion.

Exhibit R-2A, RDT&E Project Justification: PB 2021 Navy			Date: February 2020
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 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
3030: *FA-18 SLAP*	234.776	15.491	25.952	24.834	-	24.834	29.727	30.659	32.476	22.927	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 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Title: F/A-18 SLAP	11.106	9.298	6.354	0.000	6.354
Articles:	-	-	-	-	-
Description: The current design life limits do not support USN inventory requirements. Funding supports assessing the structural and component 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 2020 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.					

Exhibit R-2A, RDT&E Project Justification: PB 2021 Navy		Date: February 2020
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 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
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 2021 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. 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 2021 OCO Plans:*** N/A ***FY 2020 to FY 2021 Increase/Decrease Statement:*** Decrease of $2.944 from FY20 to FY21 is due to the completion of Aircraft Teardown Assessments. FY20 is the final year of this 3-year effort.					
Title: EA-18G SLAP	4.385	16.654	18.480	0.000	18.480
Articles:	-	-	-	-	-
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 leverages lessons learned from the F/A-18 A-F SLAP in order to achieve efficiencies in continuity of operations. ***FY 2020 Plans:*** 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					

Exhibit R-2A, RDT&E Project Justification: PB 2021 Navy		Date: February 2020
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 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Proposals (ECPs) that will address aircraft fuselage and wing structure changes required to meet service life beyond 7,500 hours. ***FY 2021 Base Plans:*** 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. ***FY 2021 OCO Plans:*** N/A ***FY 2020 to FY 2021 Increase/Decrease Statement:*** Increase of $1.826 from FY20 to FY21 is due to the commencement of Phase B Structures Analysis beginning in 1QFY21. In FY20, Structures Analysis for the EA-18G will be constrained to Phase A, while both Phase A and Phase B will be underway in FY21.					
Accomplishments/Planned Programs Subtotals	15.491	25.952	24.834	0.000	24.834

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
• APN/0525: *F-18 Series (OSIP 020-14)*	1,086.661	1,129.318	379.351	-	379.351	393.554	593.626	638.606	877.957	4,746.766	20,931.518
• APN/0505: *F/A-18EF & EA-18G Modernization & Sustainment*	0.000	0.000	468.954	-	468.954	558.476	844.065	847.521	826.835	488,591.834	492,137.685

Remarks

Exhibit R-2A, RDT&E Project Justification: PB 2021 Navy		Date: February 2020
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0702207N / *Depot Maintenance (NON-IF)*	**Project (Number/Name)** 3030 / *FA-18 SLAP*

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, developing requirements to extend flight hours (FH) from 6,000 to 10,000 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).

Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Navy		Date: February 2020
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0702207N / *Depot Maintenance (NON-IF)*	**Project (Number/Name)** 3030 / *FA-18 SLAP*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Product Development SLAP F/A-18 E/F	SS/CPFF	Boeing : St. Louis, MO	161.670	7.043	Dec 2018	7.286	Dec 2019	5.533	Dec 2020	-		5.533	Continuing	Continuing	Continuing
Product Development SLAP EA-18G	SS/CPFF	Boeing : St. Louis, MO	4.835	3.678	Dec 2018	15.454	Dec 2019	17.257	Dec 2020	-		17.257	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	195.280	10.721		22.740		22.790		-		22.790	Continuing	Continuing	N/A

Remarks

EA-18G SLAP Product Development increases in FY21 due to commencement of Structures Phase B.

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total 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	9.993	1.254	Dec 2018	0.365	Dec 2019	0.372	Dec 2020	-		0.372	Continuing	Continuing	Continuing
SLAP F/A-18 E/F	WR	FRC Southwest : San Diego, CA	8.087	0.403	Dec 2018	0.214	Dec 2019	0.218	Dec 2020	-		0.218	Continuing	Continuing	Continuing
SLAP EA-18G	WR	NAWCAD : Patuxent River, MD	0.000	0.450	Dec 2018	0.700	Dec 2019	0.713	Dec 2020	-		0.713	Continuing	Continuing	Continuing
SLAP EA-18G	WR	FRC Southwest : San Diego, CA	0.000	0.200	Dec 2018	0.400	Dec 2019	0.408	Dec 2020	-		0.408	Continuing	Continuing	Continuing
		Subtotal	24.605	2.307		1.679		1.711		-		1.711	Continuing	Continuing	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Navy			Date: February 2020
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)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Development Test & Evaluation F/A-18 E/F	WR	NAWCAD : Patuxent River, MD	2.193	2.123	Dec 2018	1.134	Dec 2019	0.000		-		0.000	0.000	5.450	-
Development Test & Evaluation EA-18G	WR	NAWCAD : Patuxent River, MD	0.000	0.057	Dec 2018	0.100	Dec 2019	0.102	Dec 2020	-		0.102	Continuing	Continuing	Continuing
		Subtotal	2.193	2.180		1.234		0.102		-		0.102	Continuing	Continuing	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total 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	0.000		0.000		0.000		-		0.000	0.000	5.954	-
Travel	Various	NAVAIR : Patuxent River, MD	0.351	0.075	Oct 2018	0.075	Oct 2019	0.075	Oct 2020	-		0.075	Continuing	Continuing	Continuing
Program Management Support (Seaport-CSS)	C/CPFF	WYLE LAB : Patuxent River, MD	2.697	0.039	Dec 2018	0.052	Dec 2019	0.034	Dec 2020	-		0.034	Continuing	Continuing	Continuing
Program Management Support	Various	NAWCAD : Patuxent River, MD	2.829	0.051	Dec 2018	0.052	Dec 2019	0.000		-		0.000	0.000	2.932	2.932
Program Management Support	C/CPFF	Engility : Patuxent River, MD	0.867	0.118	Dec 2018	0.120	Feb 2020	0.122	Dec 2020	-		0.122	Continuing	Continuing	Continuing
		Subtotal	12.698	0.283		0.299		0.231		-		0.231	Continuing	Continuing	N/A

	Prior Years	FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	234.776	15.491		25.952		24.834		-		24.834	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2021 Navy		Date: February 2020
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0702207N / *Depot Maintenance (NON-IF)*	**Project (Number/Name)** 3030 / *FA-18 SLAP*

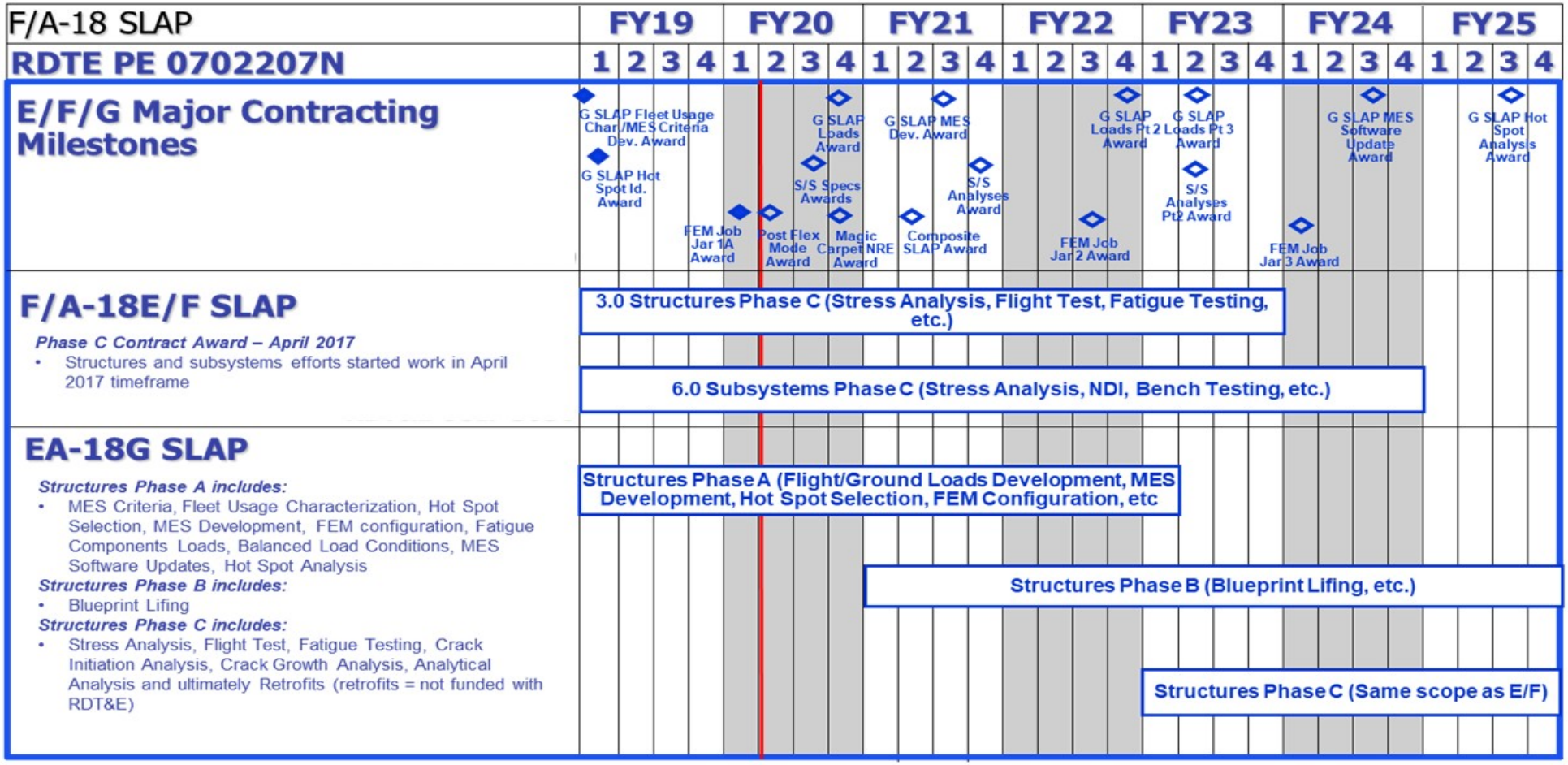

Exhibit R-4A, RDT&E Schedule Details: PB 2021 Navy		Date: February 2020
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0702207N / *Depot Maintenance (NON-IF)*	**Project (Number/Name)** 3030 / *FA-18 SLAP*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Service Life Assessment Program F/A-18 & EA-18G				
F/A-18E/F SLAP: Structures: 3.0 Structures Analysis Phase C	1	2019	4	2023
F/A-18E/F SLAP: Subsystems: 6.0 Subsystems Analysis Phase C	1	2019	4	2024
EA-18G SLAP: Structures: Analysis Phase A	1	2019	1	2023
EA-18G SLAP: Structures: Analysis Phase B	1	2021	4	2025
EA-18G SLAP: Structures: Analysis Phase C	1	2023	4	2025

Exhibit R-2A, RDT&E Project Justification: PB 2021 Navy			Date: February 2020
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 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
3182: *T-45 SLAP*	26.005	5.192	6.700	6.681	-	6.681	5.724	0.000	0.000	0.000	0.000	50.302
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 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Title: T-45 SLAP	5.192	6.700	6.681	0.000	6.681
Articles:	-	-	-	-	-
Description: Funding supports development, integration, test, and certification of a Subsystem SLAP to determine modifications necessary to extend service life through 2035.					
FY 2020 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 2021 Base Plans: Continue Subsystem SLAP activities, engineering studies, fatigue, endurance and cyclic testing of actual parts. As well as additional fatigue testing to replace subsystems in the fleet requiring age exploration.					
FY 2021 OCO Plans: N/A					
FY 2020 to FY 2021 Increase/Decrease Statement:					

Exhibit R-2A, RDT&E Project Justification: PB 2021 Navy		Date: February 2020
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0702207N / *Depot Maintenance (NON-IF)*	**Project (Number/Name)** 3182 / *T-45 SLAP*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
The FY2021 funding request was reduced by $0.019M to account for the availability of prior year execution balances.					
Accomplishments/Planned Programs Subtotals	5.192	6.700	6.681	0.000	6.681

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
• APN/0569: *T-45 Service Life Ext Prg (SLEP) OSIP 022-14*	182.814	174.526	155.745	-	155.745	204.014	217.374	190.450	195.273	365.115	2,736.823

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.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Navy			Date: February 2020
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)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Product Development SLAP T-45	SS/CPFF	Boeing : St. Louis, MO	12.882	3.606	Jun 2019	5.790	Feb 2020	5.894	Feb 2021	-		5.894	4.892	33.064	33.064
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	3.606		5.790		5.894		-		5.894	4.892	33.514	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Engineering Technical Support	WR	NAWCAD : Patuxent River, MD	6.270	1.062	Nov 2018	0.646	Nov 2019	0.524	Nov 2020	-		0.524	0.636	9.138	-
Engineering Technical Support	WR	NADEP : Jacksonville, FL	2.472	0.185	Nov 2018	0.183	Nov 2019	0.180	Nov 2020	-		0.180	0.128	3.148	-
Engineering and Logistics Support	C/IDIQ	Boeing : St. Louis, MO	0.000	0.259	Jun 2019	0.000		0.000		-		0.000	0.000	0.259	0.259
Prior Year Support Costs no longer in FYDP	Various	Various : Various	3.449	0.000		0.000		0.000		-		0.000	0.000	3.449	-
		Subtotal	12.191	1.506		0.829		0.704		-		0.704	0.764	15.994	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Travel	Various	NAVAIR : Patuxent River, MD	0.482	0.080	Nov 2018	0.081	Nov 2019	0.083	Nov 2020	-		0.083	0.068	0.794	-
		Subtotal	0.482	0.080		0.081		0.083		-		0.083	0.068	0.794	N/A

	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	26.005	5.192		6.700		6.681		-		6.681	5.724	50.302	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Navy			Date: February 2020
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 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2021 Navy		Date: February 2020
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0702207N / *Depot Maintenance (NON-IF)*	**Project (Number/Name)** 3182 / *T-45 SLAP*

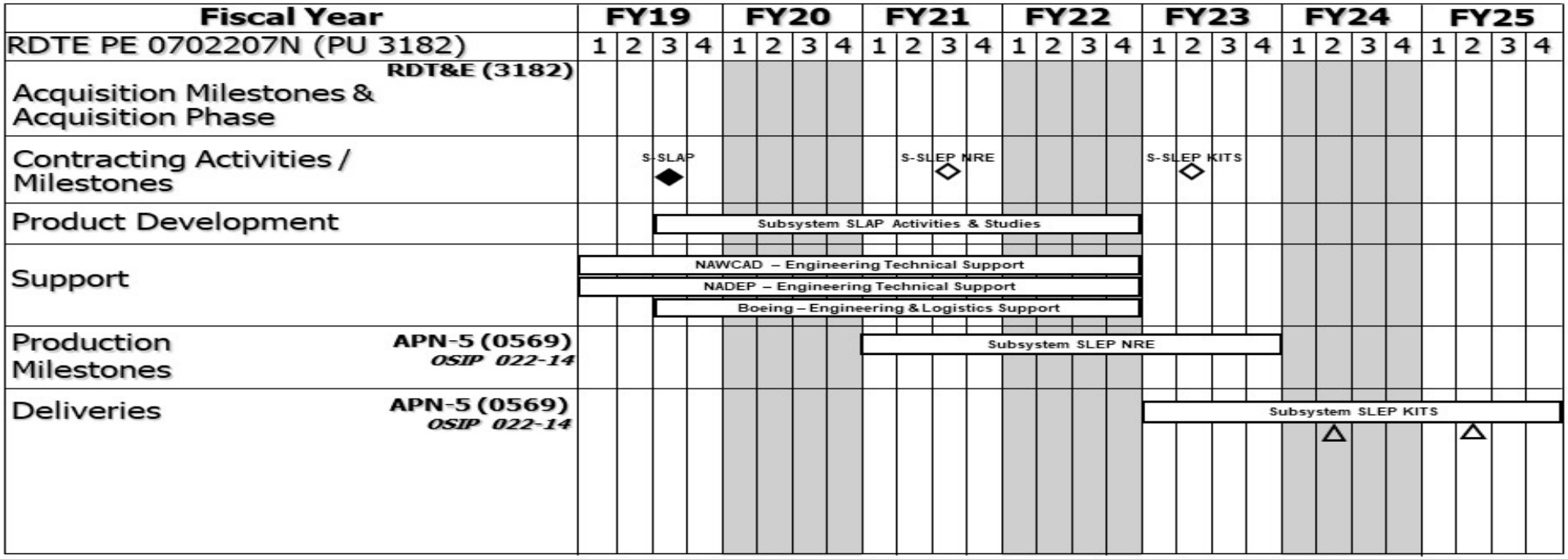

Exhibit R-4A, RDT&E Schedule Details: PB 2021 Navy		Date: February 2020
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0702207N / *Depot Maintenance (NON-IF)*	**Project (Number/Name)** 3182 / *T-45 SLAP*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
T-45 SLAP				
Product Development: Subsystem SLAP Activities & Studies	3	2019	4	2022
Product Development: S-SLAP	3	2019	3	2019
Support: Engineering Technical Support	1	2019	4	2022

Exhibit R-2A, RDT&E Project Justification: PB 2021 Navy			Date: February 2020
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 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
3384: *MH-60 SLAP*	8.124	6.624	5.530	13.653	-	13.653	30.062	33.664	31.772	22.780	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

MH-60 SLAP is assessing the primary aircraft structure and subsystem condition of the MH-60S fleet in order to evaluate the airframe's ability to meet its designed service life of 10,000 hours. SLAP will determine the efforts necessary to extend the aircraft design life limits to meet Chief of Naval Operations (CNO) operational inventory requirements through FY 2035. The highest flight time MH-60S helicopters are expected to exceed the design life limit in 2024, at which time as many as 30 aircraft per year could be removed from flight status without a SLAP and follow-on Service Life Extension Program (SLEP). MH-60 SLAP is comprised of two distinct assessments: FLA, which will establish the fatigue life of the aircraft and air vehicle systems and Subsystem Life Assessment (SLA), which will examine subsystems that are critical to safe operations and identify 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.

FY 2021 budget request funds the continuation of fatigue analysis and dispositions for safety critical items. The fatigue analysis and dispositions for safety critical items will continue to be further refined throughout SLAP effort, augmented with aircraft, specific system and wiring teardowns, inspections, and tests; data analysis; and development of models and tools, producing results that will inform SLEP activity. Design and development engineering will be performed to develop an Engineering Change Proposal (ECP) for a SLEP solution. Additionally, a plan will be developed to convert the MH-60S Block 1 aircraft to Block 3B aircraft, extending the mission profile for these aircraft and ultimately providing the fleet with more flight hours.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Title: MH-60 SLAP	6.624	5.530	13.653	0.000	13.653
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 2020 Plans:					

Exhibit R-2A, RDT&E Project Justification: PB 2021 Navy		Date: February 2020
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0702207N / *Depot Maintenance (NON-IF)*	**Project (Number/Name)** 3384 / *MH-60 SLAP*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
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 the development and design of SLEP solutions for hardware kit designs. ***FY 2021 Base Plans:*** Continue collecting SLAP analysis to determine SLEP output and ECP development. Funding to add MH-60S Block 3B capability to the Navy's MH-60S Block 1 aircraft. ***FY 2021 OCO Plans:*** N/A ***FY 2020 to FY 2021 Increase/Decrease Statement:*** Increase of $8.123 million from FY 2020 to FY 2021 for the design and development of SLEP kits and the Block 3B Upgrade.					
Accomplishments/Planned Programs Subtotals	6.624	5.530	13.653	0.000	13.653

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
• APN-5/0530: *SH60 Series (OSIP 001-23)*	0.000	0.000	0.000	-	0.000	0.000	15.300	19.900	36.700	1,221.833	1,293.733

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; sole source contracts with MERCER and Eclypse for data analysis and tool development; a sole source contract with STADCO, the alignment fixture provider; and government engineering and logistics expertise at Naval Air Station Patuxent River, MD; H-60 Fleet Support Team at Cherry Point, NC; and Naval Air Station North Island, Coronado, CA. 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.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Navy		Date: February 2020
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)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Fatigue Life Assessment MH-60S	SS/CPFF	Lockheed Martin : Owego, NY	2.612	3.437	Dec 2018	3.000	Dec 2019	1.365	Dec 2020	-		1.365	6.305	16.719	16.719
Subsystem Life Assessment MH-60S	Various	Various : Various	3.585	0.629	May 2019	0.000		0.000		-		0.000	0.000	4.214	4.214
MH-60S ECP SLEP Development	SS/CPFF	Lockheed Martin : Owego, NY	0.000	0.000		0.000		2.000	May 2021	-		2.000	92.420	94.420	94.420
Block Upgrade Development	SS/CPFF	Lockheed Martin : Owego, NY	0.000	0.000		0.000		6.500	Jan 2021	-		6.500	6.500	13.000	13.000
		Subtotal	6.197	4.066		3.000		9.865		-		9.865	105.225	128.353	N/A

Remarks

FY 2021 Product Improvement increase is due to the design and development of SLEP kits and the Block 3B Upgrade.
Fatigue Life Assessment (FLA): $1.365M to Lockheed Martin for the completion of the baseline analysis consisting of structural investigations of all major structure components of the aircraft. Cockpit beams, engine mounts, main landing gear, tail landing gear and tie-down fittings/structures are a few examples.
MH-60S ECP SLEP Development: $2.000M Based on findings from the FLA, SLA and government inspections, design improvements and development engineering for Engineering Change Proposals for the MH-60S will commence to increase aircraft design life.
Block 1 to Block 3 Upgrade: $6.500M to fund engineering for the design/development of Engineering Change Proposals for kits and retrofit procedures to convert the MH-60S Block 1 aircraft into MH-60S Block 3B aircraft.

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
SLAP MH-60S	WR	NAWCAD : Patuxent River, MD	0.392	1.102	Nov 2018	1.320	Nov 2019	1.570	Nov 2020	-		1.570	Continuing	Continuing	Continuing
SLAP MH-60S	WR	Various : Various	0.456	0.524	Nov 2018	0.750	Nov 2019	1.200	Nov 2020	-		1.200	Continuing	Continuing	Continuing
Eng & Tech Srvc (Non FFRDC)	Various	Various : Various	0.168	0.205	Apr 2019	0.171	May 2020	0.205	May 2021	-		0.205	0.000	0.749	Continuing
		Subtotal	1.016	1.831		2.241		2.975		-		2.975	Continuing	Continuing	N/A

Remarks

FY 2021 NAWC increase is due to engineering support for the design and development of SLEP kits.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Navy		Date: February 2020
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0702207N / *Depot Maintenance (NON-IF)*	**Project (Number/Name)** 3384 / *MH-60 SLAP*

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Support: $2.975M funds engineering and the fleet support team for continuing component tests, aircraft inspections, and assembly teardown data analysis to identify other areas of concern that were not addressed in the FLA.															

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Technical Support SLAP MH-60S	WR	NAWCAD : Patuxent River, MD	0.331	0.180	Nov 2018	0.228	Nov 2019	0.750	Nov 2020	-		0.750	Continuing	Continuing	Continuing
Mgmt Supt Services (Non FFRDC)	Various	Various : Various	0.580	0.529	May 2019	0.043	May 2020	0.045	May 2021	-		0.045	0.000	1.197	Continuing
Travel	Various	NAVAIR : Patuxent River, MD	0.000	0.018	Oct 2018	0.018	Oct 2019	0.018	Oct 2020	-		0.018	0.000	0.054	-
		Subtotal	0.911	0.727		0.289		0.813		-		0.813	Continuing	Continuing	N/A

Remarks

FY 2021 NAWC increase is due to management support for the design and development of SLEP kits.
Management: $0.813M provides program management, configuration tracking and program scheduling as required for SLAP analysis, ECP development and follow on aircraft fatigue deep look requirements.

	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	8.124	6.624		5.530		13.653		-		13.653	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2021 Navy		Date: February 2020
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0702207N / *Depot Maintenance (NON-IF)*	**Project (Number/Name)** 3384 / *MH-60 SLAP*

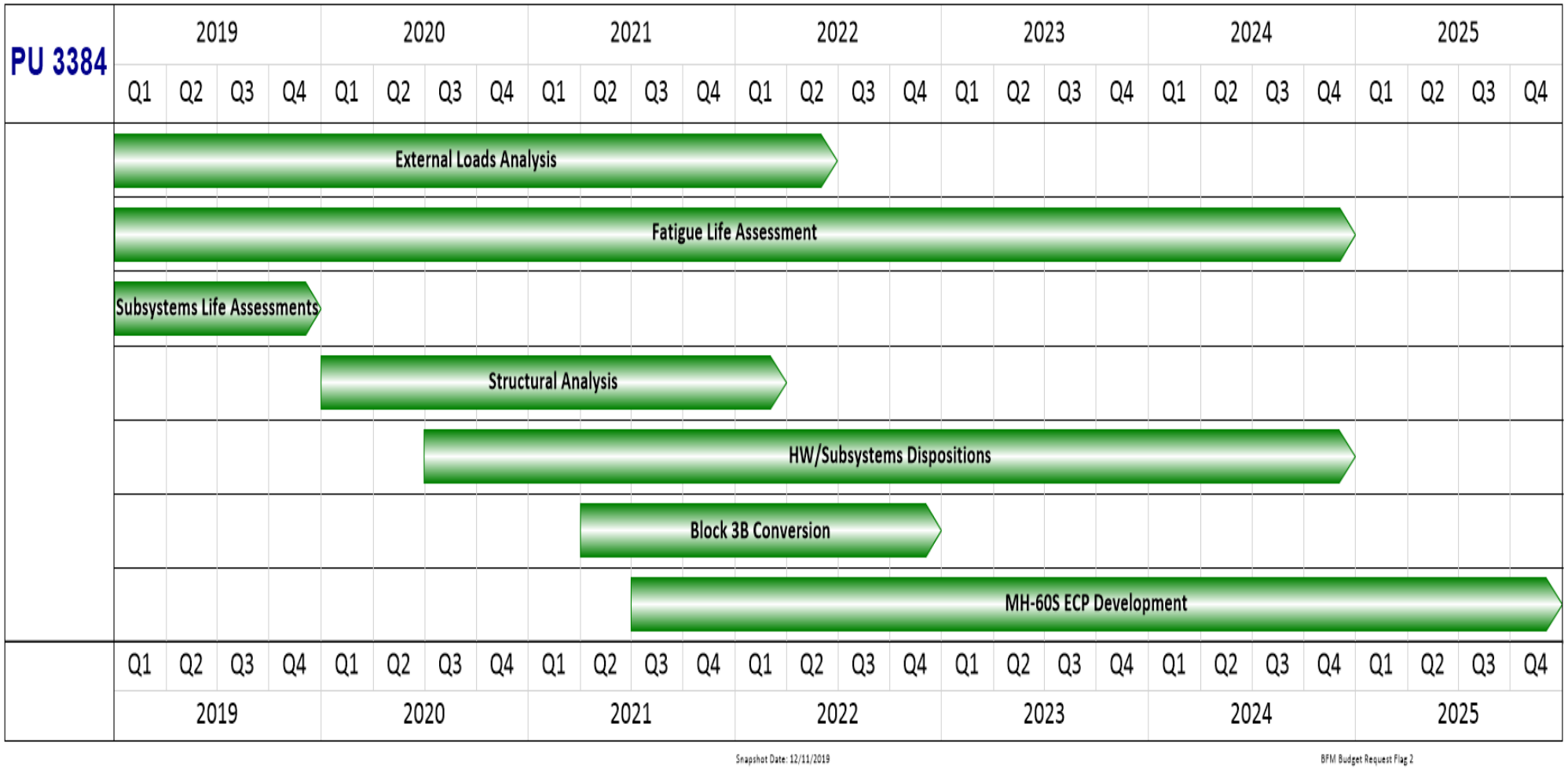

Exhibit R-4A, RDT&E Schedule Details: PB 2021 Navy		Date: February 2020
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0702207N / *Depot Maintenance (NON-IF)*	**Project (Number/Name)** 3384 / *MH-60 SLAP*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 3384				
External Loads Analysis	1	2019	2	2022
Fatigue Life Assessment	1	2019	4	2024
Subsystems Life Assessments	1	2019	4	2019
Structural Analysis	1	2020	1	2022
HW/Subsystems Dispositions	3	2020	4	2024
Block 3B Conversion	2	2021	4	2022
MH-60S ECP Development	3	2021	4	2025

Exhibit R-2A, RDT&E Project Justification: PB 2021 Navy			Date: February 2020
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0702207N / *Depot Maintenance (NON-IF)*	Project (Number/Name) 9999 / *Congressional Adds*	

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
9999: *Congressional Adds*	0.000	9.654	10.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	19.654
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. FY 2020 Non-Recurring Engineering Congressional Add funds the 401D Software Development Analysis; Phase II of the Product Life Cycle Management; the procurement of additional Automatic Wiring Analyzer equipment for identifying Tired Wiring solutions; Drawings/models and associated lists from the OEM in support of additional SLAP deep look inspections; stand-up the Fatigue Life Analysis (FLA) logical follow-on contract to capture flight test data to re-analyze focus areas identified by FLA; development of the MH-60S Block 1 to Block 3 Conversion Kit; and transition section analysis.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020
Congressional Add: MH-60 SLAP ***FY 2019 Accomplishments:*** 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. ***FY 2020 Plans:*** N/A	9.654	0.000
Congressional Add: MH-60 NRE ***FY 2019 Accomplishments:*** N/A ***FY 2020 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 the development and design of SLEP solutions for hardware kit designs. This SLAP will consider the entire MH-60S weapon system and provide the development, procurement, and installation of changes needed to remain operationally viable.	0.000	10.000
Congressional Adds Subtotals	9.654	10.000

Exhibit R-2A, RDT&E Project Justification: PB 2021 Navy		Date: February 2020
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0702207N / *Depot Maintenance (NON-IF)*	**Project (Number/Name)** 9999 / *Congressional Adds*

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 contract with Siemens; a sole source contract with General Electric; Government engineering and logistic expertise at Naval Air Station (NAS) Patuxent River, MD; H-60 Fleet Support Team at Cherry Point, NC; and Naval Air Station North Island, Coronado, CA; and other activities as required.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Navy			Date: February 2020
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)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total 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	4.702	Aug 2019	0.000		0.000		-		0.000	0.000	4.702	4.702
MH-60S Tired Wiring	WR	Various : Various	0.000	1.424	Aug 2019	1.150	Jun 2020	0.000		-		0.000	0.000	2.574	-
T-700-401D Software	SS/CPFF	GE : Lynn, MA	0.000	2.489	Feb 2019	0.000		0.000		-		0.000	0.000	2.489	2.489
SLAP Engineering & Logistics Support	SS/CPFF	Lockheed Martin : Owego, NY	0.000	1.039	Jun 2019	0.000		0.000		-		0.000	0.000	1.039	1.039
Fatigue Life Assessment MH-60S Follow-On	SS/CPFF	Lockheed Martin : Owego, NY	0.000	0.000		2.500	Aug 2020	0.000		-		0.000	0.000	2.500	2.500
Block 1 to Block 3 Conversion	SS/CPFF	Lockheed Martin : Owego, NY	0.000	0.000		4.000	Aug 2020	0.000		-		0.000	0.000	4.000	4.000
		Subtotal	0.000	9.654		7.650		0.000		-		0.000	0.000	17.304	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
SLAP MH-60S	WR	Various : Various	0.000	0.000		2.350	Jan 2020	0.000		-		0.000	0.000	2.350	-
		Subtotal	0.000	0.000		2.350		0.000		-		0.000	0.000	2.350	N/A

	Prior Years	FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	9.654		10.000		0.000		-		0.000	0.000	19.654	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2021 Navy		Date: February 2020
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0702207N / *Depot Maintenance (NON-IF)*	**Project (Number/Name)** 9999 / *Congressional Adds*

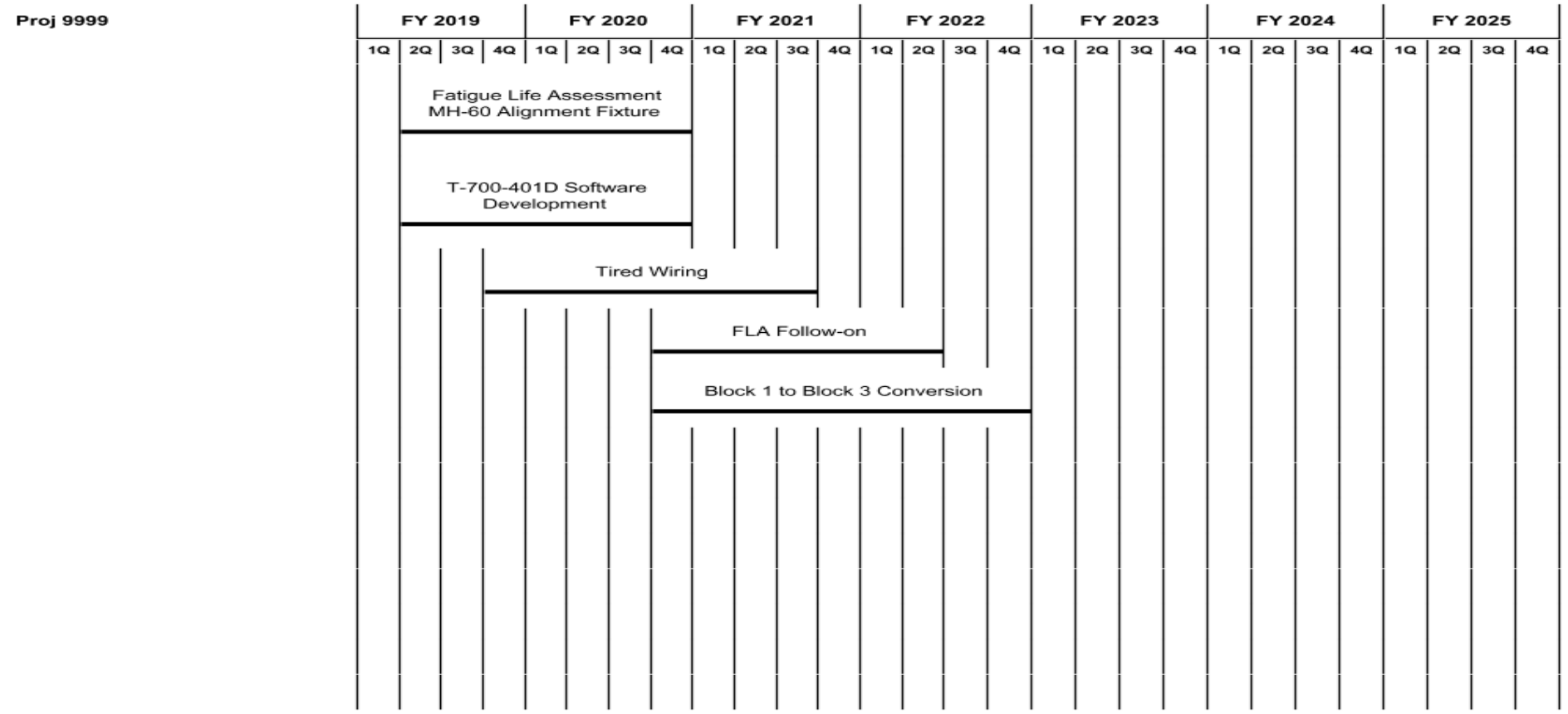

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Exhibit R-4A, RDT&E Schedule Details: PB 2021 Navy		Date: February 2020
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0702207N / *Depot Maintenance (NON-IF)*	**Project (Number/Name)** 9999 / *Congressional Adds*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 9999				
Fatigue Life Assessment MH-60 Alignment Fixture	2	2019	4	2020
T-700-401D Software Development	2	2019	4	2020
Tired Wiring	4	2019	3	2021
FLA Follow-on	4	2020	2	2022
Block 1 to Block 3 Conversion	4	2020	4	2022