Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Navy	Date: March 2024
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 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
Total Program Element	387.608	25.178	23.248	28.799	-	28.799	11.191	8.188	5.157	2.512	Continuing	Continuing
3030: *FA-18 SLAP*	285.297	10.645	9.472	6.402	-	6.402	4.894	3.507	2.434	2.482	Continuing	Continuing
3182: *T-45 SLAP*	48.540	0.319	0.000	0.484	-	0.484	0.235	0.000	0.000	0.000	0.000	49.578
3384: *MH-60 SLAP*	53.771	14.214	13.776	21.913	-	21.913	6.062	4.681	2.723	0.030	Continuing	Continuing

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 is 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. 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. 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-60 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 CNO operational inventory requirements through FY 2040. The highest flight time MH-60S helicopters are expected to exceed the design life limit in 2026, at which time as many as 30 aircraft per year could be removed from flight status without a SLAP and follow-on SLEP directly impacting Combat Logistics, Surface Warfare (SUW), Combat Search and Rescue (CSAR), Naval Special Warfare (NSW) Support, Airborne Mine Countermeasures (AMCM), and operational capabilities and capacity. The highest flight time MH-60R helicopters are expected to exceed the design life in 2034. MH-60 SLAP is comprised of two distinct assessments: investigative inspections and analysis of fleet assets, which will identify current trends that either prohibit the MH-60 from reaching its design life or the required life based on operational inventory requirements; and forward-looking analysis, which will identify future risks not yet realized on fleet assets. These assessments will consider the fatigue life of airframe structure as well as the health of aircraft subsystems.

Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Navy	Date: March 2024
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)*

The airframe structural assessment consists of 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. The aircraft subsystems assessment will evaluate wiring, 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. Analysis will be further refined, augmented with aircraft, specific system and wiring teardowns, inspections, and tests; data analysis; and development of models and tools, producing results that will continue inform SLEP ECP development. Engineering for design/development will ramp for Engineering Change Proposals (ECPs) for a phased SLEP solution.

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 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Previous President's Budget	26.248	23.248	27.977	-	27.977
Current President's Budget	25.178	23.248	28.799	-	28.799
Total Adjustments	-1.070	0.000	0.822	-	0.822
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-1.070	0.000			
• Program Adjustments	0.000	0.000	1.085	-	1.085
• Rate/Misc Adjustments	0.000	0.000	-0.263	-	-0.263

Change Summary Explanation

Cost:

PU 3030: FY2025 funding decreased by $2.894M due to:
- a programmatic decrease of $2.853M,
- a reduction of $0.041M for miscellaneous adjustments.

PU 3182: Not Applicable

PU 3384: FY2025 funding increased by $3.722M due to:
- a programmatic increase of $3.938M for MH-60R SLAP investigations and inspections,
- a reduction of $0.216M for miscellaneous adjustments.

Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Navy	Date: March 2024
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)*

Technical:
PU 3030: Not Applicable
PU 3182: Not applicable
PU 3384: Not applicable

Schedule:

PU 3030: Not Applicable
PU 3182: Not applicable
PU 3384: MH-60R Structure and Subsystems analysis have been added to the schedule beginning Q2 FY2025.

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy											Date: March 2024	
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 2023**	**FY 2024**	**FY 2025 Base**	**FY 2025 OCO**	**FY 2025 Total**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**	**Cost To Complete**	**Total Cost**
3030: *FA-18 SLAP*	285.297	10.645	9.472	6.402	-	6.402	4.894	3.507	2.434	2.482	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; EA-18G are 7,500 FH, 2,550 CAT/Traps and 17,850 total landings. The F/A-18 SLAP program of record states the SLAP goals as 10,000 FH, 2,917 Cat/Traps and 18,750 total landings. The primary objective of F/A-18 and EA-18G SLAP is to determine if the stated SLAP goals are feasible and to determine what modifications are required, if applicable, to extend the airframe. An increase in total landings and flight hours would allow the F/A-18 aircraft to operate for a prolonged period of time in order to meet CNO inventory requirements. The requirements are integrated with the Joint Strike Fighter planned introduction to ensure mission readiness. 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 2023**	**FY 2024**	**FY 2025 Base**	**FY 2025 OCO**	**FY 2025 Total**
Title: F/A-18 SLAP	4.353	3.350	2.431	0.000	2.431
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 2024 Plans: Continue stress/fatigue/structural/crack growth analyses of numerous data points; conduct required Finite Element Model (FEM) runs/correlations, evaluate SLAP composites and hotspot repository with analysis findings. Continue subsystems efforts with the expectation of extending the current service life of F/A-18E/F from the design limits to the SLAP goals in order to prepare for SLEP execution.					
FY 2025 Base Plans: Continue stress/fatigue/structural/crack growth analyses of numerous data points; conduct required Finite Element Model (FEM) runs/correlations, evaluate SLAP composites and hotspot repository with analysis					

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy		Date: March 2024
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 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
findings. Continue subsystems efforts with the expectation of extending the current service life of F/A-18E/F from the design limits to the SLAP goals in order to prepare for SLEP execution. ***FY 2025 OCO Plans:*** N/A ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Decrease from FY2024 to FY2025 of $.919 million for reduction in structural and component condition evaluations for F/A-18 SLAP.					
Title: EA-18G SLAP	6.292	6.122	3.971	0.000	3.971
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 2024 Plans:*** Continuation of ongoing stress/fatigue/structural analysis of numerous data points as well as Finite Element Model (FEM) runs/correlation and subsystems efforts to provide exploitation of complete structural/fatigue and subsystem 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 and crack initiation will be performed to determine recurring requirements to extend the platform beyond its current service life limits. These engineering results will address aircraft fuselage and wing structure changes required to meet service life beyond 7,500 hours. ***FY 2025 Base Plans:*** Continuation of ongoing stress/fatigue/structural analysis of numerous data points as well as Finite Element Model (FEM) runs/correlation and subsystems efforts to provide exploitation of complete structural/fatigue and subsystem 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					

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy		Date: March 2024
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 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
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 and crack initiation will be performed to determine recurring requirements to extend the platform beyond its current service life limits. These engineering results will address aircraft fuselage and wing structure changes required to meet service life beyond 7,500 hours. ***FY 2025 OCO Plans:*** N/A ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Decrease from FY2024 to FY2025 of $2.151 million is due to efficiencies gained from overlapping phases for structures and subsystem efforts between E/F and G.					
Accomplishments/Planned Programs Subtotals	10.645	9.472	6.402	0.000	6.402

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
• APN/0525: *F-18 Series*	443.386	640.236	680.613	-	680.613	951.783	1,054.060	1,146.062	1,170.531	3,402.507	23,324.828
• APN/0505: *F/A-18EF & EA-18G Modernization & Sustainment*	544.849	605.416	566.727	-	566.727	629.619	606.013	749.867	777.208	3,770.230	9,072.711

Remarks

D. Acquisition Strategy

The Service Life Assessment Program (SLAP) program employs sole source contracts with Boeing, the aircraft prime manufacturer. SLAP further decomposes program of record goals into smaller discrete steps, developing requirements to extend flight hours (FH) from 6,000 to 10,000. 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 inventory objectives. The program will utilize structural fatigue testing data and actual fleet usage data 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 2025 Navy		Date: March 2024
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 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 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	172.199	2.957	Dec 2022	2.334	Dec 2023	1.257	Dec 2024	-		1.257	Continuing	Continuing	Continuing
Product Development SLAP EA-18G	SS/CPFF	Boeing : St. Louis, MO	19.015	4.437	Dec 2022	4.617	Dec 2023	2.407	Dec 2024	-		2.407	Continuing	Continuing	Continuing
Prior Year Prod Dev cost no longer funded in FYDP	Various	Various : Various	28.775	0.000		0.000		0.000		-		0.000	0.000	28.775	-
		Subtotal	219.989	7.394		6.951		3.664		-		3.664	Continuing	Continuing	N/A

Remarks

Decrease from FY2024 to FY2025 is due to efficiencies gained from E/F stress/fatigue/structures analysis for the EA-18G SLAP product development efforts.

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
SLAP F/A-18 E/F	WR	NAWCAD : Patuxent River, MD	11.855	0.529	Dec 2022	0.599	Dec 2023	0.734	Dec 2024	-		0.734	Continuing	Continuing	Continuing
SLAP F/A-18 E/F	WR	FRC Southwest : San Diego, CA	9.509	0.673	Dec 2022	0.232	Dec 2023	0.236	Dec 2024	-		0.236	Continuing	Continuing	Continuing
SLAP F/A-18 E/F	WR	FRC Southeast : Jacksonville, FL	0.044	0.035	Dec 2022	0.132	Dec 2023	0.041	Dec 2024	-		0.041	0.004	0.256	-
SLAP EA-18G	WR	NAWCAD : Patuxent River, MD	8.529	0.792	Dec 2022	0.783	Dec 2023	1.061	Dec 2024	-		1.061	Continuing	Continuing	Continuing
SLAP EA-18G	WR	FRC Southwest : San Diego, CA	4.678	1.010	Dec 2022	0.433	Dec 2023	0.442	Dec 2024	-		0.442	Continuing	Continuing	Continuing
SLAP EA-18G	WR	FRC Southeast : Jacksonville, FL	0.363	0.053	Dec 2022	0.181	Dec 2023	0.061	Dec 2024	-		0.061	0.002	0.660	-
Prior Year Support cost no longer funded in FYDP	Various	Various : Various	6.826	0.000		0.000		0.000		-		0.000	0.000	6.826	-
		Subtotal	41.804	3.092		2.360		2.575		-		2.575	Continuing	Continuing	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy			Date: March 2024
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0702207N / *Depot Maintenance (NON-IF)*	Project (Number/Name) 3030 / *FA-18 SLAP*	

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Remarks Increase from FY2024 to FY2025 is due to ramp up of EA-18G crack initiation/crack growth efforts.															

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation (DT&E)	WR	NAWCAD : Patuxent River, MD	9.396	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Prior Year Developmental Test & Evaluation Not Funded FYDP (PYDT&E)	Various	Various : Various	0.157	0.000		0.000		0.000		-		0.000	0.000	0.157	-
		Subtotal	9.553	0.000		0.000		0.000		-		0.000	Continuing	Continuing	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Travel	Various	NAVAIR : Patuxent River, MD	0.546	0.050	Oct 2022	0.050	Oct 2023	0.050	Oct 2024	-		0.050	Continuing	Continuing	Continuing
Program Management Support (Seaport-CSS)	C/CPFF	Tekla : Patuxent River, MD	0.266	0.109	Apr 2023	0.111	Apr 2024	0.113	Apr 2025	-		0.113	Continuing	Continuing	Continuing
Prior Year Management Services cost no longer funded in FYDP	Various	Various : Various	13.139	0.000		0.000		0.000		-		0.000	0.000	13.139	-
		Subtotal	13.951	0.159		0.161		0.163		-		0.163	Continuing	Continuing	N/A

	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	285.297	10.645		9.472		6.402		-		6.402	Continuing	Continuing	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy			Date: March 2024
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0702207N / *Depot Maintenance (NON-IF)*	Project (Number/Name) 3030 / *FA-18 SLAP*	

	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0702207N / *Depot Maintenance (NON-IF)*	**Project (Number/Name)** 3030 / *FA-18 SLAP*

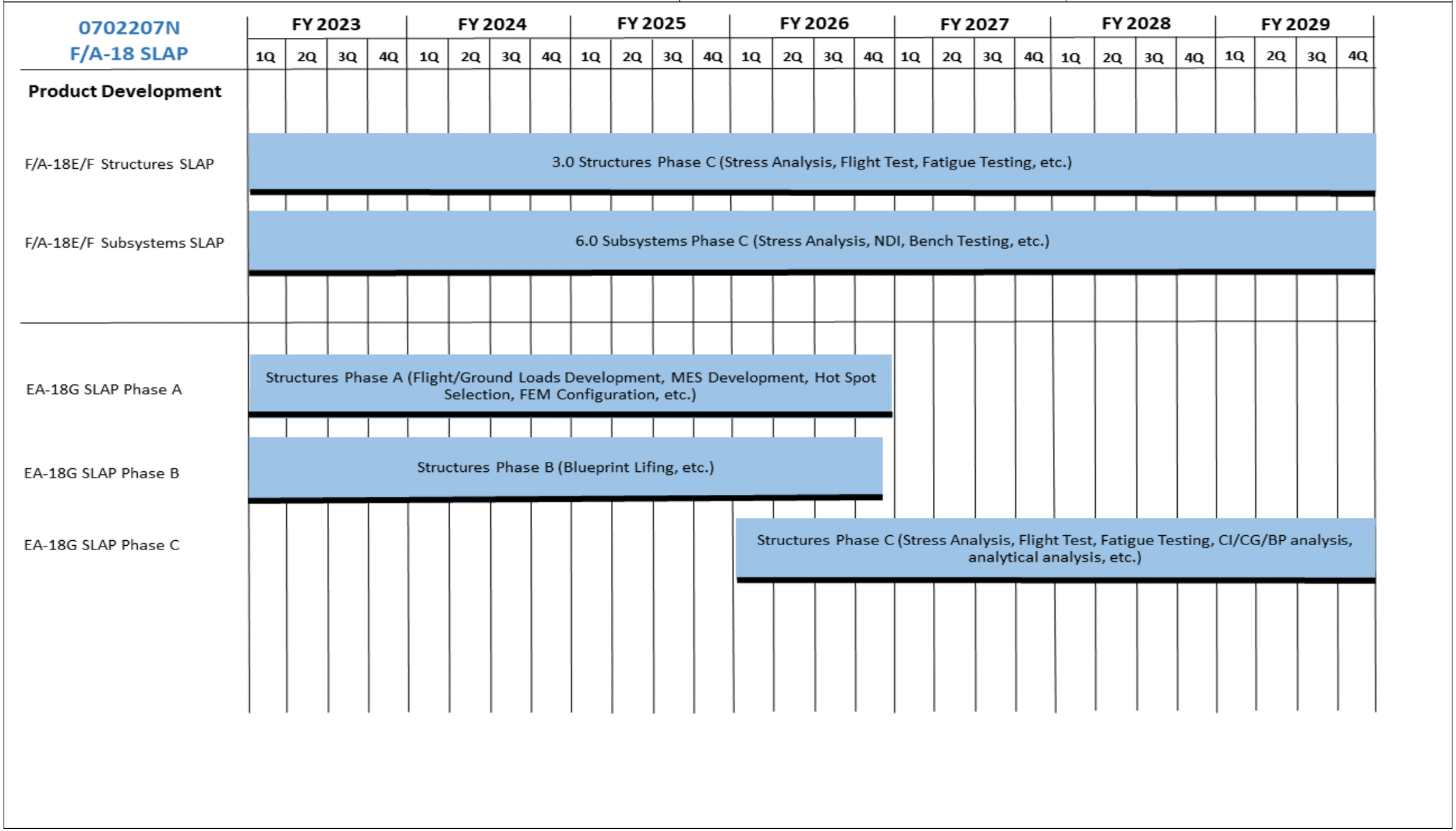


Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0702207N / *Depot Maintenance (NON-IF)*	**Project (Number/Name)** 3030 / *FA-18 SLAP*

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	2023	4	2029
F/A-18E/F SLAP: Subsystems: 6.0 Subsystems Analysis Phase C	1	2023	4	2029
EA-18G SLAP: Structures: Analysis Phase A	1	2023	4	2026
EA-18G SLAP: Structures: Analysis Phase B	1	2023	4	2026
EA-18G SLAP: Structures: Analysis Phase C	1	2026	4	2029

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy			Date: March 2024
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 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
3182: *T-45 SLAP*	48.540	0.319	0.000	0.484	-	0.484	0.235	0.000	0.000	0.000	0.000	49.578
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-45 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 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 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Title: T-45 SLAP	0.319	0.000	0.484	0.000	0.484
Articles:	-	-	-	-	-
Description: Funding supports development, integration, test, and certification of a Subsystem SLAP to determine modifications necessary to extend service life through 2035.					
FY 2024 Plans: N/A					
FY 2025 Base Plans: Continuation of labor support for development, integration, test and certification of subsystem SLAP.					
FY 2025 OCO Plans: N/A					
FY 2024 to FY 2025 Increase/Decrease Statement: Increase of $0.490 in FY2025 for labor associated with the T-45 Structural Service Life Assessment Program (SLAP).					
Accomplishments/Planned Programs Subtotals	0.319	0.000	0.484	0.000	0.484

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0702207N / *Depot Maintenance (NON-IF)*	**Project (Number/Name)** 3182 / *T-45 SLAP*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
• APN/0569: *T-45 Service Life Ext Prg (SLEP) OSIP 022-14*	195.667	170.357	169.978	-	169.978	182.577	186.029	192.593	196.637	653.955	3,690.386

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 2025 Navy			Date: March 2024
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 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Prior Year Development Costs no longer in FYDP	Various	Various : Various	31.900	0.000		0.000		0.000		-		0.000	0.000	31.900	-
		Subtotal	31.900	0.000		0.000		0.000		-		0.000	0.000	31.900	N/A

Remarks

Prior year costs for Product Development SLAP T-45, Boeing were rolled into Prior Year Development Costs no longer in FYDP.
Prior year costs for Product Development SLAP T-45 NACES, Martin Baker were rolled into Prior Year Development Costs no longer in FYDP.

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Engineering Technical Support	WR	NAWCAD : Patuxent River, MD	9.195	0.319	Nov 2022	0.000		0.484	Nov 2024	-		0.484	0.238	10.236	-
Prior Year Support Costs no longer in FYDP	Various	Various : Various	6.863	0.000		0.000		0.000		-		0.000	0.000	6.863	-
		Subtotal	16.058	0.319		0.000		0.484		-		0.484	0.238	17.099	N/A

Remarks

Increase from $0 in FY24 to $0.490M in FY25 to support NAWCAD Pax River Engineering Labor.
Prior year costs for Engineering Technical Support, NADEP were rolled into Prior Year Support Costs no longer in FYDP.
Prior year costs for Engineering Technical Support, NAWCTSD were rolled into Prior Year Support Costs no longer in FYDP.

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Prior Year Management Services Costs no longer in FYDP.	Various	NAVAIR : Patuxent River, MD	0.582	0.000		0.000		0.000		-		0.000	0.000	0.582	-
		Subtotal	0.582	0.000		0.000		0.000		-		0.000	0.000	0.582	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0702207N / *Depot Maintenance (NON-IF)*	**Project (Number/Name)** 3182 / *T-45 SLAP*

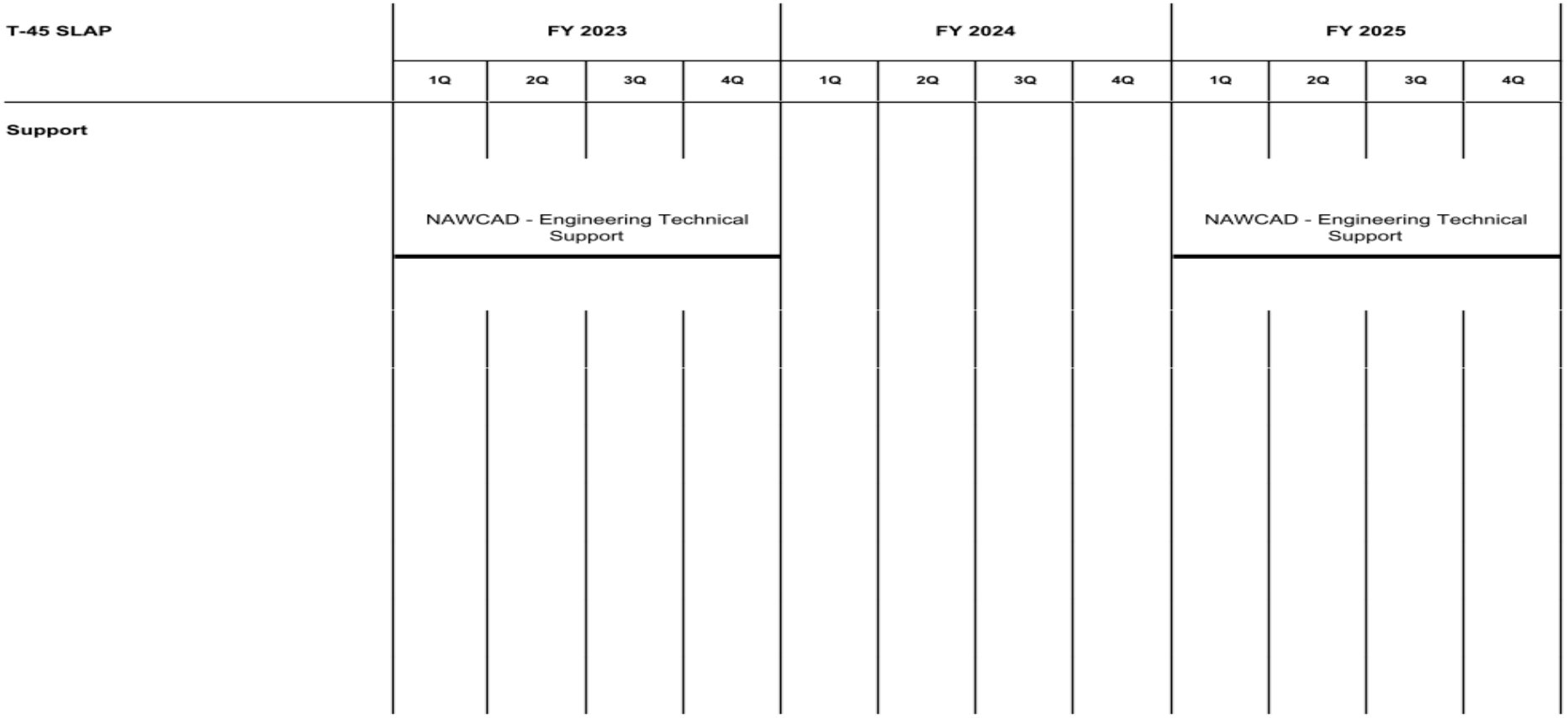
Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Remarks															
Line renamed, Prior Year Management Services Costs no longer in FYDP.															

	Prior Years	FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	48.540	0.319		0.000		0.484		-		0.484	0.238	49.581	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0702207N / *Depot Maintenance (NON-IF)*	**Project (Number/Name)** 3182 / *T-45 SLAP*



2025DON - 0702207N - 3182

Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy		Date: March 2024
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				
Support: NAWCAD - Engineering Technical Support I	1	2023	4	2023
Support: NAWCAD - Engineering Technical Support II	1	2025	4	2026

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy			Date: March 2024
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 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
3384: *MH-60 SLAP*	53.771	14.214	13.776	21.913	-	21.913	6.062	4.681	2.723	0.030	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-60 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 2040. The highest flight time MH-60S helicopters are expected to exceed the design life limit in 2026, 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). The highest flight time MH-60R helicopters are expected to exceed the design life in 2034. MH-60 SLAP is comprised of two distinct assessments: investigative inspections and analysis of fleet assets, which will identify current trends that either prohibit the MH-60 from reaching its design life or the required life based on operational inventory requirements; and forward-looking analysis, which will identify future risks not yet realized on fleet assets. These assessments will consider the fatigue life of airframe structure as well as the health of aircraft subsystems. The airframe structural assessment consists of 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. The aircraft subsystems assessment will evaluate wiring, 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. Assessment findings will be used to determine the technical requirements for a future SLEP.

FY 2025 budget requests funds to continue the SLAP analysis and engineering development that needs to occur to extend the useful life of the MH-60S and ramp the SLAP effort on the MH-60R, to include high-time fleet aircraft detailed inspections/assessments until transition to Future Vertical Lift-Maritime Strike (FVL-MS). Design and development engineering will utilize data from fatigue life assessment, inspection intervals, component replacement intervals, and other strategies to develop the Engineering Change Proposals (ECP's) for the phased MH-60S SLEP solution, and modifications to current maintenance practices.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Title: MH-60 SLAP	14.214	13.776	21.913	0.000	21.913
Articles:	-	-	-	-	-
Description: The current design life limits do not support United States Navy inventory requirements to bridge to a follow-on program procurement. The MH-60S will begin reaching conditional 10,000 hour service life limits in 2026 and the MH-60R in 2034. No full-scale fatigue test or comprehensive structural analysis was performed during initial development. Funding will support assessing the structural and subsystem condition of the MH-60 fleet in order to determine what modifications are necessary to extend the aircraft designed life limits to bridge that gap.					

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy		Date: March 2024
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 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
FY 2024 Plans: Continue to conduct SLEP engineering development and analysis that needs to occur to extend the useful life of the MH-60S until transition to Future Vertical Lift-Maritime Strike (FVL-MS). Complete the Block 3B upgrade, engineering development for tired wiring, and repair and replacement modifications. Continue/ramp engineering design and development efforts for Engineering Change Proposals (ECPs) in support of a phased SLEP solution. Initial engineering in support of MH-60R Usage Spectrum. ***FY 2025 Base Plans:*** Continue to conduct SLEP engineering development and analysis that needs to occur to extend the useful life of the MH-60 Fleet until transition to Future Vertical Lift-Maritime Strike (FVL-MS). Continue/ramp engineering design and development efforts for Engineering Change Proposals (ECPs) in support of a phased MH-60S SLEP solution. Continue engineering in support of MH-60R Usage Spectrum, and conduct investigations/ assessments for the MH-60R aircraft structure and subsystems. ***FY 2025 OCO Plans:*** N/A ***FY 2024 to FY 2025 Increase/Decrease Statement:*** The increase from FY 2024 to FY 2025 reflects the addition of the MH-60R SLAP structural and subsystem assessments and ramping of ECP development for MH-60S SLEP.					
Accomplishments/Planned Programs Subtotals	14.214	13.776	21.913	0.000	21.913

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
• APN/0530: *MH-60 Series*	18.996	16.145	19.319	-	19.319	30.926	33.130	55.170	57.340	515.645	746.671

Remarks

OSIP 001-23 MH-60S SLEP Only relates to PU 3384.

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; 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

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0702207N / *Depot Maintenance (NON-IF)*	**Project (Number/Name)** 3384 / *MH-60 SLAP*

avoid flight line inventory shortfalls. The MH-60S and MH-60R SLAP will consist of two major engineering efforts: the aircraft structural assessment and the aircraft subsystems assessment. Both efforts are broken into multiple phases which develop tools and models, assess current aircraft usage, and develop concepts to extend aircraft life to meet Chief of Naval Operations objectives. The program will utilize structural fatigue testing data and actual fleet usage data with the expectation of extending the service life of the MH-60 aircraft. Conducting both MH-60S and MH-60R SLAP to study the aircraft lifetime will provide a better estimate of aircraft service life and a follow-on SLEP.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy			Date: March 2024
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 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Fatigue Life Assessment MH-60S	SS/CPFF	Lockheed Martin : Owego, NY	13.169	0.000		0.000		0.000		-		0.000	0.000	13.169	13.169
MH-60S ECP SLEP Development	SS/CPFF	Lockheed Martin : Owego, NY	9.160	6.358	May 2023	8.440	May 2024	7.468	May 2025	-		7.468	6.018	37.444	37.834
Block Upgrade Development	SS/CPFF	Lockheed Martin : Owego, NY	12.167	3.129	Jan 2023	0.500	Jan 2024	0.000		-		0.000	0.000	15.796	15.796
Prior Year Prod Dev Cost no longer funded in FYDP	Various	Various : Various	4.240	0.000		0.000		0.000		-		0.000	0.000	4.240	4.240
MH-60R SLAP	SS/CPFF	Lockheed Martin : Owego, NY	0.000	0.000		0.000		5.400	Jan 2025	-		5.400	Continuing	Continuing	Continuing
MH-60R SLAP	TBD	Various : Various	0.000	0.000		0.000		1.500	Jan 2025	-		1.500	Continuing	Continuing	Continuing
		Subtotal	38.736	9.487		8.940		14.368		-		14.368	Continuing	Continuing	N/A

Remarks

The increase from FY 2024 to FY 2025 in Product Development reflects the addition of the MH-60R SLAP and ramping of the MH-60S SLEP efforts.

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
SLAP MH-60S	WR	NAWCAD : Patuxent River, MD	5.937	1.833	Nov 2022	1.872	Nov 2023	1.909	Nov 2024	-		1.909	0.042	11.593	-
SLAP MH-60S	WR	Various : Various	4.204	1.140	Nov 2022	1.160	Nov 2023	1.172	Nov 2024	-		1.172	0.000	7.676	-
Eng & Tech Srvc (Non FFRDC)	Various	Various : Various	0.949	0.250	Nov 2022	0.270	Nov 2023	0.375	Nov 2024	-		0.375	Continuing	Continuing	Continuing
SLAP MH-60R Usage Spectrum	WR	NAWCAD : Patuxent River, MD	0.000	0.250	Oct 2022	0.255	Nov 2023	0.260	Nov 2024	-		0.260	0.740	1.505	-
SLAP MH-60R	WR	NAWCAD : Patuxent River, MD	0.000	0.000		0.000		1.490	Nov 2024	-		1.490	Continuing	Continuing	Continuing
SLAP MH-60R	WR	Various : Various	0.000	0.000		0.000		0.650	Nov 2024	-		0.650	Continuing	Continuing	Continuing
		Subtotal	11.090	3.473		3.557		5.856		-		5.856	Continuing	Continuing	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy		Date: March 2024
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 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract

Remarks

The increase from FY 2024 to FY 2025 in Support reflects the addition of the MH-60R SLAP efforts.

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Technical Support SLAP MH-60	WR	NAWCAD : Patuxent River, MD	2.144	0.721	Nov 2022	0.735	Nov 2023	1.035	Nov 2024	-		1.035	Continuing	Continuing	Continuing
Mgmt Supt Services (Non FFRDC)	Various	Various : Various	1.726	0.514	May 2023	0.524	Nov 2023	0.634	Nov 2024	-		0.634	Continuing	Continuing	Continuing
Travel	Various	NAVAIR : Patuxent River, MD	0.075	0.019	Oct 2022	0.020	Nov 2023	0.020	Nov 2024	-		0.020	0.020	0.154	-
		Subtotal	3.945	1.254		1.279		1.689		-		1.689	Continuing	Continuing	N/A

Remarks

The increase from FY 2024 to FY 2025 in Management Services reflects the addition of the MH-60R SLAP efforts.

	Prior Years	FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	53.771	14.214		13.776		21.913		-		21.913	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0702207N / *Depot Maintenance (NON-IF)*	**Project (Number/Name)** 3384 / *MH-60 SLAP*

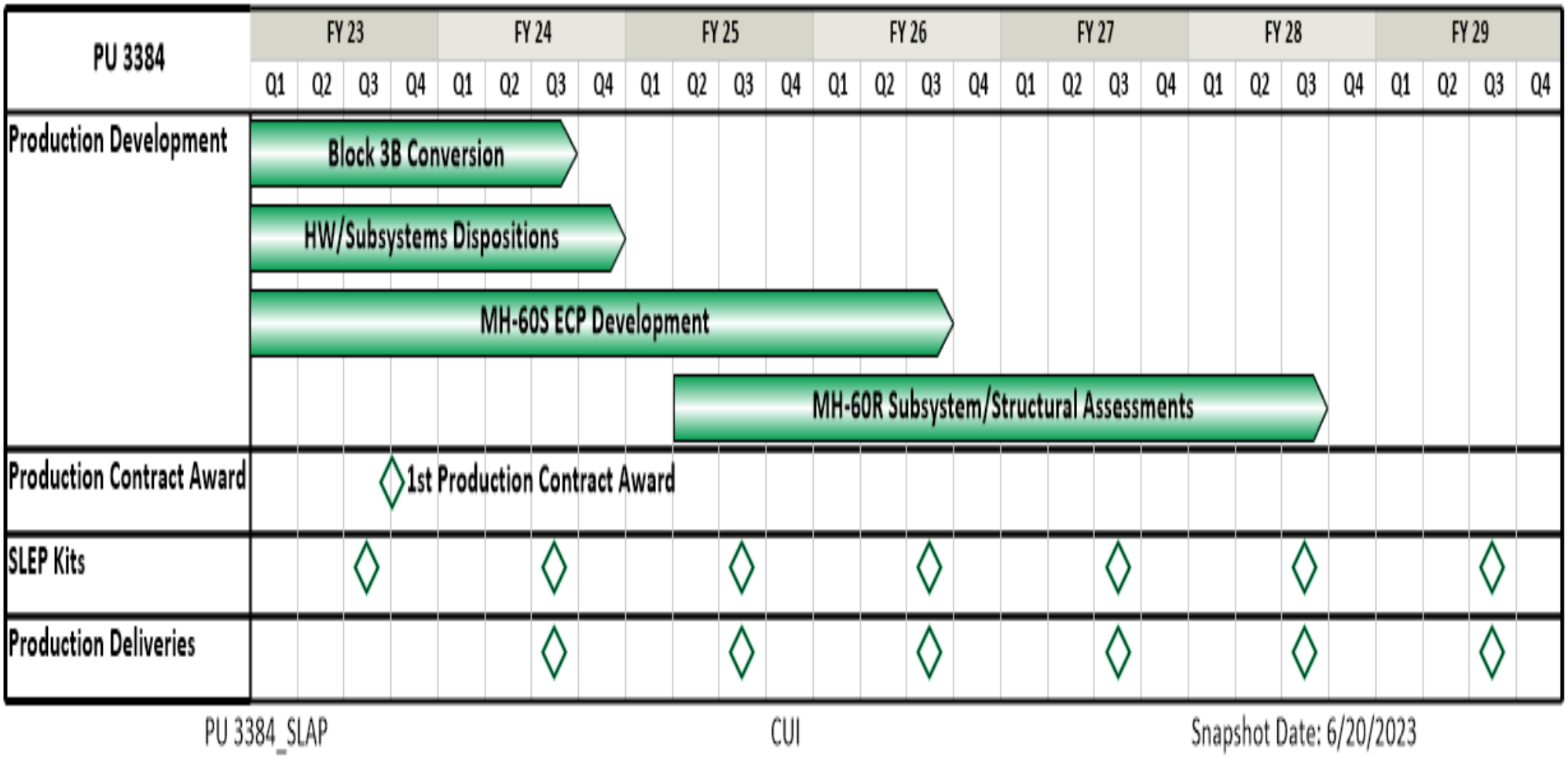


Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0702207N / *Depot Maintenance (NON-IF)*	**Project (Number/Name)** 3384 / *MH-60 SLAP*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 3384				
HW/Subsystems Dispositions	1	2023	4	2024
Block 3B Conversion	1	2023	3	2024
MH-60S ECP Development	1	2023	3	2026
MH-60R Subsystems/Structural Assessments	2	2025	3	2028
Production Contract Awards: Block 3B Conv./SLEP Kits	3	2023	3	2023
Production Contract Awards: Production Deliveries	4	2024	4	2024