Exhibit R-2, RDT&E Budget Item Justification: PB 2025 United States Special Operations Command	Date: March 2024
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*

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	2,370.416	176.998	216.174	263.712	-	263.712	273.602	225.493	181.645	181.367	Continuing	Continuing
SF100: *Aviation Systems Advanced Development*	1,605.123	53.039	56.295	106.356	-	106.356	138.207	113.069	66.383	67.710	Continuing	Continuing
SF200: *CV-22*	83.227	11.757	21.619	15.727	-	15.727	19.064	19.445	19.834	20.231	Continuing	Continuing
SF300: *Armed Overwatch/ Targeting*	45.388	1.156	2.000	2.000	-	2.000	2.000	4.000	5.000	5.100	Continuing	Continuing
S750: *Mission Training and Preparation Systems*	70.394	13.343	3.453	5.361	-	5.361	8.650	7.114	7.213	3.840	Continuing	Continuing
S875: *AC/MC-130J*	186.820	40.038	65.496	74.616	-	74.616	44.757	23.934	24.217	24.341	Continuing	Continuing
D615: *Rotary Wing Aviation*	379.464	57.665	67.311	59.652	-	59.652	60.924	57.931	58.998	60.145	Continuing	Continuing

Program MDAP/MAIS Code:
Project MDAP/MAIS Code(s): 212

A. Mission Description and Budget Item Justification

SF100 Aviation Systems Advanced Development:

This project provides for the development, rapid prototyping, demonstration, and integration of current and maturing technologies for Special Operations-peculiar (SO-p) aviation and training requirements to transform the foundation of future SOF aviation for the Joint Force in order to support the 2022 National Defense Strategy (NDS). Timely application of SO-p technology is critical and necessary to meet requirements in areas such as: Aviation Engineering Analysis (AEA); Electronic Warfare (EW)-Radio Frequency Countermeasures (RFCM); High Speed Vertical Takeoff and Landing (HSVTOL); High Energy Laser (HEL); MC-130J Amphibious Capability (MAC); MH-47G and MH-60M SOF Common Terrain Following (TF)/Terrain Avoidance (TA) Silent Knight Radar (SKR); Precision Strike Package (PSP) and the Adaptive Airborne Enterprise (A2E). The AEA provides engineering analysis, market research, and designs to address aircraft survivability needs such as signature management, situational awareness, and versatile mission platform/equipment (payloads, communication, and weapons) to achieve SOF objectives. The EW-RFCM supports development, integration, and test activities to provide EW capability against Radio Frequency (RF) threats for SO-p AC/MC-130J aircraft. HSVTOL supports development and demonstration of agile and responsive air mobility capabilities to support runway independent operations, increased speed of maneuverability, and provide the ability to penetrate anti-access (A2)/anti-denial (AD) environments. The HEL supports development of an AC-130J laser weapons system for Low Probability of Detection (LPD) use in complex environments to enable joint/coalition SOF operations against targets such as communication nodes, light-to-medium duty vehicles, and power infrastructures. The MAC supports development and demonstration of amphibious capabilities on a C-130J to support runway independent operations and provide the ability to operate in logistically constrained environments. MH-47G and MH-60M SOF Common TF/TA SKR supports development, integration, and testing of SOF Common TF/TA Multi-Mode Radar (MMR) that provides Low Probability of Intercept (LPI) and LPD capabilities for MH-47G and MH-60M aircraft. The PSP supports systems engineering, analysis, development, and enhancement of the baseline PSP for integration, installation, and test for the SOF AC-130J aircraft and other

SOF aviation platforms. A2E will operationalize the Air Force's Uncrewed Aircraft Systems (UAS) strategy to present exquisite, attributable, and expendable UAS for collaborative operations within permissive, contested, and denied environments.

The total cost of the RFCM Middle Tier of Acquisition (MTA) effort is $69.205 million (FY 2022 - FY 2026), including RDT&E and procurement of prototype units. The RFCM effort is fully funded through FY 2026.

SF200 CV-22 Development/Test and Evaluation:
This project supports integration, design, development, rapid prototyping, and test to provide improved capabilities to include: more robust performance in Situational Awareness (SA); intelligence, surveillance, and reconnaissance (ISR); weapons; avionics; SOF communications; defensive/survivability systems; interoperability; speed and maneuverability; mission deployment and improved reliability and maintainability of the CV-22 platform. The CV-22 Osprey is a SOF variant of the V-22 vertical medium lift, multi-mission aircraft. The CV-22 provides long-range, high speed, all weather, infiltration (infil), exfiltration (exfil), and resupply of SOF teams in hostile, denied, and politically sensitive areas that allows the Joint Force to be more agile and responsive as stated in the 2022 NDS. These capabilities are not currently provided by other existing SOF vertical lift aircraft. Funding supports the following CV-22 requirements: CV-22 SOF Common TF/TA SKR, Block 20 Development, Reliability Improvements, and test aircraft flying hours and maintenance. SOF Common TF/TA SKR supports development of the CV-22 SOF Common TF/TA SKR Operational Flight Program (OFP) software and development of CV-22 platform software and hardware to support integration and testing. Block 20 Development supports design, integration, and testing of CV-22 avionics upgrades and correction of deficiencies to include, but not limited to electronic warfare upgrades; improved crew interface functionality; weapon systems; and Airborne Mission Networking (AbMN). Reliability Improvements supports design, integration, test and validation of system, and sub-system, reliability enhancements to meet required aircraft availability and operational requirements. Realibility Improvements accelerate fielding and retrofitting system design improvements directly increasing CV-22 fleet readiness. Test aircraft flying hours and maintenance supports developmental flight testing and maintenance of the test CV-22 aircraft in performance of SOF capability development programs.

SF300 Armed Overwatch:
This project supports integration and testing of SO-p capabilities and aircraft certification efforts for the Armed Overwatch program. Armed Overwatch provides SOF with deployable, affordable, and sustainable crewed aircraft systems capable of executing Close Air Support (CAS), precision strike, and armed ISR requirements in austere and permissive environments for use in irregular warfare operations in support of the 2022 NDS. Armed Overwatch was initially designated a MTA program which utilized a rapid prototype user assessment for a SO-p, fixed wing aircraft with specific sensors to detect ground assets. The USSOCOM Acquisition Executive approved the program's transition to the Major Capability Acquisition pathway at Milestone C in 4th QTR of FY 2022.

S750 Mission Training and Preparation Systems (MTPS):
The MTPS project funds the definition, design, development, rapid prototyping, integration, and testing of Special Operations Mission Planning and Execution (SOMPE) systems to support mission planning, rehearsal, and execution requirements to meet SO-p mission requirements and correct deficiencies in current mission planning, rehearsal, and execution capabilities. The MTPS project also includes program management, systems engineering, configuration management, architecture development, risk reduction, and trade study initiatives, as well as initiatives to assure interoperability and commonality between diverse mission planning, rehearsal, and execution systems. Additionally, this project funds the Extended Reality (XR) Training Transformation Simulator Block Upgrade Fixed Wing (SBUDF) program that

develops and integrates training innovation and transformation solutions across the fixed-wing and special tactics augmented and virtual reality mission training device portfolio, to include AC-130J, MC-130J, CV-22, Armed Overwatch and C-146.

S875 AC/MC-130J:
This project supports the development, rapid prototyping, integration, automation, and testing of the AC-130J and MC-130J aircraft. The AC-130J Ghostrider provides CAS, air interdiction, and armed reconnaissance in support of special operations and conventional forces in contested and degraded environments. The MC-130J Commando II provides clandestine, or low visibility, single or multi-ship, low-level infil, exfil, and resupply of SOF, by airdrop or airland resupply of SOF helicopters and tiltrotor aircraft, intruding politically sensitive or hostile territories. Incremental upgrade and agile software delivery approaches will be used to rapidly prototype, integrate, mature, and continuously improve SOF capabilities for AC-130J and MC 130J aircraft. Efforts like Integrated Tactical Mission Systems (ITMS) provide critical automation and integration of SOF Tactical Mission Systems (TMS), including navigation, communication, precision fire control and aircraft defensive systems required to operate AC-130J and MC-130J aircraft in near-peer conflicts. Requirements include upgrades to integrate and automate SOF TMS's to provide systems interoperability, data fusion and improved situational awareness (SA), improved threat detection and avoidance, integrated TF/TA and SKR improvements, integrated defensive countermeasure (DCM) effects, PSP interoperability, integrated EW, and embedded training. Integrating and automating SOF mission systems that deliver these capabilities is critical to fielding SO-p AC-130J and MC-130J aircraft to be more lethal, resilient, survivable, agile, and responsive in support of the 2022 NDS. The MAC supports development and demonstration of amphibious capabilities on a C-130J to support runway independent operations and provide the ability to operate in logistically constrained environments. MC-130J aircraft that receive AbMN, TF/TA, and RFCM SO-p modifications are designated with the popular name "Combat Talon III".

The ITMS was designated a Middle Tier of Acquisition (MTA) program in FY 2022. The ITMS MTA effort spans FY 2022-FY 2026 and the total cost is $228.796 million. The ITMS effort is fully funded through FY 2026.

D615 Rotary Wing Aviation:
This project provides for the development, rapid prototyping, demonstration, and integration of current and maturing technologies for SO-p rotary wing aviation and training requirements, as well as next generation mobility to allow SO-p helicopters to operate in denied environments in support of the 2022 NDS. This project includes modifications to systems to counter rapidly emerging threats, address cyber security, improve lethality and enhance aircraft self-protection in contested environments. Rotary wing aircraft supported by this project include: MH-60M; MH-47G; A/MH-6; and Future Vertical Lift (FVL). These aircraft provide aviation support to SOF in worldwide contingency operations and low-intensity conflicts. These aircraft must be capable of rapidly deploying, penetrating hostile areas undetected, and operating at extended ranges under adverse weather conditions to infiltrate, provide logistics for, reinforce, and extract SOF. The anti-access/area denial (A2/AD) threat is characterized by an extensive and sophisticated ground-based air defense system and an upgraded air-to-air capability targeted against helicopters. Mission Processor Upgrade (MPU) provides for non-recurring engineering, systems engineering/testing, and future aircraft architecture studies that support replacement and upgrade of the current mission and video processors for all Army Special Operations Aviation (ARSOA) rotary wing aircraft. Tactical Mission Networking (TMN) focuses on technology development of platform software and hardware systems with capabilities to enable aircraft to effectively adapt and overcome the challenges of a highly contested environment.

These technologies will be pursued via rapid prototyping efforts when appropriate.

Exhibit R-2, RDT&E Budget Item Justification: PB 2025 United States Special Operations Command	Date: March 2024
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*

B. Program Change Summary ($ in Millions)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Previous President's Budget	183.152	216.174	219.497	-	219.497
Current President's Budget	176.998	216.174	263.712	-	263.712
Total Adjustments	-6.154	0.000	44.215	-	44.215
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	0.529	-			
• SBIR/STTR Transfer	-6.683	-			
• Adjustments to Budget Year	-	-	44.215	-	44.215

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2023	FY 2024
Project: SF100: *Aviation Systems Advanced Development*		
Congressional Add: *Development of cyber security and continuous monitoring of serial bus systems*	9.635	-
Congressional Add Subtotals for Project: SF100	9.635	-
Congressional Add Totals for all Projects	9.635	-

Change Summary Explanation

Funding:

FY 2023: Net Decrease of $6.154 million is due to a reprogramming for emergent command requirements (-$0.529 million) and a decrease of (-$6.975 million) reprogrammed to congressionally mandated Small Business Innovative Research/Small Business Technology (SBIR/STTR) programs.

FY 2024: None.

FY 2025: Net increase of $44.215 million is due to the following:

SF100

Aviation Engineering Analysis: Aviation Engineering Analysis net decrease of $29.088 million is due to funding transfer from PE 1160403BB, Aviation Systems, Project SF100: Aviation Systems Advanced Development to PE 1160402BB, SOF Advanced Technology Development, Project S200: Advanced Technology Development for High Speed Vertical Takeoff and Landing (HSVTOL) which conducts in-depth engineering development to support detailed design activities for the HSVTOL demonstration platform (-$36.946 million) and an increase to transition MAC capabilities from PE 1160403BB, Aviation Systems, Project SF100:

Exhibit R-2, RDT&E Budget Item Justification: PB 2025 United States Special Operations Command	Date: March 2024
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*

Aviation Systems Development to PE 1160403BB, Aviation Systems, Project S875: AC/MC-130J, to support MAC development to include aircraft performance modeling and full scale manufacturing and fabrication of beam and truss assembly and the flotation system ($7.858 million).
MQ-9: Net Increase of $52.500 million is due to the transition of MQ-9 funds from PE 1105219BB, MQ-9 Unmanned Aerial Vehicle, Project S851: Unmanned Aerial Vehicle ($10.000 million) which supports the A2E concept and includes development of a Modular Open-System Architecture (MOSA) and collaboration environments that facilitate a more efficient and expeditious integration and fielding of Special Operations Forces-peculiar (SO-p) capabilities ($42.500 million).

Precision Strike Package: Increase of $14.400 million begins systems engineering, integration analysis, and enhancement of the baseline PSP on AC-130J with an Active Electronically Scanned Array (AESA) Radar improving battlespace awareness and identification, tracking and targeting sophisticated threats for Integrated Deterrence of peer adversaries in support of the National Defense Strategy

SF200
CV-22: Decrease of -$5.562 million is due to a change in acquisition strategy from a forced retro fit to an attrition-based approach and executing reliability improvements via other V-22 Joint Program Office funding sources.

S750
SBUD: Increase of $0.765 million supports development efforts which focuses on increasing realism in graphics and functionality within virtual reality training devices for AC/MC-130J, initiation of development of integrated, augmented reality (AR) aircraft training for use in live MC-130J flights.

S875
FWAEA MAC: Increase of $11.500 million transitions MAC capabilities from Project SF100: Aviation Systems Advanced Development to Project S875: AC/MC-130J beginning in FY 2025, which begins aircraft performance modeling and full-scale manufacturing and fabrication of beam assembly, truss assembly, and the flotation system.

D615
MH-47: Decrease of $0.300 million reprogrammed for emergent command requirements.

Exhibit R-2A, RDT&E Project Justification: PB 2025 United States Special Operations Command			Date: March 2024
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1160403BB / *Aviation Systems*	Project (Number/Name) SF100 / *Aviation Systems Advanced Development*	

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
SF100: *Aviation Systems Advanced Development*	1,605.123	53.039	56.295	106.356	-	106.356	138.207	113.069	66.383	67.710	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This project provides for the development, rapid prototyping, demonstration, and integration of current and maturing technologies for Special Operations (SO)-peculiar (SO-p) aviation and training requirements to transform the foundation of future SOF aviation for the Joint Force in order to support the 2022 National Defense Strategy (NDS). Timely application of SO-p technology is critical and necessary to meet requirements in areas such as: Aviation Engineering Analysis (AEA), Electronic Warfare (EW)-Radio Frequency Countermeasures (RFCM), High Speed Vertical Takeoff and Landing (HSVTOL), High Energy Laser (HEL), MC-130J Amphibious Capability (MAC), Adaptive Airborne Enterprise (A2E), MH-47G and MH-60M SOF Common Terrain Following (TF)/Terrain Avoidance (TA) Silent Knight Radar (SKR), and Precision Strike Package (PSP). The AEA provides engineering analysis, market research, and designs to address aircraft survivability needs such as signature management, situational awareness (SA), and versatile mission platform/equipment (payloads, communication, and weapons) to achieve SOF objectives. The EW-RFCM supports development, integration, and test activities to provide EW capability against Radio Frequency (RF) threats for SO-peculiar AC/MC-130J aircraft. The HSVTOL supports development and demonstration of agile and responsive air mobility capabilities to support runway independent operations, increased speed of maneuverability, and provide the ability to penetrate anti-access (A2)/anti-denial (AD) environments. The HEL supports development of an AC-130J laser weapons system for Low Probability of Detection (LPD) use in complex environments to enable joint/coalition SOF operations against targets such as communication nodes, light-to-medium duty vehicles, and power infrastructures. The MAC supports development and demonstration of amphibious capabilities on a C-130J to support runway independent operations and provide the ability to operate in logistically constrained environments. MH-47G and MH-60M SOF Common TF/TA SKR supports development, integration, and testing of SOF Common TF/TA Multi-Mode Radar (MMR) that provides Low Probability of Intercept (LPI) and LPD capabilities for MH-47G and MH-60M aircraft. The PSP supports systems engineering, analysis, development, and enhancement of the baseline PSP for integration, installation, and test on SOF AC-130J aircraft and other SOF aviation platforms.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
Title: EW-RFCM, Program Number 768	9.708	20.220	9.180
Description: The EW-RFCM program supports development, integration, and test activities to provide EW capability against RF threats for SO-p AC/MC-130J aircraft. The RFCM system is part of the Defensive Countermeasures (DCM) suite that provides situational awareness and threat response processing required for SOF missions.			
FY 2024 Plans: Continue spiral design, development and operational test activities, to include; complete software program increment qualification test, complete hardware in the loop test, and begin software release.			
FY 2025 Plans:			

Exhibit R-2A, RDT&E Project Justification: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** SF100 / *Aviation Systems Advanced Development*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
Continues spiral design, development and test activities, to include: begins technical refresh of system hardware architecture to increase system capacity, begins software integration to updated hardware architecture, and begins hardware integration testing. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Decrease of $11.040 million is due to completion of initial software-only spiral update, decreasing from two concurrent development efforts in FY 2024 to one in FY 2025.			
Title: Precision Strike Package (PSP) for SOF, Program Number 843 ***Description:*** The PSP for SOF supports systems engineering, analysis, development, and enhancement of the baseline PSP and integration, installation, and test on SOF AC-130Js and other SOF platforms. The PSP is modular, scalable, and platform agnostic. Missions for the AC-130 aircraft include, but are not limited to: close air support; air interdiction; and armed reconnaissance. ***FY 2024 Plans:*** Initiate engineering analysis and development to remove the aft weapon system (105mm Gun), refit the aft section, and optimize crew workload in support of the United States Special Operations Command (USSOCOM) crew reduction initiatives. ***FY 2025 Plans:*** Continues to refit the aft section. Continues engineering analysis and development to optimize defensive systems and automate mission planning and crew functions to support the USSOCOM crew reduction initiatives. Initiate systems engineering, analysis, and integration of an Active Electronic Scanned Array (AESA) Radar on AC-130J. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Increase of $27.025 million is to initiate engineering analysis, integration, and developmental testing of AESA Radar capability on AC-130J, allowing the platform to detect, target, identify, and engage across a spectrum of threats at longer ranges and react with greater precision. Additionally, supports increased engineering analysis and initiates developmental test of optimized defensive systems, mission planning, and automated crew functions to improve AC-130J effectiveness in contested environments. Supports the refit of the aft section to reduce AC-130J crew complement commensurate with USSOCOM manpower reductions.	0.000	1.224	28.249
Title: High Energy Laser (HEL) ***Description:*** The HEL supports development of an AC-130J laser weapons system for LPD use in complex environments to enable joint/coalition SOF operations against targets such as communication nodes, light-to-medium duty vehicles, and power infrastructures. Utilizing a best of breed approach, it integrates laser, beam control, power, and thermal subsystems via a Government lead system integrator. This provides additional flexibility for rapid prototyping and future modifications. ***FY 2024 Plans:***	15.387	3.000	-

Exhibit R-2A, RDT&E Project Justification: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** SF100 / *Aviation Systems Advanced Development*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
Complete flight test activities and demonstration of the HEL system on the AC-130J. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Decrease of $3.000 million is due to completion of project activities in FY 2024.			
Title: MH-47/MH-60 SOF Common TF/TA SKR, Program Number 778 ***Description:*** The MH-47G and MH-60M SOF Common TF/TA SKR supports development, integration, and testing of SOF Common TF/TA multi-mode radar that provides LPI and LPD capabilities to defeat advanced passive detection threats while maintaining safe TF capabilities for MH-47G and MH-60M aircraft. ***FY 2024 Plans:*** Continue software spiral efforts to reduce TF/TA SKR signature, support data fusions initiatives, and increase reliability. ***FY 2025 Plans:*** Continues software spiral efforts to reduce TF/TA SKR signature, support data fusions initiatives, and increase reliability. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Increase of $0.044 million is due to increased SKR developmental test and evaluation costs.	2.060	2.189	2.233
Title: Aviation Engineering Analysis (AEA) ***Description:*** The AEA provides engineering analysis, market research, and develops solutions to address aircraft survivability needs such as signature management, situational awareness (SA), and versatile mission platform/equipment (payloads, communication, and weapons) to achieve SOF objectives. ***FY 2024 Plans:*** Continue to perform engineering analysis and demonstrations to improve aviation mission survivability, aircraft and sensor anatomy, sensor fusion, targeting enhancement, cyber hardening, navigation in denied environments, and data link enhancements to support Fixed Wing next generation ISR, Mobility and Strike platforms. Activities include: signature management; SA with full spectrum threat warning and countermeasures; and versatile mission equipment (payloads, communications and weapons) to improve SOF survivability in less than permissive operating environments. Other technology advancements for Fixed Wing platforms include improvements for increased range, speed with reduced time to target, improving ability to insert and recover forces in contested environments and technology analysis on advanced mobility platforms (deep penetrating and aquatic landing). Strike enhancements include targeting/engagement automation, weapons effects and stand-off capability. ***FY 2025 Plans:***	5.801	14.662	14.194

Exhibit R-2A, RDT&E Project Justification: PB 2025 United States Special Operations Command		Date: March 2024
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
Continue to perform engineering analysis and demonstrations to improve aviation mission survivability, aircraft and sensor anatomy, sensor fusion, targeting enhancement, cyber hardening, navigation in denied environments, and data link enhancements to support Fixed Wing next generation ISR, Mobility and Strike platforms. Activities include: signature management; SA with full spectrum threat warning and countermeasures; and versatile mission equipment (payloads, communications and weapons) to improve SOF survivability in less than permissive operating environments. Other technology advancements for Fixed Wing platforms include improvements for increased range, speed with reduced time to target, improving ability to insert and recover forces in contested environments and technology analysis on advanced mobility platforms (deep penetrating and aquatic landing). Strike enhancements include targeting/engagement automation, weapons effects and stand-off capability. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Decrease of $0.468 million is due to reduction in planned aviation mission autonomy efforts in FY 2025.			
Title: High Speed Vertical Take-off and Landing (HSVTOL) ***Description:*** The HSVTOL supports development and demonstration of HSVTOL capabilities to support runway independent operations, increased speed of maneuverability, and provide ability to operate in contested environments.	1.044	-	-
Title: MC-130J Amphibious Capability (MAC) ***Description:*** The MAC supports development and demonstration of amphibious capabilities on a C-130J to support runway independent operations and provide the ability to operate in logistically constrained environments. ***FY 2024 Plans:*** Continue engineering analysis and design activities for incorporating amphibious capabilities on a C-130J. This includes float design optimization for hydrodynamic and aerodynamic performance, aircraft truss design and loads analysis, and continued aircraft performance modeling. In addition, plans include contract award for fabrication of floats and truss assemblies. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Decrease of $15.000 million is due to transition of MAC capabilities from Project SF100: Aviation Systems Advanced Development to Project S875: AC/MC-130J.	9.404	15.000	-
Title: Adaptive Airborne Enterprise (A2E) ***Description:*** Adaptative Airborne Enterprise (A2E) architecture and systems are being developed to ensure interoperability of air platforms to space, sea vessels and ground units. Supports the use of collaboration environments to facilitate a more efficient and expeditious intel integration and close long-range kill chains in highly congested and contested operating environments defined by the 2022 NDS. The USSOCOM will advance crewed and uncrewed systems from a single operational domain and hierarchical	-	-	52.500

Exhibit R-2A, RDT&E Project Justification: PB 2025 United States Special Operations Command		Date: March 2024
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
command and control system to a multi-domain, agile, small footprint, mesh-network command and control ecosystem. Some foundational capabilities will leverage evolved MQ-9 platforms and infrastructure. Multiple program offices collaborative domain efforts will enhance long range strike, take advantage of diverse Joint Command, Control, Communications (C4) ISR networks/ architectures, increase survivability and improve decision making speed to critical decision makers at all echelons of command. Key capabilities will include preparation of the environment, illuminating threats, and link targets with desired effects for SOF and Joint Forces. ***FY 2025 Plans:*** Begins development of a foundational open system architecture that will enable multi-platform control. Initiates integration of Vigilant Spirit (VS) as the primary Command and Control (C2) interface, as it has already been demonstrated to manage multiple semi-autonomous and autonomous UASs simultaneously. VS integration will enable distributed operations by expanding beyond the traditional Ground Control Station to a simplified, software-based "operator station" that can be tailored to various hardware and network requirements for mission command and management of multiple UAS and payloads simultaneously. Begins efforts with the Golden Horde Autonomy Architecture to enable small UASs (sUAS) to be commanded from multiple large crewed and uncrewed platforms, allowing crews to control masses of air vehicles through the VS interface. Begins efforts to develop modular payloads for two future large UASs which will enable sUAS/payloads to be configured as mission requirements and operating environment demand. Air launched payloads include loitering munitions and sUAS to provide the mass required to locate and action targets in contested and denied environments. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Net Increase of $52.500 million. $10.000 million increase is due to transition of MQ-9 funds from PE 1105219BB, MQ-9 Unmanned Aerial Vehicle, Project S851: Unmanned Aerial Vehicle which supports the acceleration of the A2E concept. $42.500 million increase will develop a Modular Open-System Architecture (MOSA), collaborative environments that facilitate a more efficient and expeditious integration and fielding of SO-p capabilities and enhance long-range strike.			
Accomplishments/Planned Programs Subtotals	43.404	56.295	106.356

	FY 2023	FY 2024
Congressional Add: Development of cyber security and continuous monitoring of serial bus systems	9.635	-
FY 2023 Accomplishments: Perform development of cyber security and continuous monitoring of serial bus systems for various SOF platforms.		
Congressional Adds Subtotals	9.635	-

Exhibit R-2A, RDT&E Project Justification: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** SF100 / *Aviation Systems Advanced Development*

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
• PROC/5000C13000: *C-130 Modifications*	16.893	18.796	-	-	-	-	-	-	-	0.000	35.689
• PROC/2012C130J: *AC/MC-130J*	222.869	319.754	300.892	-	300.892	319.441	386.667	410.950	438.665	Continuing	Continuing
• PROC/1202PSP: *Precision Strike Package*	57.450	108.497	69.917	-	69.917	72.285	58.113	59.211	61.306	Continuing	Continuing
• PROC0201RWUPGR: *Rotary Wing Upgrades and Sustainment*	224.134	261.012	220.301	-	220.301	190.270	193.662	203.051	207.501	Continuing	Continuing

Remarks

D. Acquisition Strategy

• EW-RFCM: Awarded $700 million ceiling acquisition and procurement contract covering Engineering and Manufacturing Development (EMD), Low-Rate Initial Production (LRIP), and Full-Rate Production (FRP) activities. EMD and LRIP are fixed price award fee incentivizing schedule and were awarded in 3rd Qtr FY 2020. FRP and other programmatic support activities (such as data rights and system integration laboratory options) are firm fixed price. The EW – RFCM program has been designated a Middle Tier of Acquisition (MTA) in accordance with Section 804 of Public Law 114-92, the authority in DoD Directive 5143.01, and guidance in DoD Instruction 5000.80.

• PSP: The USSOCOM Program Office with six Combat Acquisition Detachments (CAD) executing program elements to integrate PSP and post-production capability enhancements on AC-130J aircraft. A-kit and integration contracts executed via Special Operations Forces Support Activity (SOFSA) Global Logistics Supply Services Task Orders (10-yr IDIQ awarded in 2017) and B-kit components awarded annually and executed via CAD contracting offices. The PSP for SOF program has produced and fielded the full 30 aircraft AC-130J fleet and continues to modernize and enhance the PSP baseline. The PSP for SOF program has been designated a Major Capability Acquisition (MCA) at Milestone C in accordance with the authority in DoD Directive 5135.02, the guidance in DoD Instruction 5000.85.

• HEL: The HEL effort utilizes Naval Surface Warfare Center (NSWC) Dahlgren Division as the Government lead system integrator of HEL components. HEL system components are either purchased under Defense Ordnance Technology Consortium or developed and assembled by NSWC Dahlgren. Both approaches provide flexibility for rapid prototyping.

• MH-47/MH-60 SOF Common TF/TA SKR: Sole source to Raytheon to produce the SKR. SKR Logistics and MH-47G and MH-60M A-Kit production and installation proceeding at SOFSA, Lexington, KY. Contract Vehicle: Multi-Year Procurement (MYP) for FY 2021 through FY 2023 procurements. The SKR program plans to award a follow-on five-year MYP purchasing SKRs in FY 2024 - FY 2028 for the MH-47, MH-60, CV-22 and MC-130J aircraft and a six-year Indefinite Delivery/Indefinite Quantity contract for support and sustainment in FY 2024 - FY 2029. The MH-47/MH-60 SOF Common TF/TA SKR program has been designated a Major Capability Acquisition (MCA) at Milestone C, in accordance with the authority in DoD Directive 5135.02, the guidance in DoD instruction 5000.85. The purpose of the MCA is to acquire and continue software spiral efforts to reduce TF/TA SKR signature, support data fusion initiatives, and increase reliability.

Exhibit R-2A, RDT&E Project Justification: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** SF100 / *Aviation Systems Advanced Development*

• AEA: Utilize Joint Department of Defense (DoD) programs to advance the technology levels for both the current Fixed Wing platforms and the advanced mobility platforms along with the Joint Aircraft Survivability Program sponsored projects to recommend material solutions for demonstration and potential integration on FW aircraft. Utilize DoD, labs and industry partners to continue market research and engineering analysis efforts.

• HVSTOL: Utilize Joint DoD programs to advance the technology levels for HVSTOL platforms and to recommend material solutions for a technical demonstration. Perform engineering analysis on key enabling technologies in conjunction with the Air Force Research Laboratory, AFWERX, Defense Advanced Research Projects Agency (DARPA) and other agencies.

• MAC: Utilize Government partners, labs and Industry partners through multiple contract awards to perform engineering analysis in the areas of hydrodynamics, structural loads, and flight performance modeling.

• A2E: Utilizes Government partners, labs, and Industry partners through multiple contract awards to advance technology and enable key capabilities with desired effects for SOF and Joint Forces in highly congested and contested operating environments. These effects will include, but not limited to, advance manned and unmanned systems from a single operational domain and hierarchical command and control system to a multi-domain, mesh-network command and control ecosystem and increase survivability.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** SF100 / *Aviation Systems Advanced Development*

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
Electronic Warfare (EW) Radio Frequency Countermeasures (RFCM) Spiral One Development	C/CPFF	Various : Various	9.133	6.500	Mar 2023	16.585	Mar 2024	7.263	Mar 2025	-		7.263	Continuing	Continuing	-
Precision Strike Package (PSP) for Special Operations Forces (SOF) - Aft Weapon System & Crew Optimization	C/Various	Various : Various	-	-		1.224	Jan 2024	9.554	Jan 2025	-		9.554	Continuing	Continuing	-
PSP for SOF - Active Electronically Scanned Array (AESA) Radar	C/Various	Various : Various	-	-		-		9.580	Jan 2025	-		9.580	Continuing	Continuing	-
HEL - Flight Testing/ Demonstration	C/CPFF	Various : Various	1.478	15.388	Nov 2022	3.000	Nov 2023	-		-		-	0.000	19.866	-
MH-47/MH-60 SOF Common Terrain Following/Terrain Avoidance Silent Knight Radar (TF/TA SKR) Software Development	C/CPFF	Raytheon : McKinney, TX	21.272	1.382	Jun 2023	1.421	Nov 2023	1.421	Jan 2025	-		1.421	Continuing	Continuing	-
Aviation Engineering Analysis (AEA)	C/Various	Various : Various	44.166	3.801	Nov 2022	11.162	Nov 2023	11.194	Nov 2024	-		11.194	Continuing	Continuing	-
AEA – Aviation Mission Autonomy	C/Various	Various : Various	-	2.000	Nov 2022	3.500	Nov 2023	3.000	Nov 2024	-		3.000	Continuing	Continuing	-
MC-130J Amphibious Capabilities (MAC)	C/FFP	Various : Various	1.600	9.403	Nov 2022	15.000	Nov 2023	-		-		-	Continuing	Continuing	-
High Speed Vertical Take-Off and Landing (HSVTOL) – Market Research	C/FP	Various : Various	-	1.044	Nov 2022	-		-		-		-	Continuing	Continuing	-
Cybersecurity serial bus systems (Congressional Add)	C/Various	Various : Various	-	9.635	Jun 2023	-		-		-		-	Continuing	Continuing	-
Adaptive Airborne Enterprise (A2E)	Various	Various : Various	-	-		-		45.360	Jan 2025	-		45.360	Continuing	Continuing	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 United States Special Operations Command			Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** SF100 / *Aviation Systems Advanced Development*	

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
Engineering and Development															
Prior Year Funding - Completed Efforts	Various	Various : Various	1,131.840	-		-		-		-		-	0.000	1,131.840	-
Prior Year Funding - Classified Project Congressional Add	C/Various	Under Separate Cover : Under Separate Cover	8.000	-		-		-		-		-	0.000	8.000	-
		Subtotal	1,217.489	49.153		51.892		87.372		-		87.372	Continuing	Continuing	N/A

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
EW-RFCM	C/Various	Various : Various	34.829	1.030	Jan 2023	1.040	Jan 2024	0.719	Jan 2025	-		0.719	Continuing	Continuing	-
PSP for SOF - Aft Weapon System & Crew Optimization	C/Various	Various : Various	-	-		-		1.704	Jan 2025	-		1.704	Continuing	Continuing	-
PSP for SOF - AESA Radar	C/Various	Various : Various	-	-		-		1.994	Jan 2025	-		1.994	Continuing	Continuing	-
A2E Software/ Engineering Support	Various	Various : Various	-	-		-		2.040	Nov 2024	-		2.040	Continuing	Continuing	-
Prior Year Funding - Completed Efforts	Various	Various : Various	69.455	-		-		-		-		-	0.000	69.455	-
		Subtotal	104.284	1.030		1.040		6.457		-		6.457	Continuing	Continuing	N/A

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
EW-RFCM Developmental Test & Evaluation	C/Various	Various : Various	17.103	1.800	Jan 2023	-		1.198	Jan 2025	-		1.198	Continuing	Continuing	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** SF100 / *Aviation Systems Advanced Development*

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
EW-RFCM Operational Test & Evaluation	C/Various	Various : Various	-	0.378	Jan 2023	2.595	Jan 2024	-		-		-	Continuing	Continuing	-
PSP for SOF - Aft Weapon System & Crew Optimization Developmental Test	C/Various	Various : Various	-	-		-		2.591	Jan 2025	-		2.591	Continuing	Continuing	-
PSP for SOF - AESA Radar Developmental Test	C/Various	Various : Various	-	-		-		2.826	Jan 2025	-		2.826	Continuing	Continuing	-
MH-47/MH-60 SOF Common TF/TA SKR Developmental Test & Evaluation	C/CPFF	Various : Various	128.643	0.678	Nov 2022	0.768	Nov 2023	0.812	Nov 2024	-		0.812	Continuing	Continuing	-
A2E Developmental Test & Evaluation	Various	Various : Various	-	-		-		5.100	Mar 2025	-		5.100	Continuing	Continuing	-
Prior Year Funding - Completed Efforts	Various	Various : Various	85.435	-		-		-		-		-	0.000	85.435	-
		Subtotal	231.181	2.856		3.363		12.527		-		12.527	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
Prior Year Funding - Completed Efforts	Various	Various : Various	52.169	-		-		-		-		-	0.000	52.169	-
		Subtotal	52.169	-		-		-		-		-	0.000	52.169	N/A

	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	1,605.123	53.039		56.295		106.356		-		106.356	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** SF100 / *Aviation Systems Advanced Development*

AC/MC-130J RFCM Schedule

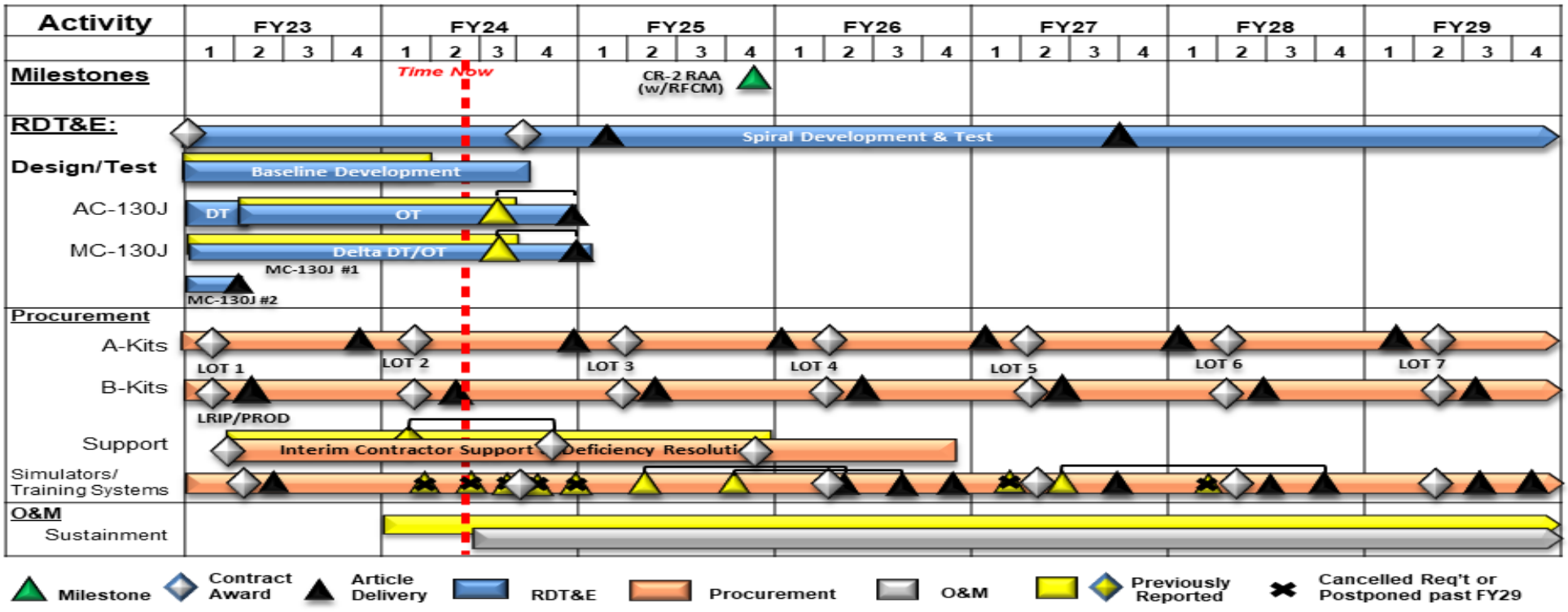


Exhibit R-4, RDT&E Schedule Profile: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** SF100 / *Aviation Systems Advanced Development*

AC-130J/Precision Strike Package (PSP) for Special Operations Forces (SOF) Schedule

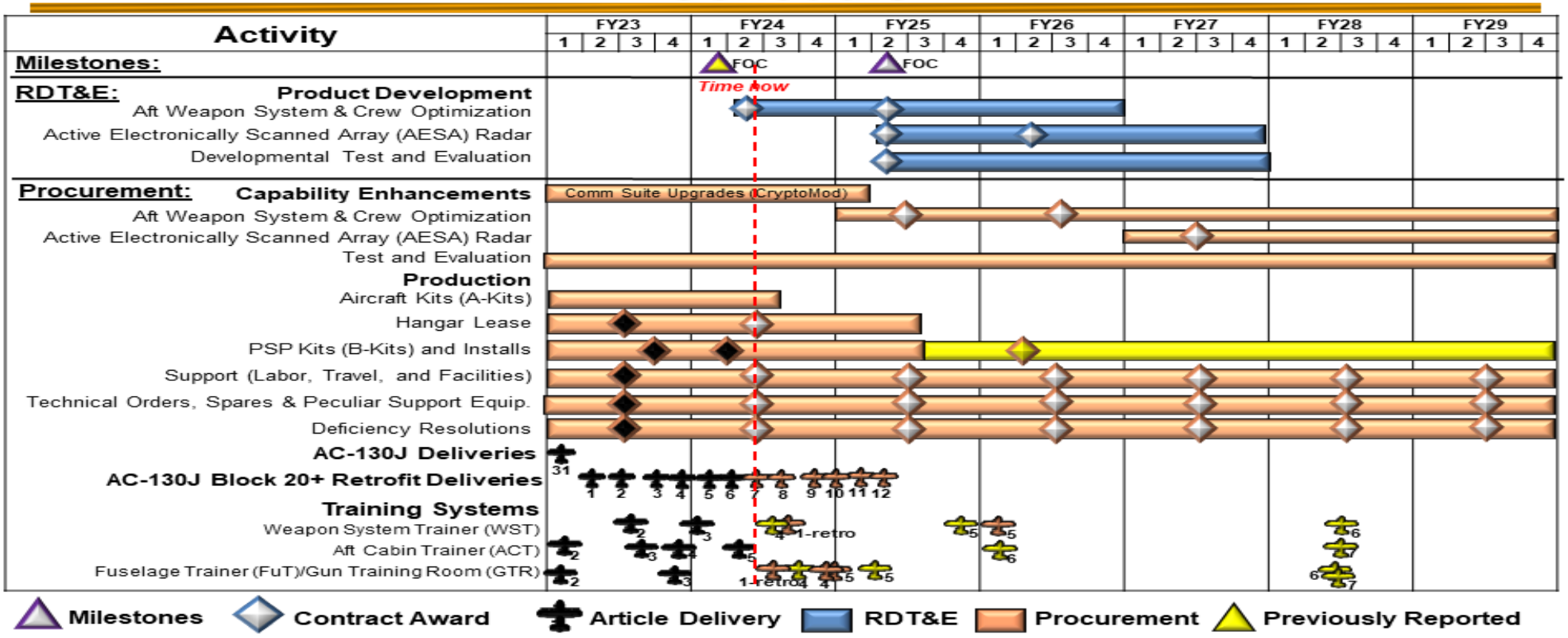


Exhibit R-4, RDT&E Schedule Profile: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** SF100 / *Aviation Systems Advanced Development*

AC-130 HEL Schedule

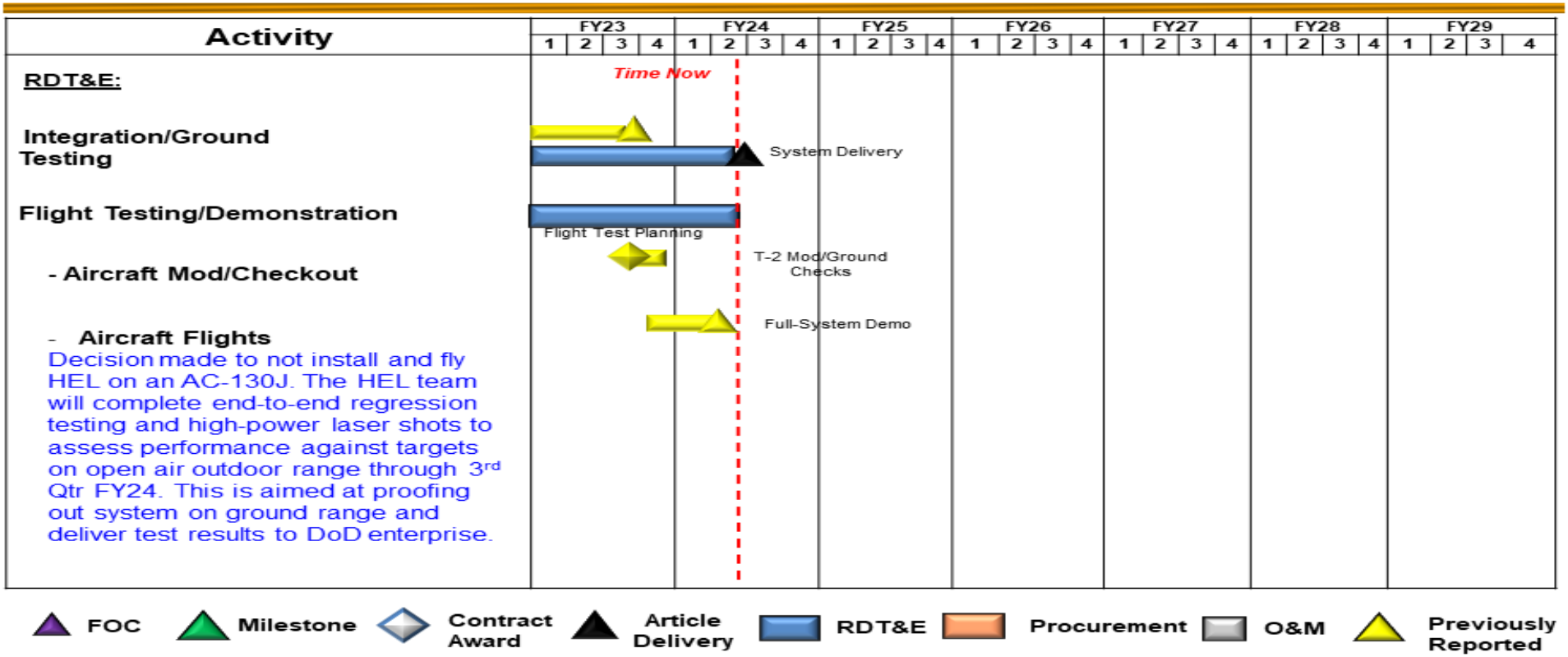


Exhibit R-4, RDT&E Schedule Profile: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** SF100 / *Aviation Systems Advanced Development*

MH-47/MH-60 SOF Common Terrain Following/Terrain Avoidance Silent Knight Radar Schedule

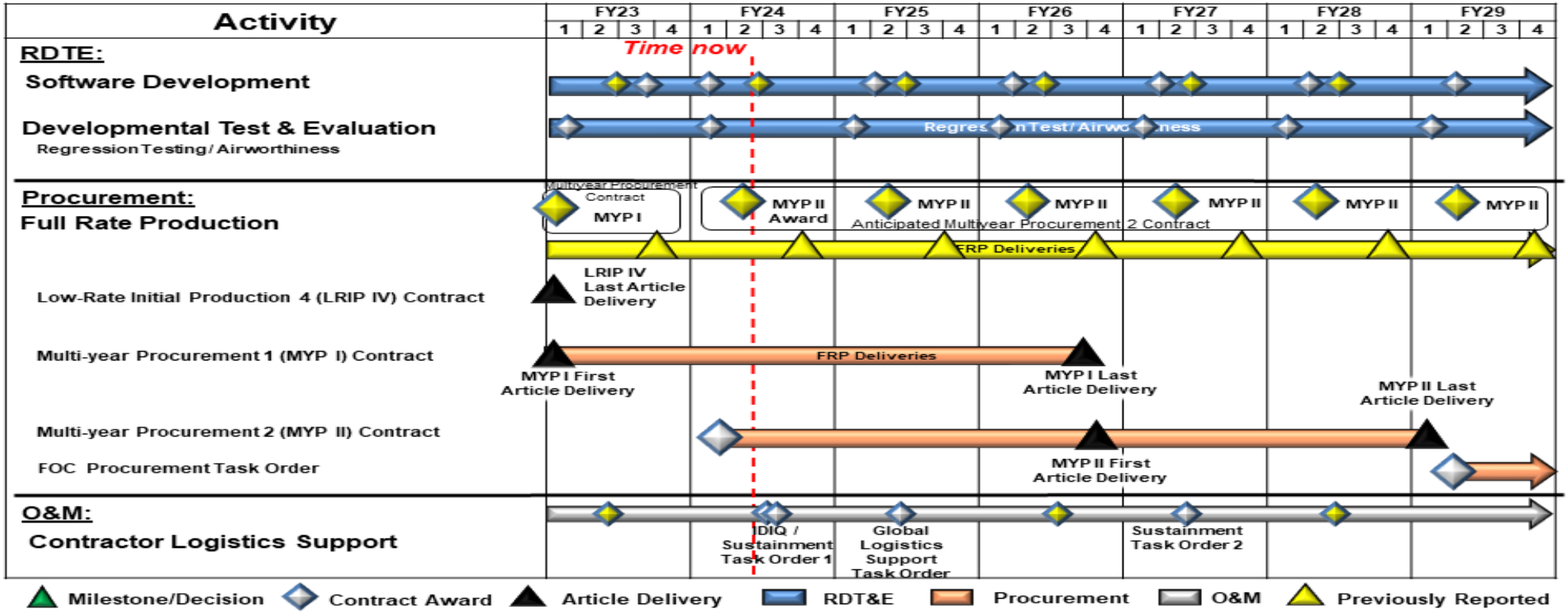


Exhibit R-4, RDT&E Schedule Profile: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** SF100 / *Aviation Systems Advanced Development*

AEA Schedule

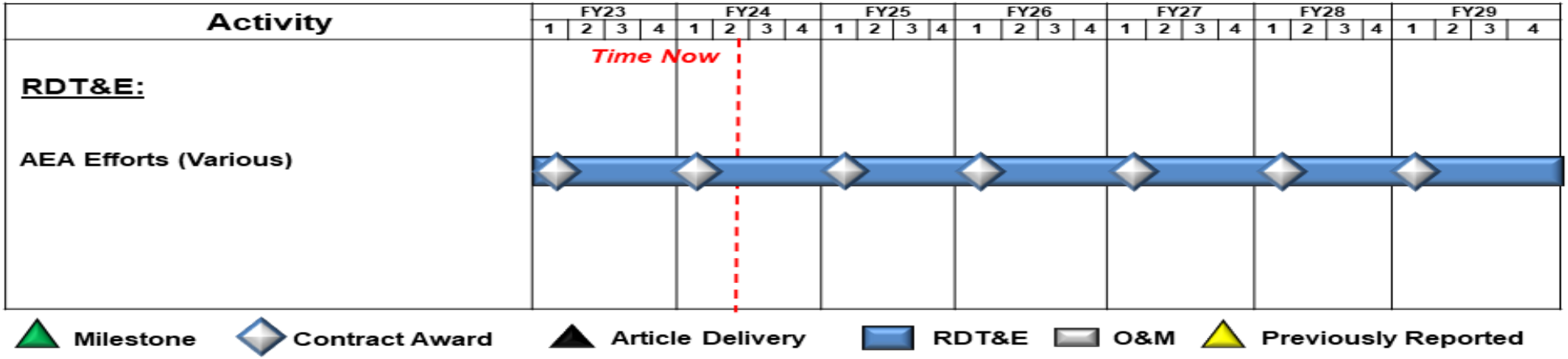
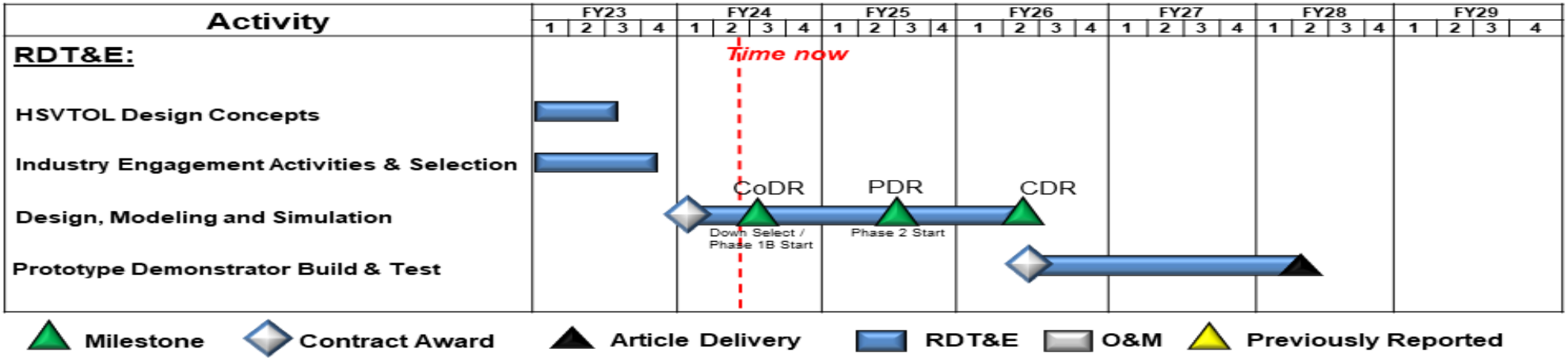


Exhibit R-4, RDT&E Schedule Profile: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** SF100 / *Aviation Systems Advanced Development*

HSVTOL Schedule

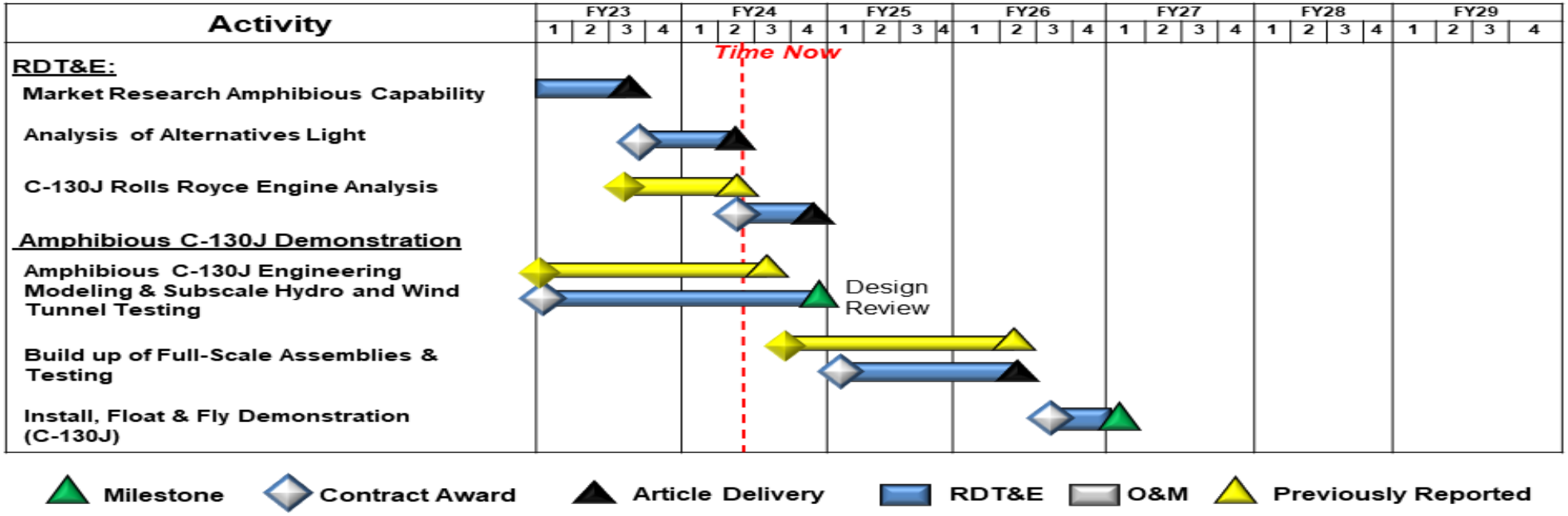


CoDR – Concept Development Review, PDR – Preliminary Design Review, CDR – Critical Design Review

Beginning in FY 2024, HSVTOL capabilities have transitioned from Program Element (PE) 1160403BB, Aviation Systems, Project SF100: Aviation Systems Advanced Development to PE 1160402BB SOF Advanced Technology Development, Project S200: Advanced Technology Development

Exhibit R-4, RDT&E Schedule Profile: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** SF100 / *Aviation Systems Advanced Development*

MAC Schedule



Note: Beginning in FY 2025, MAC Capabilities have transitioned from Program Element (PE) 1160403BB, Aviation Systems, Project SF100: Aviation Systems Advanced Development to PE 1160403BB Aviation Systems, Project S875: AC/MC-130J

Exhibit R-4, RDT&E Schedule Profile: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** SF100 / *Aviation Systems Advanced Development*

A2E Schedule

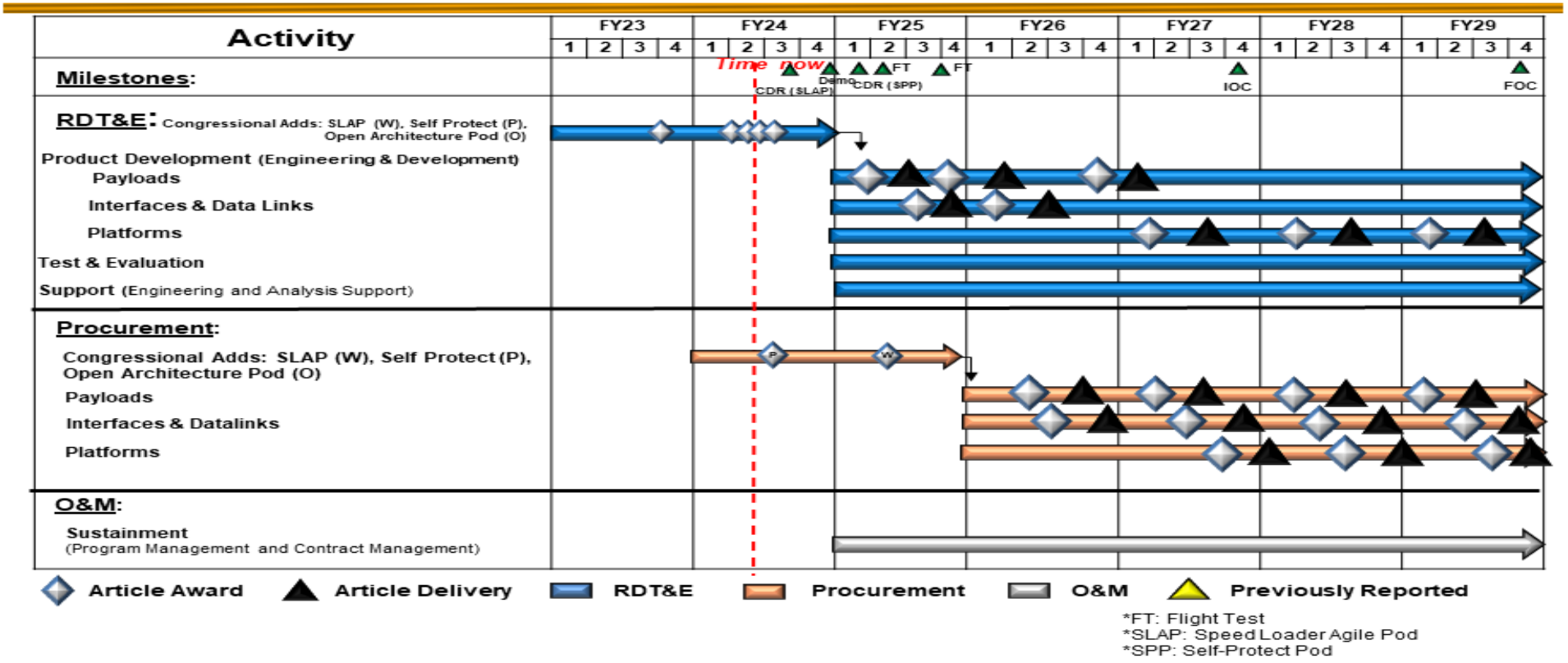


Exhibit R-4A, RDT&E Schedule Details: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** SF100 / *Aviation Systems Advanced Development*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Electronic Warfare - Radio Frequency Countermeasures (EW-RFCM)				
Spiral Development and Test	1	2023	4	2029
Baseline Development, Design, and Test	1	2023	2	2024
Developmental Test and Operational Test (DT/OT) AC-130J	1	2023	3	2024
DT/OT #1 MC-130J	2	2023	3	2024
Precision Strike Package (PSP) for Special Operations Forces (SOF)				
Aft Weapon System and Crew Optimization Product Development	2	2024	4	2026
Active Electronically Scanned Array (AESA) Product Development	2	2025	4	2027
Developmental Test & Evaluation	2	2025	4	2027
High Energy Laser (HEL)				
Integration / Ground Testing	1	2023	1	2024
Flight Testing / Demonstration	1	2023	3	2024
Aircraft Modification / Checkout	2	2024	3	2024
Aircraft Flights	3	2024	4	2024
MH-47G and MH-60M SOF Common Terrain Following (TF) / Terrain Avoidance (TA) Silent Knight Radar (SKR)				
Software Development	1	2023	4	2029
Developmental Test and Evaluation	1	2023	4	2029
Next Generation Aviation Engineering Analysis (AEA)				
AEA Efforts (Various)	1	2023	4	2029
High Speed Vertical Take Off and Landing (HSVTOL)				
HSVTOL Design Concepts	1	2023	3	2023

Exhibit R-4A, RDT&E Schedule Details: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** SF100 / *Aviation Systems Advanced Development*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Industry Engagement Activities and Selection	1	2023	4	2023
MC-130J Amphibious Capability (MAC)				
Market Research Amphibious Capability	1	2023	3	2023
Analysis of Alternative Light	3	2023	2	2024
C-130J Rolls Royce Engine Analysis	2	2024	4	2024
Amphibious C-130J Engineering Modeling and Subscale Hydro and Wind Tunnel Testing	1	2023	4	2024
Build up of Full-Scale Assemblies and Testing	1	2025	2	2026
Install, Float & Fly Demonstration	3	2026	1	2027
Adaptive Airborne Enterprise (A2E)				
Product Development	2	2025	4	2029
Developmental Test & Evaluation	2	2025	4	2029

Exhibit R-2A, RDT&E Project Justification: PB 2025 United States Special Operations Command			Date: March 2024
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1160403BB / *Aviation Systems*	Project (Number/Name) SF200 / *CV-22*	

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
SF200: *CV-22*	83.227	11.757	21.619	15.727	-	15.727	19.064	19.445	19.834	20.231	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Project MDAP/MAIS Code: 212

A. Mission Description and Budget Item Justification

This project supports integration, design, development, rapid prototyping, and test to provide improved capabilities to include, but not limited to: more robust performance in situational awareness (SA); intelligence, surveillance, and reconnaissance (ISR), weapons, avionics; Special Operations Forces (SOF) communications; defensive/ survivability systems; interoperability; speed and maneuverability; mission deployment and improved reliability and maintainability of the CV-22 platform. The CV-22 Osprey is a SOF variant of the V-22 vertical medium lift, multi-mission aircraft. The CV-22 provides long-range, high speed, all weather, infiltration (infil), exfiltration (exfil), and resupply of SOF teams in hostile, denied, and politically sensitive areas that allows the Joint Force to be more agile and responsive as stated in the 2022 National Defense Strategy (NDS). These capabilities are not currently provided by other existing SOF vertical lift aircraft. Funding supports the following CV-22 requirements: CV-22 SOF Common Terrain Following (TF) / Terrain Avoidance (TA) Silent Knight Radar (SKR), Block 20 Development, Reliability Improvements, and Test Aircraft Flying Hours and Maintenance.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
Title: SOF Common TF/TA SKR, Program Number 44Z	11.757	2.500	6.100
Description: Supports development of the CV-22 SOF Common TF/TA SKR Operational Flight Program (OFP) software, and development of CV-22 platform software and hardware to support integration and testing. This effort provides radar improvements for long range, night/adverse weather, clandestine penetration of medium-to-high threat areas for infl, exfil, and resupply of SOF forces. The more sustainable and capable radar, the APQ-187, replaces the obsolete APQ-186 TF/TA radar currently integrated on CV-22 aircraft. ***FY 2024 Plans:*** Correct deficiencies to the CV-22 SOF Common TF/TA SKR OFP discovered during flight testing. ***FY 2025 Plans:*** Completes developmental test and evaluation of SOF Common TF/TA SKR OFP integration. Begins developing advanced radar weather penetrating capabilities. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Increase of $3.600 million corrects deficiencies to the CV-22 SOF Common TF/TA SKR Operational Flight Program discovered during flight testing and develops advanced radar weather penetrating capabilities.			
Title: CV-22 Development, Program Number 773	-	8.069	5.127

Exhibit R-2A, RDT&E Project Justification: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** SF200 / *CV-22*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
Description: CV-22 development supports design, integration, and testing of CV-22 avionics upgrades and correction of deficiencies to include, but not limited to electronic warfare upgrades, improved crew interface functionality, weapon systems, and Airborne Mission Networking (AbMN). Efforts include incremental development to improve capabilities to, but not limited to situational awareness, intelligence, surveillance, and reconnaissance, weapons, SOF communications, avionics, interoperability and defensive survivability systems. ***FY 2024 Plans:*** Begin developing AbMN capabilities including, but not limited to, designing the aircraft information architecture and creating an environment to develop a fully integrated AbMN capability suite. ***FY 2025 Plans:*** Develops an integrated AbMN hardware and software system to receive, process, display, and disseminate battlespace information. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Decrease of $2.942 million is due to a transition of funding to develop and test solutions for SKR Operational Flight and Program deficiencies.			
Title: CV-22 Reliability Improvements ***Description:*** Supports design, integration, test and validation of system, and sub-system, reliability enhancements to meet required aircraft availability and operational requirements. Reliability Improvements accelerate fielding and retrofitting system design improvements directly increasing CV-22 fleet readiness. Efforts include design and re-design enhancements of components that impact aircraft reliability. ***FY 2024 Plans:*** Investigate and identify CV-22 Hard Clutch Engagement (HEC) root cause. Other efforts include, but not limited to, alternative clutch designs, developing a gearbox vibration monitoring system, and expanding on-board maintenance data collection ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Decrease of $4.780 million is due to a change in acquisition strategy from designing, developing, testing, and deploying improved parts to procuring additional existing parts and implements a more frequent maintenance/replacement of the part.	-	4.780	-
Title: Test Aircraft Flying Hours and Maintenance ***Description:*** Supports development flight testing and maintenance of the test CV-22 aircraft to ensure integration of the CV-22 SOF Common TF/TA SKR. Efforts include conducting developmental test flights and maintenance required to execute the aircraft for test sorties.	-	6.270	4.500

Exhibit R-2A, RDT&E Project Justification: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** SF200 / *CV-22*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
FY 2024 Plans: Support flying and maintaining two test CV-22 aircraft to conduct SOF Common TF/TAR SKR and other developmental tests as required. ***FY 2025 Plans:*** Continues supporting flying hours and maintaining two test CV-22 aircraft to conduct developmental flight tests. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Decrease of $1.770 million is due to fewer flying hours forecast to support FY 2025 flight test activities.			
Accomplishments/Planned Programs Subtotals	11.757	21.619	15.727

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
• PROC/1000CV22: *CV-22 SOF Modification*	78.726	75.981	49.403	-	49.403	19.719	17.551	52.281	53.538	Continuing	Continuing

Remarks

D. Acquisition Strategy

When possible, rapid prototyping will be incorporated in the acquisition strategies below to develop, demonstrate, and evaluate residual operational capabilities. The SKR was developed by the United States Special Operations Command (USSOCOM) to provide a SOF Common TF/TA capability for SOF aircraft. The SKR replaces the obsolete APQ-186 TF/TA multimode radar on the CV-22. The acquisition strategy for the CV-22 SOF Common TF/TA SKR program is to procure radar units and radar software modifications through the USSOCOM SKR program management office, buy aircraft modification kits, and integrate SKR into CV-22 aircraft using a mixture of both sole source and competitive contracts.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 United States Special Operations Command			Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** SF200 / *CV-22*	

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
SOF Common Terrain Following/Terrain Avoidance (TF/TA) Silent Knight Radar (SKR) Operational Flight Program (OFP) Development	C/CPFF	Various : Various	39.903	1.062	Feb 2023	-		1.200	Mar 2025	-		1.200	Continuing	Continuing	-
SOF Common TF/TA SKR Integration	C/CPFF	Various : Various	31.815	1.685	Feb 2023	-		1.000	Mar 2025	-		1.000	Continuing	Continuing	-
CV-22 Development	Various	Various : Various	0.337	-		8.069	Apr 2024	5.127	Mar 2025	-		5.127	Continuing	Continuing	-
Reliability Improvements	C/Various	Various : Various	-	-		4.780	Apr 2024	-		-		-	0.000	4.780	-
		Subtotal	72.055	2.747		12.849		7.327		-		7.327	Continuing	Continuing	N/A

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
Test Aircraft Flying Hours and Maintenance Developmental	C/Various	Various : Various	-	-		6.270	Feb 2024	4.500	Feb 2025	-		4.500	Continuing	Continuing	-
SOF Common TF/TA SKR - OFP Developmental	C/CPFF	Various : Various	6.694	1.200	Feb 2023	1.000	Nov 2023	1.000	Mar 2025	-		1.000	Continuing	Continuing	-
SOF Common TF/ TA SKR- Integration Developmental	C/CPFF	Various : Various	4.478	7.810	Feb 2023	1.500	Nov 2023	2.900	Mar 2025	-		2.900	Continuing	Continuing	-
		Subtotal	11.172	9.010		8.770		8.400		-		8.400	Continuing	Continuing	N/A

Remarks

Test Aircraft Flying Hours and Maintenance costs were previously reported under Test and Evaluation / CV-22 SOF Common TF/TA SKR-Integration Developmental.

	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	83.227	11.757		21.619		15.727		-		15.727	Continuing	Continuing	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 United States Special Operations Command			Date: March 2024
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1160403BB / *Aviation Systems*	Project (Number/Name) SF200 / *CV-22*	

	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 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** SF200 / *CV-22*

CV-22 Schedule

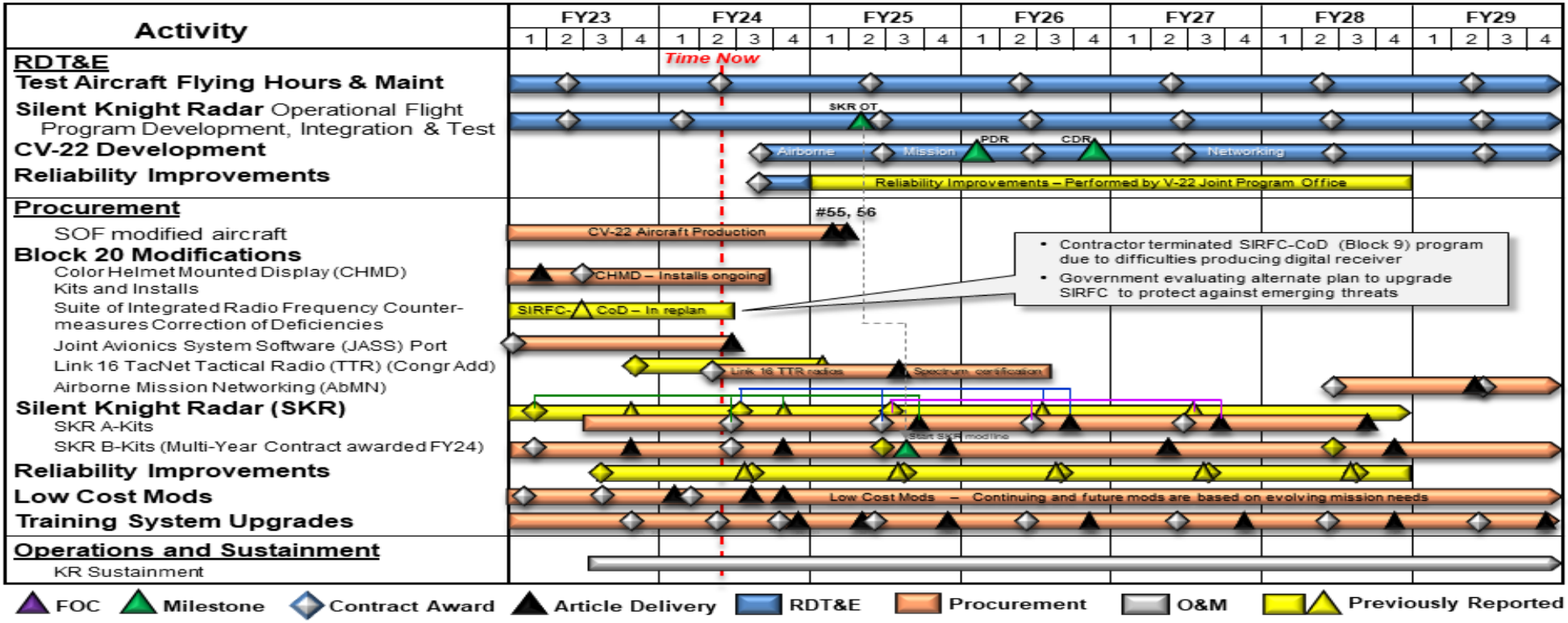


Exhibit R-4A, RDT&E Schedule Details: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** SF200 / *CV-22*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
CV-22				
Test Aircraft Flight Hours and Maintenance	1	2023	4	2029
Special Operations Forces (SOF) Common Terrain Following (TF) / Terrain Avoidance (TA) Silent Knight Radar (SKR)	1	2023	4	2029
Block 20 Development - Airborne Mission Networking (formerly Survivability and Situational Awareness)	3	2024	4	2029
Reliability Improvements	3	2024	4	2024

Exhibit R-2A, RDT&E Project Justification: PB 2025 United States Special Operations Command			Date: March 2024
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1160403BB / *Aviation Systems*	Project (Number/Name) SF300 / *Armed Overwatch/Targeting*	

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
SF300: *Armed Overwatch/ Targeting*	45.388	1.156	2.000	2.000	-	2.000	2.000	4.000	5.000	5.100	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This project supports integration and testing of SO-peculiar capabilities and aircraft certification efforts for the Armed Overwatch program. Armed Overwatch provides Special Operations Forces (SOF) with crewed deployable, affordable, and sustainable crewed aircraft systems capable of executing close air support (CAS), precision strike, and armed intelligence, surveillance, and reconnaissance (ISR) requirements in austere and permissive environments for use in Irregular Warfare operations that are in support of the 2022 National Defense Strategy (NDS).

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
Title: Armed Overwatch/Targeting, Program Number 814	1.156	2.000	2.000
Description: The funding in this project supports integration and testing of SO-p capabilities and aircraft certification efforts. ***FY 2024 Plans:*** Continue SOF integration, testing, and aircraft certification efforts. Initiate modular capability enhancements and payload integration activities for SOF secure communications, sensors, and targeting systems. ***FY 2025 Plans:*** Continues SOF integration, testing, and aircraft certification efforts. Continues modular capability enhancements and payload integration activities sensors and targeting systems, and initiates weapon upgrades capitalizing on Armed Overwatch's modular and open architecture to rapidly reconfigure platform capability tailored to support Special Operations ground force needs.			
Accomplishments/Planned Programs Subtotals	1.156	2.000	2.000

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
• PROC/0201ARMOWT: *Armed Overwatch/Targeting*	246.000	266.846	335.487	-	335.487	246.802	228.196	1.322	1.348	Continuing	Continuing

Remarks

Exhibit R-2A, RDT&E Project Justification: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** SF300 / *Armed Overwatch/Targeting*

D. Acquisition Strategy

Armed Overwatch: These technologies were pursued through industry partners via rapid prototyping. The USSOCOM Acquisition Executive approved the program's transition to the Major Capability Acquisition pathway at Milestone C and award of the follow-on production contract in 4th QTR FY 2022. The production contract was awarded 31 July 2022; certification and verification testing began immediately following award.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 United States Special Operations Command			Date: March 2024
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1160403BB / *Aviation Systems*	Project (Number/Name) SF300 / *Armed Overwatch/Targeting*	

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
Armed Overwatch/ Targeting: Special Operations Forces Integration, Testing and Aircraft Certification	C/FFP	Various : Various	30.296	1.156	Jun 2023	-		0.750	Mar 2025	-		0.750	Continuing	Continuing	-
Modular Payload Integration and Certification	C/FFP	Various : Various	-	-		1.500	Mar 2024	0.500	Mar 2025	-		0.500	Continuing	Continuing	-
		Subtotal	30.296	1.156		1.500		1.250		-		1.250	Continuing	Continuing	N/A

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
Armed Overwatch Integration, Testing, and Aircraft Certification	Various	Various : Various	7.550	-		-		-		-		-	Continuing	Continuing	-
		Subtotal	7.550	-		-		-		-		-	Continuing	Continuing	N/A

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
Armed Overwatch Verification Testing	C/FFP	Various : Various	1.029	-		-		0.400	Dec 2025	-		0.400	Continuing	Continuing	-
Armed Overwatch Live Fire Test & Evaluation	C/FFP	Various : Various	6.200	-		-		-		-		-	Continuing	Continuing	-
Modular Payload Operational Test	C/FFP	Various : Various	0.313	-		0.500	Mar 2024	0.350	Mar 2025	-		0.350	Continuing	Continuing	-
		Subtotal	7.542	-		0.500		0.750		-		0.750	Continuing	Continuing	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 United States Special Operations Command			Date: March 2024
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1160403BB / *Aviation Systems*	Project (Number/Name) SF300 / *Armed Overwatch/Targeting*	

	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	45.388	1.156		2.000		2.000		-		2.000	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** SF300 / *Armed Overwatch/Targeting*

Armed Overwatch Schedule

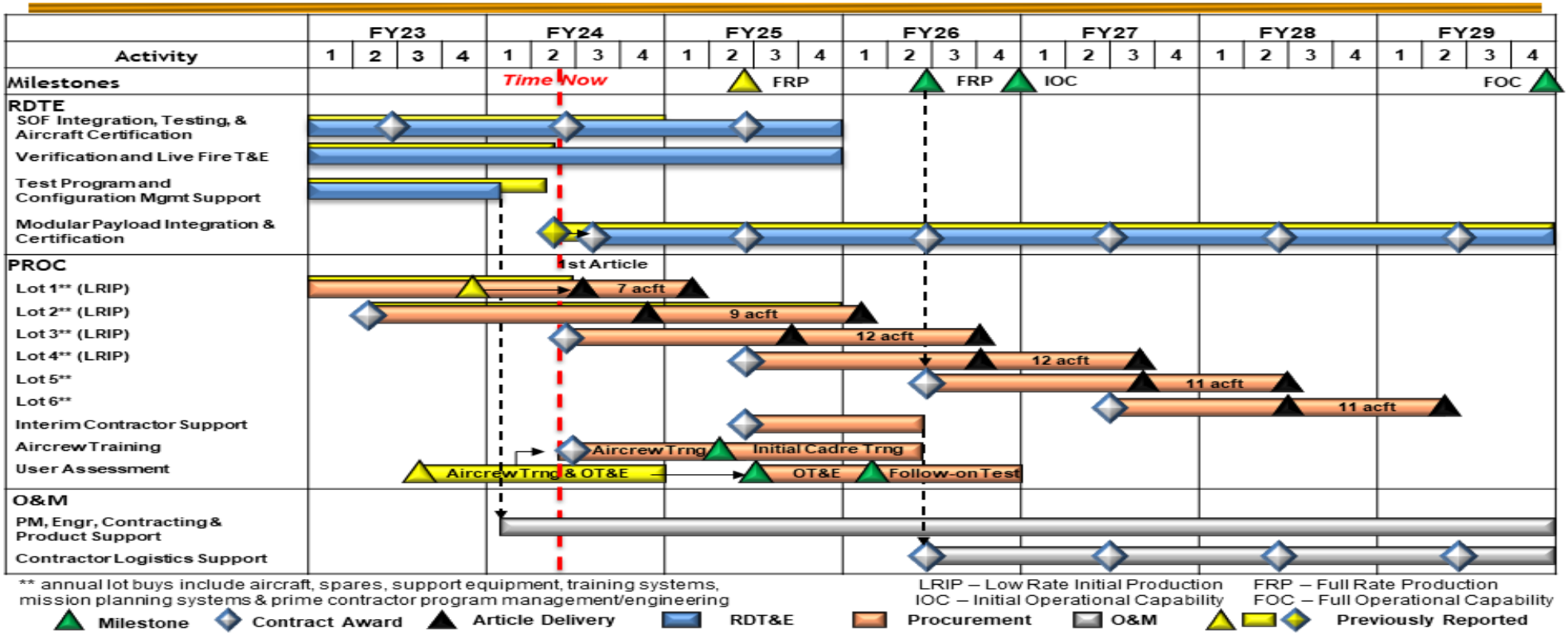


Exhibit R-4A, RDT&E Schedule Details: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** SF300 / *Armed Overwatch/Targeting*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Armed Overwatch/Targeting				
Special Operations Forces Integration, Testing, and Aircraft Certification	1	2023	4	2025
Verification and Live Fire T&E	1	2023	4	2025
Test Program and Configuration Management Support	1	2023	1	2024
Modular Payload Integration & Certification	2	2024	4	2029

Exhibit R-2A, RDT&E Project Justification: PB 2025 United States Special Operations Command			Date: March 2024
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1160403BB / *Aviation Systems*	Project (Number/Name) S750 / *Mission Training and Preparation Systems*	

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
S750: *Mission Training and Preparation Systems*	70.394	13.343	3.453	5.361	-	5.361	8.650	7.114	7.213	3.840	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This project funds the definition, design, development, prototyping, integration, and testing of Mission Training and Preparation Systems (MTPS) to support training, avoid obsolescence, and maintain simulator concurrency with weapon system configurations; support mission planning and rehearsal systems enhancements required to meet Special Operations-peculiar (SO-p) mission requirements and correct deficiencies identified in previous testing; and support mission planning and rehearsal capabilities in current MTPS. The MTPS project also includes program management, systems engineering, configuration management, architecture development, risk reduction, and trade study initiatives, as well as initiatives to assure interoperability and commonality between diverse SOF training systems. Additionally, this project funds the Extended Reality (XR) Training Transformation Simulator Block Upgrade Fixed Wing (SBUDF) program that develops and integrates training innovation and transformation solutions across the United States Special Operations Command (USSOCOM) fixed wing and special tactics augmented and virtual reality (AR/VR) mission training device portfolio, to include AC-130J, MC-130J, CV-22, Armed Overwatch and C-146.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
Title: Training Transformation Simulator Block Upgrades (SBUDF)	2.801	3.453	5.361
Description: Develops and integrates training innovation and transformation solutions across the USSOCOM fixed wing and special tactics training device portfolio, to include AC 130J, MC-130J, CV-22, Armed Overwatch, and C-146. These efforts include further developing and integrating augmented reality (AR), virtual reality (VR), and mixed reality technology and applying the technology to SO-peculiar missions and platforms in support of combat readiness and SOF operator mission qualification. These initiatives are not intended to replace existing traditional USSOCOM training devices and full motion simulators, but will rather mitigate current training limitations as well as enhance and complement existing training capabilities. The SBUDF will also support the development of advanced instructor and student feedback systems and artificial intelligence capabilities to increase the fidelity, quality, and efficiency of the USSOCOM training pipeline.			
FY 2024 Plans: Continue spiral development of AC-130J aircrew/maintenance AR/VR mission training devices and modules, while initiating development for MC-130J and Armed Overwatch aircrew/maintenance applications and incorporating emerging technology into existing solutions. Additionally, funds development and incorporation of artificial intelligence (AI) feedback systems into existing training platforms.			
FY 2025 Plans:			

Exhibit R-2A, RDT&E Project Justification: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** S750 / *Mission Training and Preparation Systems*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
Continues spiral development of AC-130J and Armed Overwatch aircrew/maintenance AR/VR mission training devices, modules and AI feedback systems. Additionally, initiate development of an integrated AR live aircraft training capability for the MC-130J, which will allow for more realistic, immersive, and repeatable live range training by utilizing digitally rendered friendly and adversary assets and terrain in absence of real world assets or terrain features. Some examples of live training scenarios that could utilize this live AR capability include threat reaction, aerial refueling approach, formation flying, and terrain avoidance scenarios. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** $1.908 million Increase, supports developmental efforts focused on increasing realism in graphics and functionality within virtual reality (VR) training devices for AC/MC-130J and initiation of development of integrated, augmented reality (AR) training capability for use in live MC-130J flights.			
Title: Special Operations Mission Planning and Execution (SOMPE), Program Number 838 ***Description:*** The SOMPE program develops, integrates, tests, and validates software enhancements required to meet SO-p requirements for, and correct deficiencies to, mission planning, preview, and execution software tools to support all phases of SOF operations from deliberate to time-critical. The SOMPE automates time-sensitive planning activities and provides enhanced situational awareness during mission execution. The SOMPE provides the interoperable environment for SOF adaptive planning to integrate global operations including, but not limited to, precision strike software, digital navigation, and Unmanned Aerial Systems (UAS) command and control. This program also provides the integration of SOMPE with multi-dimensional visualization systems, providing immersive mission rehearsal in minimal timeframes from the SOMPE mission plan. The SOMPE is embedded in the United States Special Operations Command (USSOCOM) Headquarters, Theater Special Operations Commands (TSOC), Joint Special Operations Task Forces, Joint Special Operations Aviation Components, SOF warfighters, and SOF warfighter platforms directly supporting the 2022 National Defense Strategy focus on integrated deterrence, crisis and conflict.	10.542	-	-
Accomplishments/Planned Programs Subtotals	13.343	3.453	5.361

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
• PROC/5000C13000: *C-130 Modifications*	16.893	18.796	-	-	-	-	-	-	-	0.000	35.689
• PROC/0207NSAV: *Non-Standard Aviation*	5.026	25.782	8.400	-	8.400	34.758	33.622	43.934	54.811	Continuing	Continuing
• PROC/1000CV2200: *CV-22 Modification*	78.726	75.981	49.403	-	49.403	19.719	17.551	52.595	53.538	Continuing	Continuing

Exhibit R-2A, RDT&E Project Justification: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** S750 / *Mission Training and Preparation Systems*

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
• PROC/0204OTHER: *Other Items <$5M*	78.434	82.910	74.173	-	74.173	80.968	95.025	73.440	86.693	Continuing	Continuing
• PROC/0607U28: *U-28*	4.589	7.198	5.259	-	5.259	2.031	-	-	-	0.000	19.077
• PROC/0201RWUPGR: *Rotary Wing Upgrades and Sustainment*	224.134	261.012	220.301	-	220.301	190.270	193.662	203.051	207.501	Continuing	Continuing

Remarks

D. Acquisition Strategy

The Training Transformation SBUDF program will utilize Naval Surface Warfare Center (NSWC) Dahlgren Division as the Government lead system integrator, while incorporating commercial off-the-shelf hardware/software solutions and competitive as well as sole source contracts to support spiral development of training transformation initiatives.

The SOMPE program employs the software acquisition pathway, leveraging commercial government sources, to facilitate rapid product development and delivery of software solutions using modern software development practices such as agile software development, Development Security and Operations (DevSecOps), and lean practices. SOMPE implements a modular open system approach that leverages commercial and government sources, including Science and Technology and Small Business Innovative Research programs within and outside of the United States Special Operations Command (USSOCOM), to quickly prototype, integrate, test, and deploy emerging technologies for decision support in all domains. This development strategy enables the program to design, develop, operationally test and deliver software quickly based on dynamic and emergent SO-peculiar operational requirements to achieve the USSOCOM's vision of obtaining strategic, asymmetric advantages for the nation in integrated deterrence, crisis, and conflict.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** S750 / *Mission Training and Preparation Systems*

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
Training Transformation Simulator Block Upgrades Fixed Wing Augmented Reality/ Virtual Reality Device Spiral Development	Various	Various : Various	-	2.801	Mar 2023	3.453	Jan 2024	5.361	Jan 2025	-		5.361	Continuing	Continuing	-
Special Operations Mission Planning and Execution (SOMPE) Software Development, Security, Operations (DevSecOps)	Various	Various : Various	56.704	8.971	Jan 2023	-		-		-		-	Continuing	Continuing	-
		Subtotal	56.704	11.772		3.453		5.361		-		5.361	Continuing	Continuing	N/A

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
SOMPE Software	MIPR	Special Operations Mission Planning Office : Various	3.872	-		-		-		-		-	Continuing	Continuing	-
		Subtotal	3.872	-		-		-		-		-	Continuing	Continuing	N/A

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
SOMPE Exercise & Limited Objective Operational and Developmental Test Events	Various	Various : Various	9.818	1.571	Nov 2022	-		-		-		-	Continuing	Continuing	-
		Subtotal	9.818	1.571		-		-		-		-	Continuing	Continuing	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 United States Special Operations Command			Date: March 2024
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1160403BB / *Aviation Systems*	Project (Number/Name) S750 / *Mission Training and Preparation Systems*	

	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	70.394	13.343		3.453		5.361		-		5.361	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** S750 / *Mission Training and Preparation Systems*

Training Transformation SBUDF Schedule

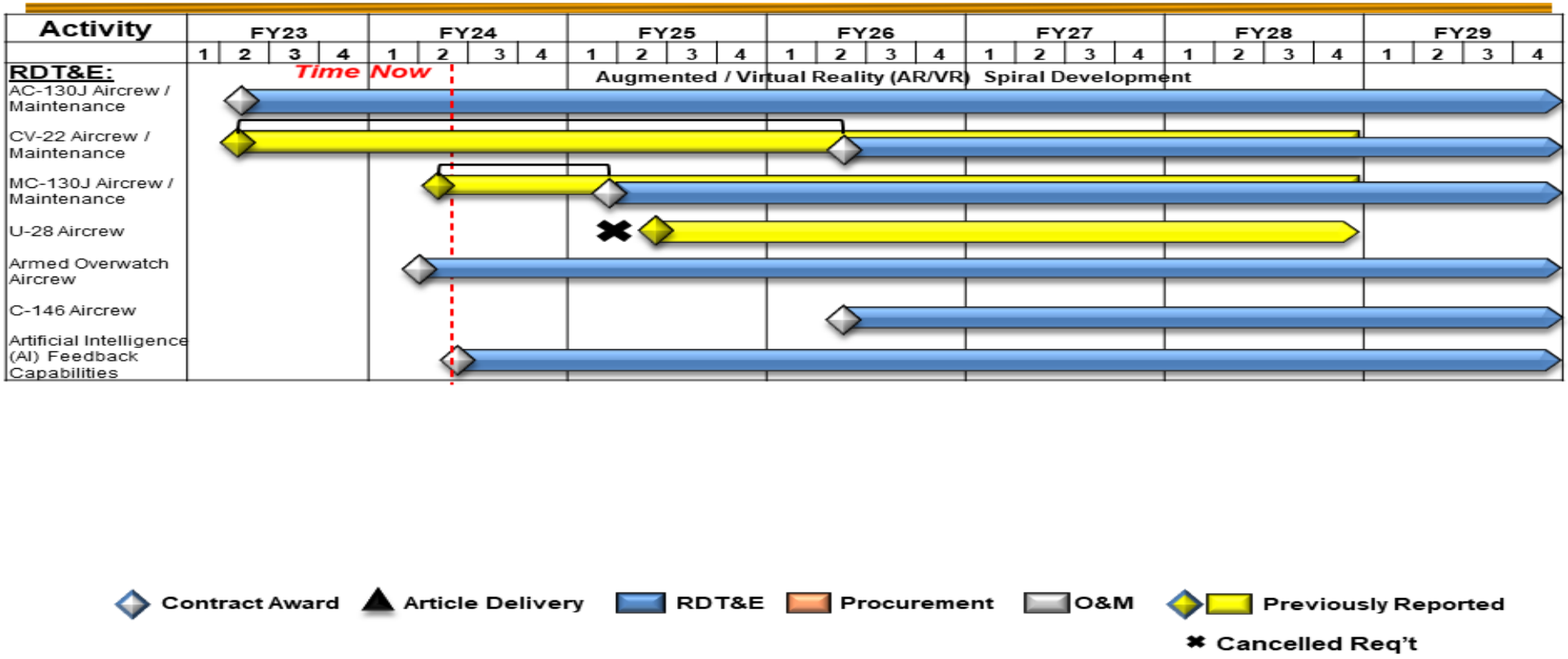


Exhibit R-4, RDT&E Schedule Profile: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** S750 / *Mission Training and Preparation Systems*

Training Transformation SBUDF Schedule (Continued)

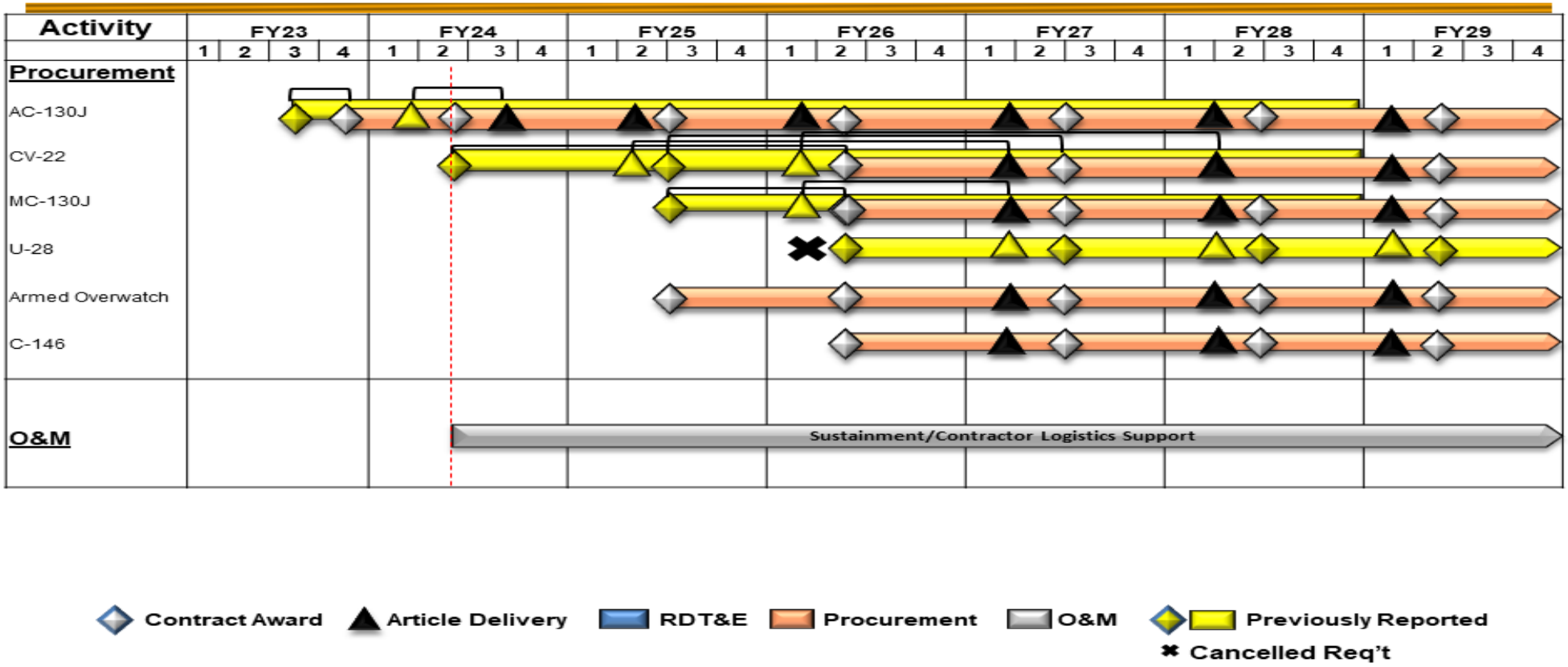


Exhibit R-4, RDT&E Schedule Profile: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** S750 / *Mission Training and Preparation Systems*

Special Operations Mission Planning and Execution (SOMPE) Schedule

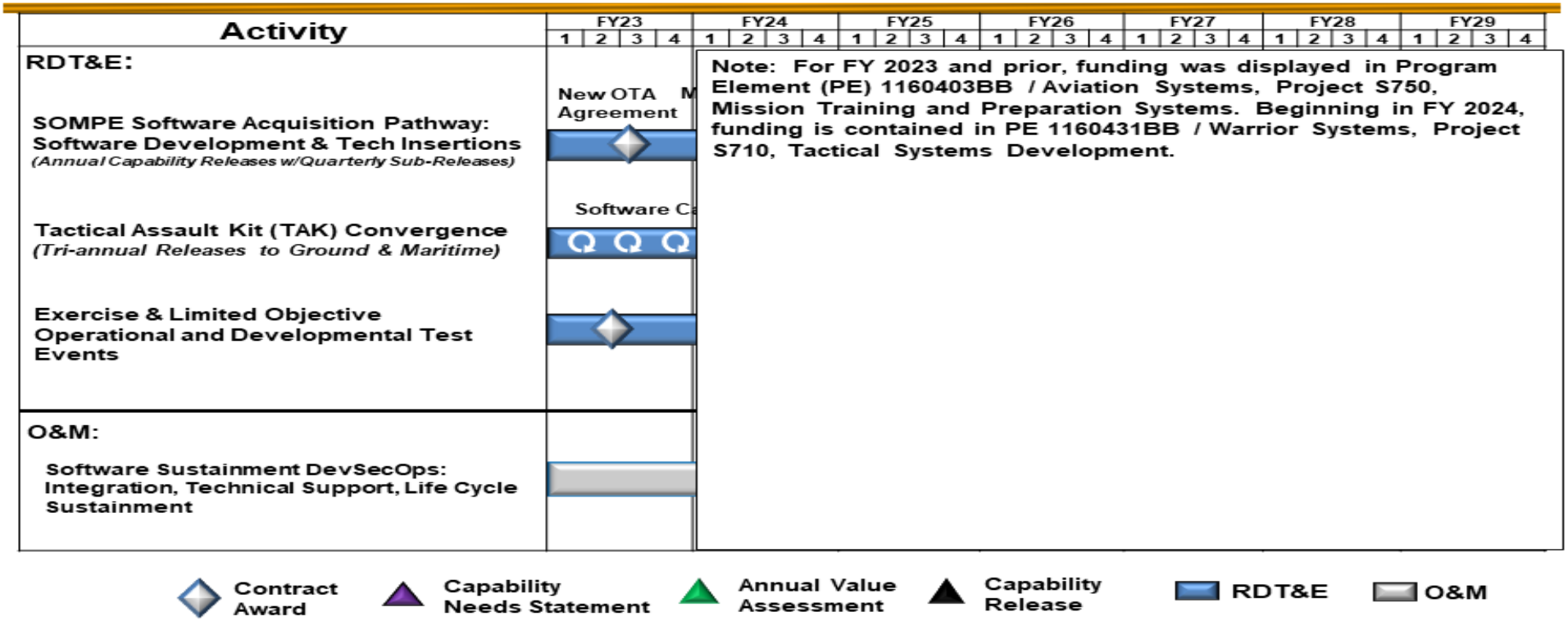


Exhibit R-4A, RDT&E Schedule Details: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** S750 / *Mission Training and Preparation Systems*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Training Transformation Simulator Block Upgrades Fixed Wing				
Augmented Reality/Virtual Reality (AR/VR) Device Spiral Development AC-130J Aircrew / Maintenance	2	2023	4	2029
AR/VR Device Spiral Development CV-22 Aircrew / Maintenance	2	2026	4	2029
AR/VR Device Spiral Development MC-130J Aircrew / Maintenance	1	2025	4	2029
AR/VR Device Spiral Development Armed Overwatch Aircrew	2	2025	4	2029
AR/VR Device Spiral Development C-146 Aircrew	2	2026	4	2029
Artificial Intelligence Feedback Capabilities	2	2024	4	2029
Special Operations Mission Planning and Execution (SOMPE)				
Software Acquisition Pathway: Software Development and Tech Insertions	1	2023	4	2023
Tactical Assault Kit (TAK) Convergence	1	2023	4	2023
Exercise & Limited Objective Operational and Developmental Test Events	1	2023	4	2023

Exhibit R-2A, RDT&E Project Justification: PB 2025 United States Special Operations Command			Date: March 2024
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1160403BB / *Aviation Systems*	Project (Number/Name) S875 / *AC/MC-130J*	

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
S875: *AC/MC-130J*	186.820	40.038	65.496	74.616	-	74.616	44.757	23.934	24.217	24.341	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This project supports the development, rapid prototyping, integration, automation, and testing of the AC-130J and MC-130J aircraft. The AC-130J Ghostrider provides close air support (CAS), air interdiction, and armed reconnaissance in support of special operations and conventional forces in contested and degraded environments. The MC-130J Commando II provides clandestine, or low visibility, single or multiship, low-level infiltration (infil), exfiltration (exfil), and resupply of Special Operations Forces (SOF), by airdrop or airland and air refueling missions for special operations helicopters and tiltrotor aircraft, intruding politically sensitive or hostile territories. Incremental upgrade and agile software delivery approaches will be used to rapidly prototype, integrate and mature SOF capabilities onto the AC-130J and MC-130J aircraft. Capability Release Two (CR2) includes the following SOF modifications: Special Mission Systems (SMS), Auxiliary Flight Deck Station (AFDS), Defensive System Upgrade (DSU), Terrain Following (TF) / Terrain Avoidance (TA) radar, Airborne Mission Networking (AbMN), and Electronic Warfare (EW) / Radio Frequency Countermeasures (RFCM) programs. Additionally, Capability Release Three (CR3) builds upon the CR2 configuration through integration of an enhanced Tactical Flight Management System (TFMS), Auto-Route Replanner (ARR), integrated Defensive Countermeasure (DCM) Suite implemented in alignment to the Open Mission Systems (OMS) standard reference architecture and hosted on an upgraded Next Generation SMS. Efforts like Integrated Tactical Mission Systems (ITMS) in CR3 provides critical automation and integration of SOF Tactical Mission Systems (TMS), including navigation, communication, precision fire control and defensive systems required for safe flight in AC-130J and MC-130J aircraft. Requirements include upgrades to integrate and automate SOF TMS such as AbMN interoperability, data fusion and improved situational awareness, improved threat detection and avoidance, integrated TF / TA and Silent Knight Radar (SKR) improvements, DCM suite, Precision Strike Package (PSP) interoperability, integrated EW, and embedded training. Integrating and automating SOF mission systems that deliver these capabilities is critical to fielding SOF-capable AC-130J and MC-130J aircraft to be more lethal, resilient, survivable, agile, and responsive in support of the 2022 National Defense Strategy (NDS). MAC supports development and demonstration of amphibious capabilities on a C-130J to support runway independent operations and provide the ability to operate in logistically constrained environments.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
Title: Integrated Tactical Mission Systems (ITMS), Program Number 780	40.038	65.496	63.116
Description: Provides critical automation and integration of SOF TMS, including navigation, communication, precision fire control and aircraft defensive systems required for safe flight in AC-130J and MC-130J aircraft. The ITMS program increases operational crew performance and aircraft survivability by integrating the AC/MC-130J green aircraft and multiple SOF mission systems as an interoperable system-of-systems. Automated software capabilities will be developed, integrated, and tested with SOF-peculiar and green aircraft flight information, displays, and controls through the Special Mission Systems (SMS) suite. By increasing system-of-systems data interoperability through an Open Mission Systems (OMS) compliant Modular Open System Architecture (MOSA), an agile software development infrastructure will be employed to integrate multiple subsystems and continuously deliver automated software capabilities. Capabilities include, but are not limited to: automated route replanning; tactical flight management; integrated aircraft defensive systems; defensive countermeasures (DCM); and embedded training.			

Exhibit R-2A, RDT&E Project Justification: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** S875 / *AC/MC-130J*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
The Next Generation Special Mission Processor (SMP) resolves current diminishing manufacturing sources issues with a MOSA compliant design to perform central processing for ITMS software. The ITMS enables dynamic operations with integrated real-time information, automation, and decision making data for safe TF/TA flight and mission execution on MC-130J aircraft and seamless employment of the PSP on AC-130J aircraft. ***FY 2024 Plans:*** Continue development, demonstration, and test of common interfaces to integrate legacy, current, and future mission systems into an interoperable systems architecture for both MC-130J and AC-130J aircraft. Continue to identify, prototype, demonstrate, and enhance modern OMS compliant capabilities of: pre-mission software; common payload interfaces; automated sensor tip/cue; enhanced cybersecurity management software; automated weapons planning and management; and applications of BMS software in support of multi-role aircraft capabilities and roll-on/roll-off systems. Complete MC-130J TFMS minimum viable product integration and test, and continues software DevSecOps to improve avionics interoperability with mission systems. Begin MC-130J integration and test of minimum viable products for onboard ARR and DCM capabilities on Next Gen SMP hardware. Continue capability maturation of software services for TFMS and ARR products to improve operations-based software performance. Continue development of DCM capabilities for both the MC-130J and AC-130J aircraft. ***FY 2025 Plans:*** Continues development, demonstration, and test of integration of new and existing systems into a Modular Open Systems Architecture (MOSA) aligned to the Open Mission Systems (OMS) reference architecture for both AC-130J and MC-130J. Integrates existing defensive systems with the prototype mission package for consolidated situational awareness and control to support AFSOC survivability and reduce crew compliment aircraft needs, including completion of data gateway adapters to the defensive systems. Continues integration of the Tactical Flight Management System (TFMS) with the MC-130J avionics to support AFSOC-unique aviation operations. Initial integration of AC-130J unique capabilities with the OMS mission package is performed, with development and demonstration of OMS-enabled lethality optimization services on the Precision Strike Package (PSP) for the AC-130J. Efforts are underway to incorporate digital engineering infrastructure and principles supporting these efforts, including completion of stand-up of an enterprise Integrated Digital Environment (IDE), continued development of a Government System Model, and initial deployment of DevSecOps services focused on a common software service repository. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** $2.380 million decrease due to the completion of common interfaces to integrate legacy and current mission systems, less effort for tactical map enhancements, and release of the onboard Automated Route Replanner (ARR) initial capability on Next Generation Special Mission Processor (SMP) hardware for MC-130J.			
Title: MC-130J Amphibious Capability (MAC) ***Description:*** THE MAC supports development and demonstration of amphibious capabilities on a C-130J to support runway independent operations and provide the ability to operate in logistically constrained environments.	-	-	11.500

Exhibit R-2A, RDT&E Project Justification: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** S875 / *AC/MC-130J*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
FY 2025 Plans: Continues aircraft performance modeling. Begins full scale manufacturing and fabrication of test article beam assembly, truss assembly, and the floatation system. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Increase of $11.500 million is due to transition of MAC capabilities from SF100: Aviation Systems Advanced Development to S875: AC/MC-130J, which supports the fabrication and testing of full-scale test articles. Decrease of $3.5 million from original amount of $15 million (originally reported under Project SF100, Aviation Systems Advanced Development), is due to completion of detailed design activities in FY 2024, with fabrication beginning in FY 2025.			
Accomplishments/Planned Programs Subtotals	40.038	65.496	74.616

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
• PROC/2012C130J: *AC/MC-130J*	222.869	319.754	300.892	-	300.892	319.441	386.667	410.950	438.665	Continuing	Continuing
• PROC/1202PSP: *Precision Strike Package*	57.450	108.497	69.917	-	69.917	72.285	58.113	59.211	61.306	Continuing	Continuing

Remarks

D. Acquisition Strategy

ITMS: Award two sole source contracts to key prime integrators to develop and maintain an open mission system compliant MOSA, integrate legacy subsystems into the common architecture, support government on-boarding of 3rd party capabilities, and modernize software services through DevSecOps. Perform operationally driven rapid prototyping and demonstrations to evaluate new technology for system integration while informing changes to tactics, techniques, and procedures. Government lead development of virtual environment to enable collaborative integration of modular software services procured through competitive, sole source contracts, and use of open mission system compliant standards for hardware and software architecture, software, services, and future subsystems. Perform combined government and contractor integration, lab, and flight development/operational testing.

MAC: Utilize Government partners, labs and Industry partners through multiple contract awards to perform engineering analysis in the areas of hydrodynamics, structural loads, and flight performance modeling. In addition award contract to design, build and install test article.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 United States Special Operations Command			Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** S875 / *AC/MC-130J*	

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
Integrated Tactical Mission System (ITMS) - AC/MC-130J Systems Interoperability & Tactical Map Enhancements	C/Various	Sierra Nevada Corporation : Nevada	53.388	5.108	Dec 2022	8.867	Dec 2023	5.955	Dec 2024	-		5.955	Continuing	Continuing	-
ITMS - Open Mission System (OMS) Capabilities	C/Various	Various : Various	15.288	5.780	Dec 2022	9.805	Dec 2023	11.178	Dec 2024	-		11.178	Continuing	Continuing	-
ITMS - MC-130J Software Capability Development	C/CPFF	Lockheed Martin Aeronautics : Marietta	27.222	10.566	Dec 2022	21.703	Dec 2023	18.054	Dec 2024	-		18.054	Continuing	Continuing	-
ITMS - AC-130J Software Capability Development	C/Various	Various : Various	6.153	-		1.826	Dec 2023	3.238	Dec 2024	-		3.238	Continuing	Continuing	-
ITMS - Agile Software Framework Dev & Test	C/Various	Various : Various	11.951	6.830	Mar 2023	7.850	Mar 2024	8.312	Mar 2025	-		8.312	Continuing	Continuing	-
ITMS - NextGen Special Mission Processor (SMP) Development, Integration & Test	C/Various	Various : Various	18.182	-		-		-		-		-	0.000	18.182	-
MC-130J Airborne Mission Networking (AbMN)	C/CPFF	Sierra Nevada Corporation : Centennial, CO	19.712	-		-		-		-		-	0.000	19.712	-
MC-130J Amphibious Capability (MAC)	C/FFP	Various : Various	-	-		-		11.500	Nov 2024	-		11.500	Continuing	Continuing	-
		Subtotal	151.896	28.284		50.051		58.237		-		58.237	Continuing	Continuing	N/A

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
ITMS - Support	C/Various	Various : Various	8.885	3.650	Mar 2023	4.375	Mar 2024	4.893	Mar 2025	-		4.893	Continuing	Continuing	-
		Subtotal	8.885	3.650		4.375		4.893		-		4.893	Continuing	Continuing	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 United States Special Operations Command			Date: March 2024
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1160403BB / *Aviation Systems*	Project (Number/Name) S875 / *AC/MC-130J*	

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
ITMS - Integration & Developmental Test	Sub Allot	USSOCOM Detachment 1 : Eglin AFB, FL	22.277	8.104	Mar 2023	11.070	Mar 2024	11.486	Mar 2025	-		11.486	Continuing	Continuing	-
Prior Year Funding - Completed Efforts	C/Various	Lockheed Martin : Atlanta, GA	3.762	-		-		-		-		-	0.000	3.762	-
		Subtotal	26.039	8.104		11.070		11.486		-		11.486	Continuing	Continuing	N/A

Remarks

AC-130J Software Capability Development increase ramps software development, integration and test to improve PSP interoperability and enhance common TFMS, AAR, and DCM software to the AC-130J fleet based on FY 2025 OMS prototype demonstrations.

ITMS - Support decreases due to the completion of common interfaces to integrate legacy and current mission systems and based on execution of the program with minimal risk to development activities.

	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	186.820	40.038		65.496		74.616		-		74.616	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** S875 / *AC/MC-130J*

Integrated Tactical Mission Systems (ITMS) Schedule

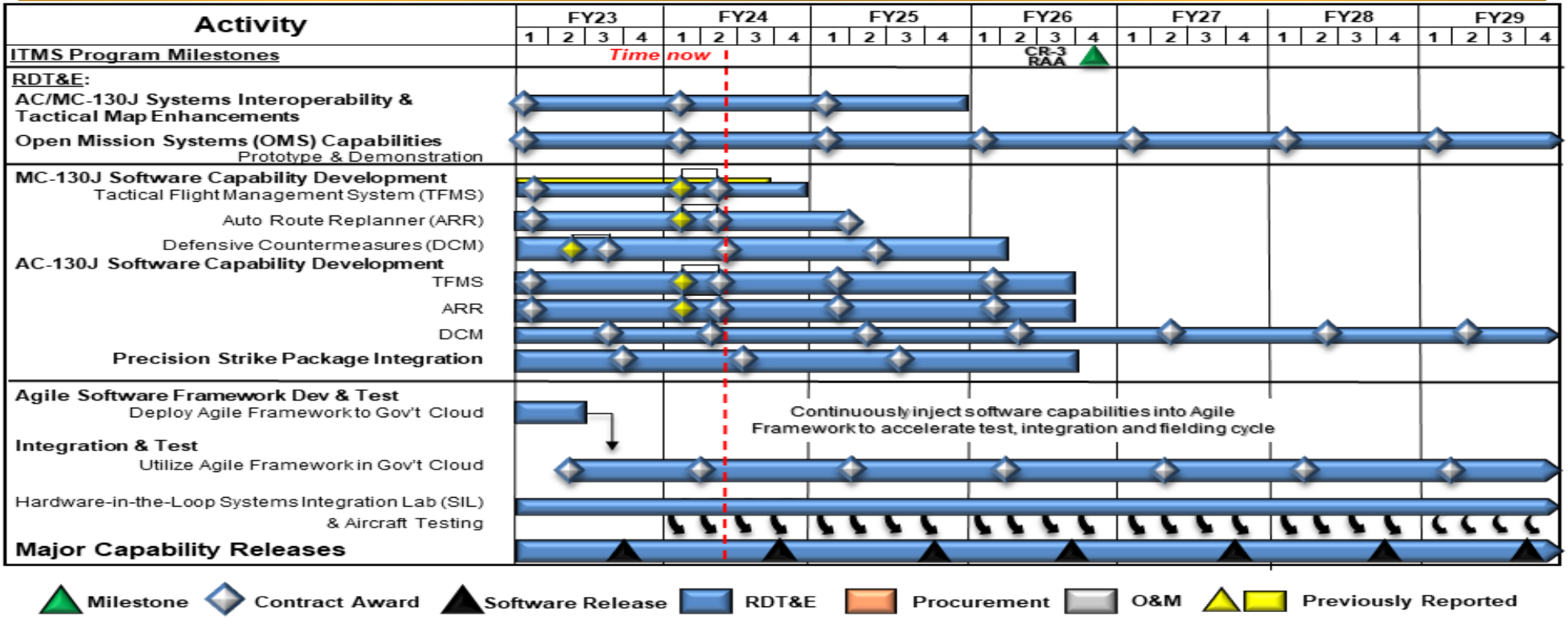
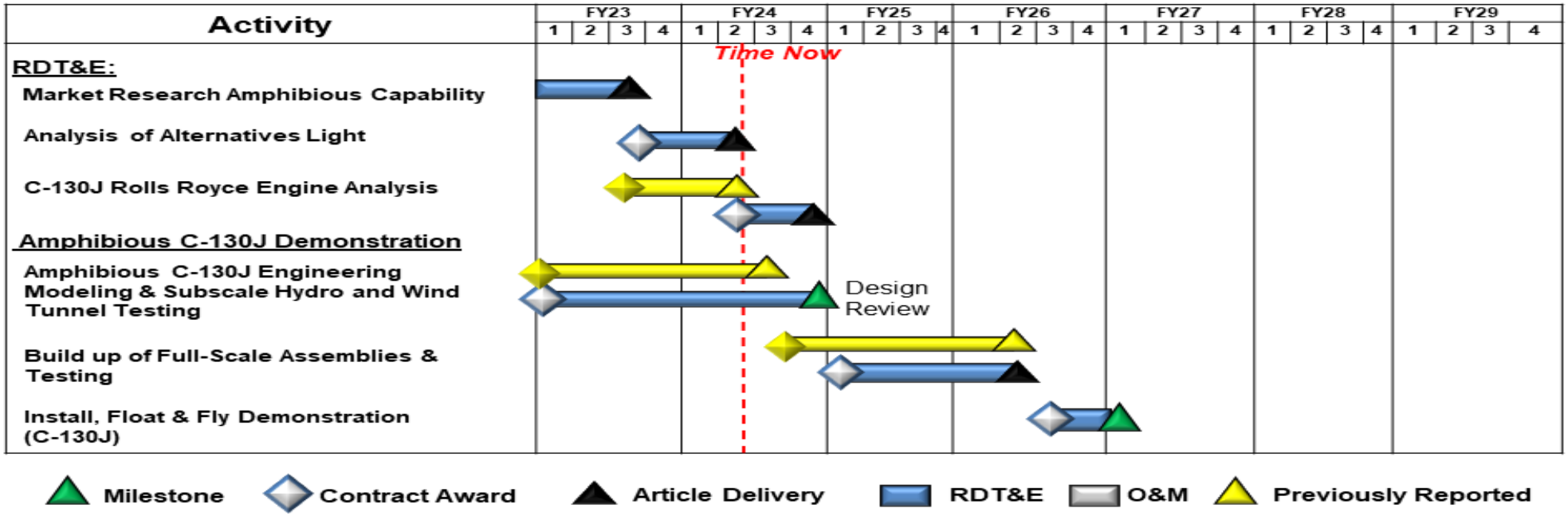


Exhibit R-4, RDT&E Schedule Profile: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** S875 / *AC/MC-130J*

MAC Schedule



Note: Beginning in FY 2025, MAC Capabilities have transitioned from Program Element (PE) 1160403BB, Aviation Systems, Project SF100: Aviation Systems Advanced Development to PE 1160403BB Aviation Systems, Project S875: AC/MC-130J

Exhibit R-4A, RDT&E Schedule Details: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** S875 / *AC/MC-130J*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Integrated Tactical Mission Systems (ITMS)				
AC/MC-130J Systems Interoperability & Tactical Map Enhancements	1	2023	4	2025
Open Mission System (OMS) Capabilities- Prototype and Demonstration	1	2023	4	2029
MC-130J Software Capability Development - Tactical Flight Management System (TFMS)	1	2023	3	2024
MC-130J Software Capability Development - Auto Route Replanner (ARR)	1	2023	1	2025
MC-130J Software Capability Development - Defensive Countermeasures (DCM)	1	2023	2	2026
AC-130J Software Development - TFMS	1	2023	3	2026
AC-130J Software Development - ARR	1	2023	3	2026
AC-130J Software Development - DCM	1	2023	4	2029
AC-130J Software Development - Precision Strike Package Integration	1	2023	3	2026
Agile Software Framework Development & Test - Deploy Agile Framework to Government Cloud	1	2023	3	2023
Integration &Test - Utilize Agile Framework in Government Cloud	3	2023	4	2029
Integration &Test - Hardware-in-the-Loop Systems Integration Lab (SIL) & Aircraft Testing	1	2023	4	2029
Integration &Test - Major Release Cycles (Delivery Capabilities)	1	2023	4	2029
MC-130J Amphibious Capability (MAC)				
Build up of Full-Scale Assemblies & Testing	1	2025	2	2026
Install, Float & Fly Demonstration (C-130J)	2	2026	1	2027

Exhibit R-2A, RDT&E Project Justification: PB 2025 United States Special Operations Command			Date: March 2024
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1160403BB / *Aviation Systems*	Project (Number/Name) D615 / *Rotary Wing Aviation*	

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
D615: *Rotary Wing Aviation*	379.464	57.665	67.311	59.652	-	59.652	60.924	57.931	58.998	60.145	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This project provides for the development, rapid prototyping, demonstration, and integration of current and maturing technologies for Special Operations - peculiar (SO-p) rotary wing aviation and training requirements. This project provides next generation mobility to allow SO-p helicopters to operate in denied environments in support of the 2022 National Defense Strategy. Rotary wing aircraft supported by this project include currently fielded: MH-60M; MH-47G; A/MH-6; and future planned Future Vertical Lift (FVL) Future Attack Reconnaissance Aircraft (FARA) and Future Long-Range Assault Aircraft (FLRAA). The currently fielded aircraft provide aviation support to SOF in worldwide contingency operations and low-intensity conflicts. These aircraft must be capable of rapidly deploying, penetrating hostile areas undetected, and operations at extended ranges under adverse weather conditions to infiltrate, provide logistics for, reinforce, and extract SOF. The anti-access/area denial (A2/AD) threat is characterized by an extensive and sophisticated ground based air defense system and an upgraded air-to-air capability targeted against helicopters. The Mission Processor Upgrades (MPU) provides for non-recurring engineering, systems engineering/testing, and future aircraft architecture studies that support replacement and upgrade of the current mission and video processors for all Army Special Operations Aviation (ARSOA) rotary wing aircraft. Tactical Mission Networking (TMN) focuses on technology development of platform software and hardware systems with capabilities to enable aircraft to effectively adapt and overcome the challenges of a highly contested and congested Radio Frequency (RF) environment.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
Title: A/MH-6M Block 3.0 Upgrade, Program Number 828	2.635	2.940	2.999
Description: The A/MH-6 aircraft is the USSOCOM's only urban attack and assault platform and provides reconnaissance, close air support (CAS), precision strike, infiltration (infil), exfiltration (exfil), and resupply of SOF teams in hostile, denied, and politically sensitive areas. This specialized aircraft must be capable of worldwide rapid deployment and operations in contested or anti-access/area denial (A2/AD) environments in support of Multi-Domain Operations. The A/MH-6 allows the Joint Force to be more agile and responsive to combat missions, Irregular Warfare and Military Operations Other than War (MOOTW) as stated in the 2022 National Defense Strategy (NDS). This program funds the development and testing of SO-p equipment and modifications for the A/MH-6. It will include software development and testing to integrate new capability, development and qualification of new hardware, and test and evaluation of new weapons, sensors, communications systems, or aircraft modifications that increase system performance.			
FY 2024 Plans: Continue software updates to incorporate communications data upgrades and crypto modernization for enhanced situational awareness incorporating Tactical Assault Kit, and additional software applications in the Tactical Assault Kit. Continue improved			

Exhibit R-2A, RDT&E Project Justification: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** D615 / *Rotary Wing Aviation*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
main rotor transmission study and improvements to the Full Authority Digital Engine Control (FADEC), and lightweight engine doors exhaust study flight testing. ***FY 2025 Plans:*** Continues software updates to incorporate communications data upgrades and crypto modernization for enhanced situational awareness as well as additional software applications. Begins improving main rotor transmission and continues improvements to the FADEC and lightweight engine doors exhaust flight testing. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Increase of $0.059 million supports lightweight engine doors exhaust flight testing.			
Title: MH-60M Modifications and Upgrades, Program Number 827 ***Description:*** Funds the development and integration of critical technologies for the MH-60 helicopter to include flight test support, engineering analysis, documentation, and airworthiness substantiation. The Block 2.0 effort integrates the Army-common T901 Improved Turbine Engine (ITE) into the MH-60M, replacing the current SO-p engine. Block 2.0 initiatives include, but are not limited to, safety, performance restoration, MH-60 engineering changes and product improvements to SO-p equipment, munitions utilized for testing, modifications to Aircraft Survivability Equipment (ASE) and weapons systems designed to counter rapidly emerging threats, improved lethality, and enhanced aircraft self-protection in the Multi-Domain Operations (MDO) environment and against near peer threats. The MH-60M aircraft provides long-range, high speed, all weather, close air support (CAS), precision strike, infiltration (infil), exfiltration (exfil), and resupply of SOF teams in hostile, denied, and politically sensitive areas that allows the Joint Force to be more agile and responsive to combat missions Irregular Warfare and Military Operations Other than War (MOOTW) as stated in the 2022 National Defense Strategy (NDS). ***FY 2024 Plans:*** Continue Payload Restoration efforts and other technologies to improve safety and decrease operational costs to ASE, weapons systems improvements and munitions. Initiate T901 Engine integration efforts on the MH-60M based on an established UH-60M baseline. Begin development of MH-60M T901 software in support of future flight test. ***FY 2025 Plans:*** Continues Payload Restoration efforts and other technologies to improve safety and decrease operational costs to ASE, weapons systems improvements and munitions. Initiates T901 Engine integration efforts on the MH-60M based on an established UH-60M baseline. Continues development of MH-60M T901 software in support of future flight test. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Increase of $2.741 million is to support continued product development and testing efforts in support of initiation of the T901 Engine.	3.987	11.910	14.651
Title: Future Vertical Lift (FVL)	9.718	11.668	11.514

Exhibit R-2A, RDT&E Project Justification: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** D615 / *Rotary Wing Aviation*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
Description: Provides for development of the United States Special Operations Command (USSOCOM) platform capabilities that address SO-p FVL requirements. This FVL family of systems significantly increases range, speed, payload, survivability, reliability, and maintainability of vertical lift aircraft to meet emerging mission requirements. The USSOCOM will participate in the service-common development of a joint FVL aircraft by injecting SO-p requirements and equities into the initial development and design efforts to minimize SO-p modifications to the common aircraft. Additionally, SOF development will maximize the interoperability of the future and enduring fleet's Mission Equipment Packages (MEP) and integration. The FVL aircraft provides long-range, high speed, all weather, close air support (CAS), precision strike, infiltration (infil), exfiltration (exfil), and resupply of SOF teams in hostile, denied, and politically sensitive areas that allows the Joint Force to be more agile and responsive to combat missions Irregular Warfare and Military Operations Other than War (MOOTW) as stated in the 2022 National Defense Strategy (NDS). ***FY 2024 Plans:*** Continue Future Long-Range Assault Aircraft (FLRAA) SO-p mission equipment package engineering, integration, and demonstration necessary to support advanced avionics, advanced mission equipment, Radio Frequency Countermeasures (RFCM), Terrain Following/Terrain Avoidance (TF/TA) Sensor, Electro-Optical/Infrared Sensor, Launched Effects (LE) and Degraded Visual Environment (DVE) into the Army single-vendor baseline. Continue Modular Open-System Architecture (MOSA) analysis into a common cockpit with Digital Backbone integrating SO-p mission equipment and initiates software development for select SO-p sensors and weapons. Develop interoperability of MOSA based capabilities to enduring fleet for testing of SO-p mission equipment packages. ***FY 2025 Plans:*** Continues FLRAA SO-p mission equipment package engineering, integration, and demonstration necessary to support advanced avionics, advanced mission equipment, RFCM, TF/TA Sensor, Electro-Optical/ IR Sensor, LE and DVE into the Army single-vendor baseline by specifically designing space, weight, and structure provisions as part of the Army baseline design. Continues MOSA analysis into a common cockpit with Digital Backbone integrating SO-p mission equipment and initiates software development for select SOF- p sensors and weapons. Develops interoperability of MOSA based capabilities to enduring fleet for testing of SO-p mission equipment packages. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Decrease of $0.154 million is due to efficiencies from the Army's FLRAA down select to a single vendor.			
Title: MH-47 Modifications and Upgrades, Program Number 830	0.712	4.155	3.940
Description: This specialized aircraft for these missions must be capable of worldwide rapid deployment and operations in contested or anti-access/area denial (A2/AD) environments in support of Multi-Domain Operations. Develops technologies to improve the performance and safety of the MH-47G and decrease operational costs. Efforts include the Active Parallel Actuator Subsystem (APAS), weight reduction, and performance improvement developments. This program also includes modifications to counter rapidly emerging threats and enhance aircraft self- protection. The MH-47G aircraft is the USSOCOM's only heavy assault			

Exhibit R-2A, RDT&E Project Justification: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** D615 / *Rotary Wing Aviation*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
platform and provides long-range, high speed, all weather, and resupply of SOF teams in hostile, denied, and politically sensitive areas that allows the Joint Force to be more agile and responsive to combat missions, Irregular Warfare and Military Operations Other than War (MOOTW) as stated in the 2022 National Defense Strategy (NDS). ***FY 2024 Plans:*** Continue developing technologies, weight reduction, and performance improvements; includes modifications to systems to counter rapidly emerging threats and enhance aircraft self-protection integration with MH-47G subsystems, such as Common Avionics Architecture System (CAAS), and continue execution of a configuration study of performance related improvements. Incorporate performance enhancing and weight reduction technologies targeting increased payloads, improved fuel economy, and expanded airspeed and environmental operating envelopes. ***FY 2025 Plans:*** Continues developing new technologies, weight reduction efforts, and performance improvements; this includes modifications to Aircraft Survivability Equipment and weapons systems to counter rapidly emerging threats and enhanced aircraft self-protection integration with MH-47G subsystems, such as CAAS. Incorporates performance enhancing and weight reduction technologies targeting increased payloads, improved fuel economy and expanded airspeed, range, and environmental operating envelopes to include maritime environments. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Decrease of $0.215 million was made available to support critical emergent Command requirements.			
Title: Mission Processor Upgrade (MPU), Program Number 846 ***Description:*** This specialized equipment must be capable of worldwide rapid deployment and operations in contested or anti-access/area denial (A2/AD) environments in support of Multi-Domain Operations. MPU provides for non-recurring engineering, systems engineering/testing, and future aircraft architecture studies that support replacement and upgrade of the current mission and video processors for all Army Special Operations Aviation (ARSOA) rotary wing aircraft; upgrading all internal processors increases the processing power to support critical functionality and emerging technologies that will be integrated into the aircraft operational flight program. MPU enables the enhancement in processing and memory resources required to incorporate future functionality within the aircraft; this includes replacement of ground-based navigation aids, advanced large area displays, processors with greater computing power, secured & removable storage, machine learning capabilities, precision timing devices in Global Positioning System (GPS)-denied environment, further advancement of cognitive decision aiding system that fuses information on threat, route, weather, terrain, and friendly forces, instantaneously adjusting an aircraft's route to protect the flight crew in hazardous weather, low level conditions, night conditions, and the next generation ARSOA cockpit. MPU also furnishes the progression to protect aircraft and aircrew from cyber security threats from real-time flight monitoring and prevention capabilities. Tactical Mission Networking (TMN) focuses on the technology development of platform software and hardware systems and facilitates advanced radio waveforms and communications equipment to ensure interoperability.	5.007	4.774	4.869

Exhibit R-2A, RDT&E Project Justification: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** D615 / *Rotary Wing Aviation*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
Upgrading antennas, processors, radios and other enabling communications equipment will be a persistent requirement as the environment becomes increasingly more complex. The Army intends to upgrade its networks every two years – this funding will ensure Special Operations Aircraft can adapt and keep pace with both SOF and conventional forces' communications and networking improvements/upgrades. This Special Operations Aviation Mission Equipment is a commodities product shared across the Special Operations Rotary Wing aircraft and ensures the Special Operations Rotary Wing aircraft are safely able to provide long-range, high speed, all weather, close air support (CAS), precision strike, reconnaissance, infiltration (infil), exfiltration (exfil), and resupply of SOF teams in hostile, denied, and politically sensitive areas that allows the Joint Force to be more agile and responsive to combat missions, Irregular Warfare and Military Operations Other than War (MOOTW) as stated in the 2022 National Defense Strategy (NDS). Beginning in FY 2025 funding for MPU and TMN have been consolidated under the MPU funding line to accurately reflect funding execution. ***FY 2024 Plans:*** Begin avionics and communications upgrades and cybersecurity efforts in support of the next generation cockpit modernization roadmap. Continue development of software and hardware to rapidly incorporate advanced waveforms, advanced communications, and networking hardware onto ARSOA aircraft. ***FY 2025 Plans:*** Continues avionics, communications upgrades and cybersecurity efforts in support of the next generation cockpit modernization roadmap; includes precision timing devices in Global Positioning System (GPS)-denied environment, and enhanced utilization of information on threat, route, weather, terrain, and friendly forces. Continues development of software and hardware to rapidly incorporate advanced waveforms, advanced communications, and ensure interoperability with ground forces and multi-domain operations. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Increase of $0.095 million supports avionics and communications upgrades and cybersecurity efforts in support of the next generation cockpit modernization roadmap as well as rapid incorporation of advanced waveforms, advanced communications, and networking hardware onto ARSOA aircraft.			
Title: Classified Program(s) ***Description:*** Details provided under separate cover. ***FY 2024 Plans:*** Details provided under separate cover. ***FY 2025 Plans:***	35.606	31.864	21.679

Exhibit R-2A, RDT&E Project Justification: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** D615 / *Rotary Wing Aviation*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
Details provided under separate cover. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Detail for decrease of $10.185 million provided under separate cover.			
Accomplishments/Planned Programs Subtotals	57.665	67.311	59.652

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
• PROC/0201RWUPGR: *Rotary Wing Upgrades and Sustainment*	224.134	261.012	233.977	-	233.977	199.470	206.476	216.050	218.683	Continuing	Continuing
• 0601MH47: *MH-47 Chinook*	146.380	149.883	157.413	-	157.413	162.816	131.914	136.982	139.722	Continuing	Continuing

Remarks

D. Acquisition Strategy

• A/MH-6 Block 3.0 Upgrade airframe efforts will be a sole-source contract to Boeing, owner of the technical data associated with the performance modification to the A/MH-6 airframes. The cockpit avionics architecture will be developed by Collins Aerospace. Any new hardware components will be Non Developmental Item/Commercial-Off-The-Shelf (COTS) to the extent possible and will be competitively selected. Airframe modification and integration work will be conducted via Indefinite Delivery Indefinite Quantity contract with Special Operations Forces Support Activity (SOFSA). A/MH-6 Block 3.0 Upgrade is a Major Capability Acquisition (MCA) program.

• MH-60M Modifications and Upgrades supports systems integration and qualification efforts on 72 SOF configured MH-60M helicopters. The Modifications and Upgrades are executed via various acquisition vehicles and include, but are not limited to, government and contractor flight test support, engineering analysis, documentation, and airworthiness substantiation. Airframe modification and integration work will be conducted via a contract with SOFSA. MH-60M Modifications and Upgrades is a MCA program.

• The FVL is the SOF aviation participation in the Joint FVL effort to develop the next generation of vertical takeoff and landing aircraft and establishes the foundation for the transformation of the Department of Defense (DoD) vertical lift aviation capabilities over the next forty years. The USSOCOM is not the Milestone Decision Authority (MDA) for FVL. The Army manages the FLRAA program via the Middle Tier of Acquisition (MTA) through Milestone B, followed by an MCA. The Army manages FARA via MTA until downselect to one platform followed by a MCA.

• MH-47 Modifications and Upgrades will develop technologies to improve performance and safety of the MH-47G and decrease operational costs. Efforts include the APAS, weight reduction, and performance improvement developments. The Modifications and Upgrades are executed via various acquisition vehicles and consist mostly of government and contractor executed integration, testing, and qualification efforts with some analytical engineering services to be completed. Post-production block modifications are accomplished via contract with SOFSA. MH-47 Modifications and Upgrades is a MCA program.

Exhibit R-2A, RDT&E Project Justification: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** D615 / *Rotary Wing Aviation*

• MPU provides for next generation cockpit architecture studies that will help define the replacement of current mission and video processors for all ARSOA platforms. Additionally, it will address near term required upgrades to existing components. Potential upgrades will be through existing Original Equipment Manufacturers (OEM), while the future cockpit architecture studies will be competitively awarded. Tactical Mission Networking provides for future communications and networking capability exploration and solution development that will ensure ARSOA platforms can communicate through voice and data in a highly contested environment. Tactical Mission Networking will ensure ARSOA aircraft can maintain interoperability with the SOF and conventional ground forces' plan of rapidly and continually updating their communications and networking infrastructure. Non-developmental communications equipment will be procured through existing DoD contracts. Aircraft integration will be through existing aircraft modification contracts. MPU is a MCA program.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 United States Special Operations Command			Date: March 2024
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1160403BB / *Aviation Systems*	Project (Number/Name) D615 / *Rotary Wing Aviation*	

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
MH-60M Modifications and Upgrades	C/Various	PM TAPO : Ft. Eustis, VA	0.770	2.543	Mar 2023	9.043	Mar 2024	11.026	Mar 2025	-		11.026	Continuing	Continuing	-
Future Vertical Lift (FVL)	C/Various	PM TAPO : Ft. Eustis, VA	16.559	8.512	Apr 2023	9.157	Apr 2024	9.038	Mar 2025	-		9.038	Continuing	Continuing	-
FVL Congressional Add (Cong Add)	C/Various	PM TAPO : Ft. Eustis, VA	7.356	-		-		-		-		-	0.000	7.356	-
MH-47 Modifications and Upgrades	C/Various	PM TAPO : Fort Eustis, VA	59.572	0.712	Nov 2022	4.155	Nov 2023	3.940	Nov 2024	-		3.940	Continuing	Continuing	-
Mission Processor Upgrade (MPU)	C/Various	PM TAPO : Fort Eustis, VA	3.000	5.007	Mar 2023	3.184	Mar 2024	3.247	Mar 2025	-		3.247	Continuing	Continuing	-
Classified Program(s)	C/TBD	TBD : TBD	124.358	28.929		29.108		18.180	Mar 2025	-		18.180	Continuing	Continuing	-
Prior Years Funding	C/Various	PM TAPO : Fort Eustis, VA	58.715	-		-		-		-		-	0.000	58.715	-
		Subtotal	270.330	45.703		54.647		45.431		-		45.431	Continuing	Continuing	N/A

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
MH-60M Modification and Upgrades	C/Various	PM TAPO : Fort Eustis, VA	1.194	1.170	Mar 2023	1.180	Mar 2024	1.536	Mar 2025	-		1.536	Continuing	Continuing	-
FVL	C/Various	PM TAPO : Fort Eustis, VA	5.866	0.732	Apr 2023	1.146	Apr 2024	1.128	Mar 2025	-		1.128	Continuing	Continuing	-
FVL (Cong Add)	C/Various	PM TAPO : Fort Eustis, VA	0.359	-		-		-		-		-	0.000	0.359	-
		Subtotal	7.419	1.902		2.326		2.664		-		2.664	Continuing	Continuing	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 United States Special Operations Command			Date: March 2024
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1160403BB / *Aviation Systems*	Project (Number/Name) D615 / *Rotary Wing Aviation*	

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
A/MH-6M Block 3.0 Upgrade Operational Test and Evaluation	C/Various	PM TAPO : Fort Eustis, VA	40.023	2.635	Feb 2023	2.940	Feb 2024	2.999	Feb 2025	-		2.999	Continuing	Continuing	-
MH-60M Modification and Upgrades Developmental Test & Evaluation	C/Various	PM TAPO : Fort Eustis, VA	17.776	0.024	Mar 2023	1.432	Mar 2024	1.796	Mar 2025	-		1.796	Continuing	Continuing	-
FVL Developmental Test & Evaluation	C/Various	PM TAPO : Fort Eustis, VA	0.289	-		0.877	Apr 2024	0.864	Mar 2025	-		0.864	Continuing	Continuing	-
Mission Processor Upgrade (MPU) Developmental Test and Evaluation	C/Various	PM TAPO : Fort Eustis, VA	1.590	-		1.590	Apr 2024	1.622	Apr 2025	-		1.622	Continuing	Continuing	-
Classified Program (s)	C/TBD	TBD : TBD	7.119	6.677		2.756		3.499	Mar 2025	-		3.499	Continuing	Continuing	-
Prior Years Funding	C/Various	Various : Various	34.199	-		-		-		-		-	0.000	34.199	-
		Subtotal	100.996	9.336		9.595		10.780		-		10.780	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
MH-60M Modification and Upgrades	C/Various	PM TAPO : Ft. Eustis, VA	0.253	0.250	Mar 2023	0.255	Mar 2024	0.293	Mar 2025	-		0.293	Continuing	Continuing	-
Future Vertical Lift	C/Various	PM TAPO : Ft. Eustis, VA	0.466	0.474	Feb 2023	0.488	Apr 2024	0.484	Mar 2025	-		0.484	Continuing	Continuing	-
		Subtotal	0.719	0.724		0.743		0.777		-		0.777	Continuing	Continuing	N/A

	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	379.464	57.665		67.311		59.652		-		59.652	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** D615 / *Rotary Wing Aviation*

A/MH-6 Program Schedule

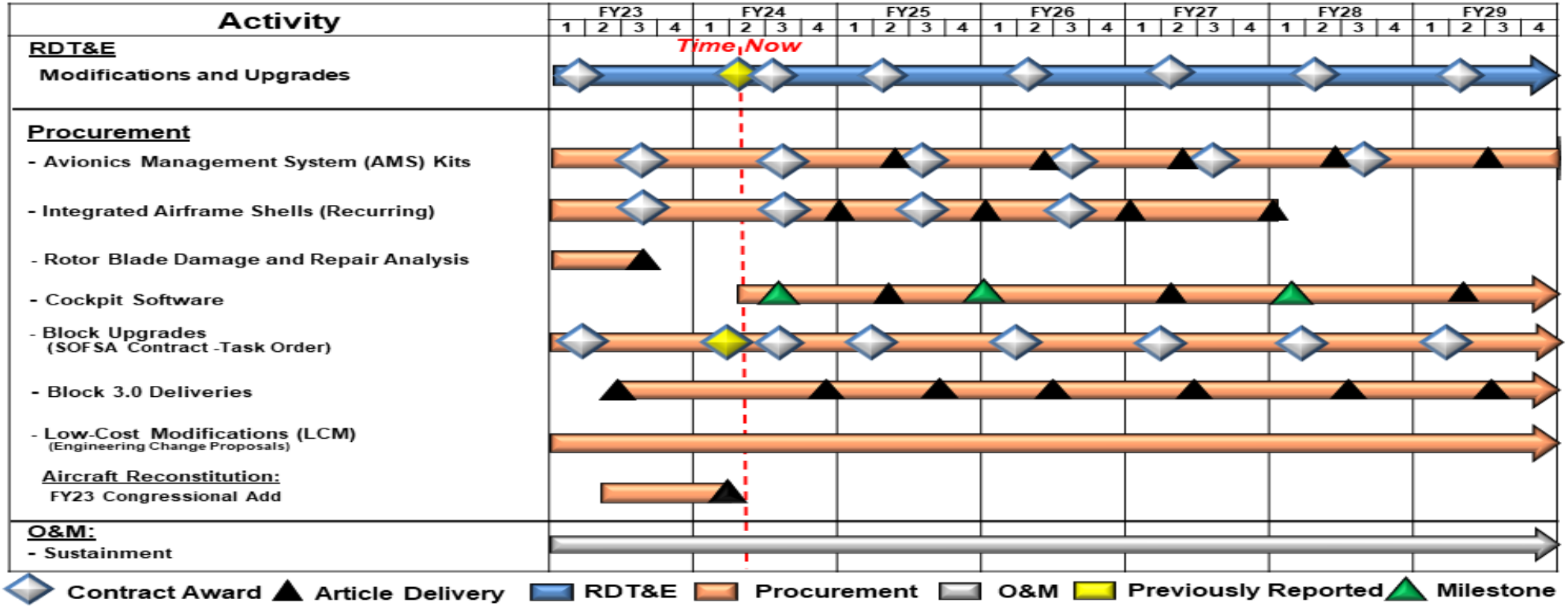


Exhibit R-4, RDT&E Schedule Profile: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** D615 / *Rotary Wing Aviation*

MH-60 Program Schedule

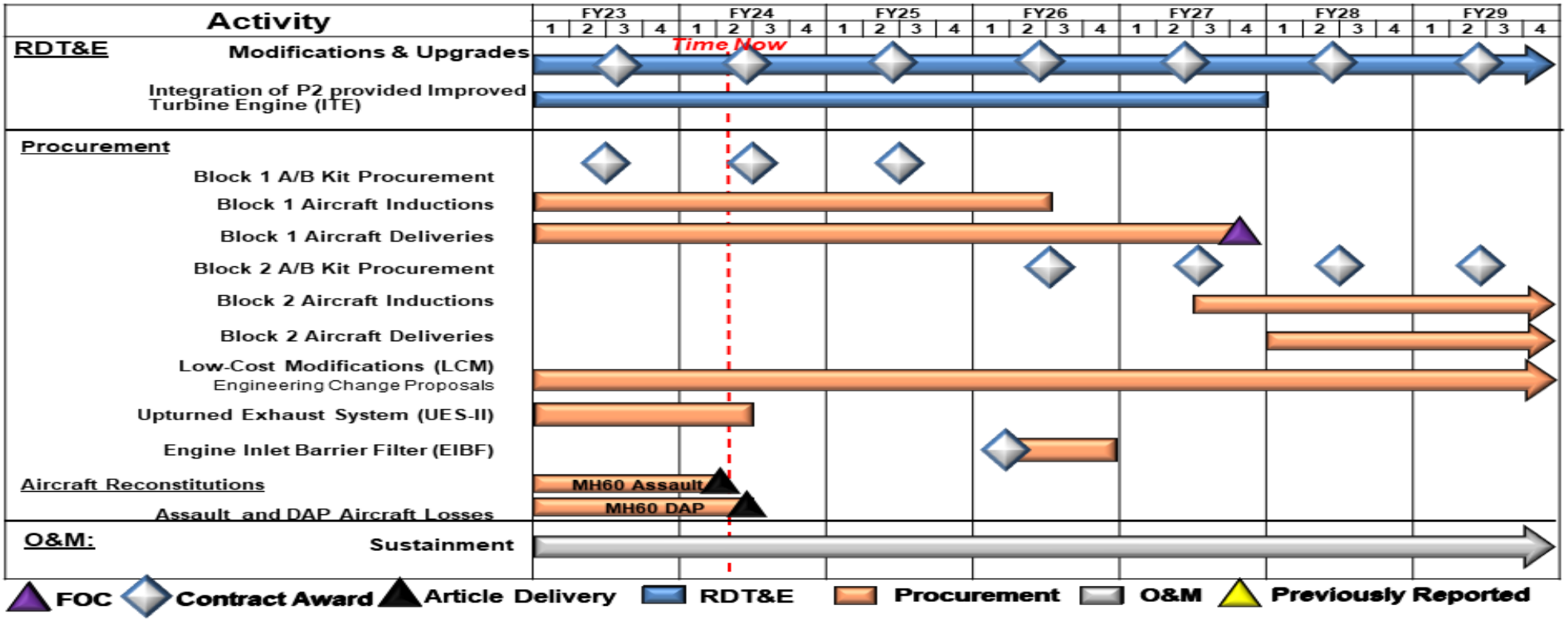


Exhibit R-4, RDT&E Schedule Profile: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** D615 / *Rotary Wing Aviation*

Future Vertical Lift Schedule

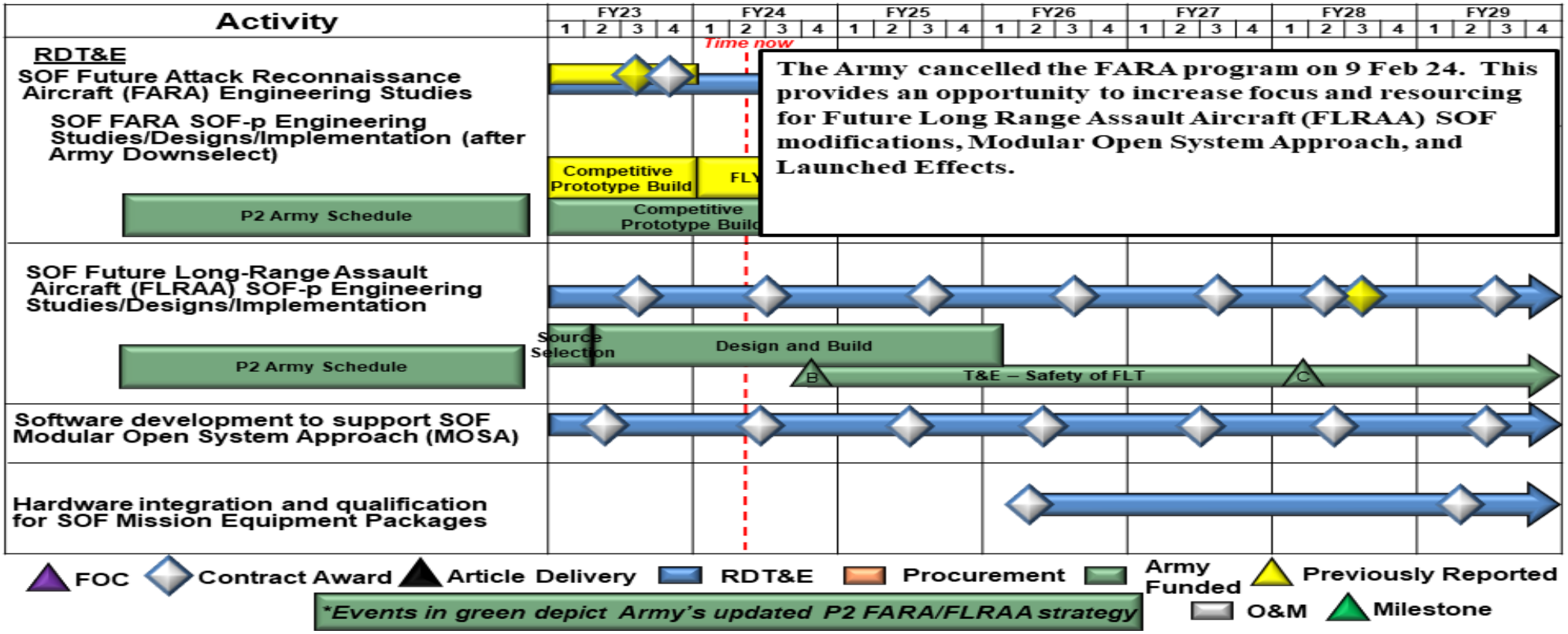


Exhibit R-4, RDT&E Schedule Profile: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** D615 / *Rotary Wing Aviation*

MH-47 Program Schedule

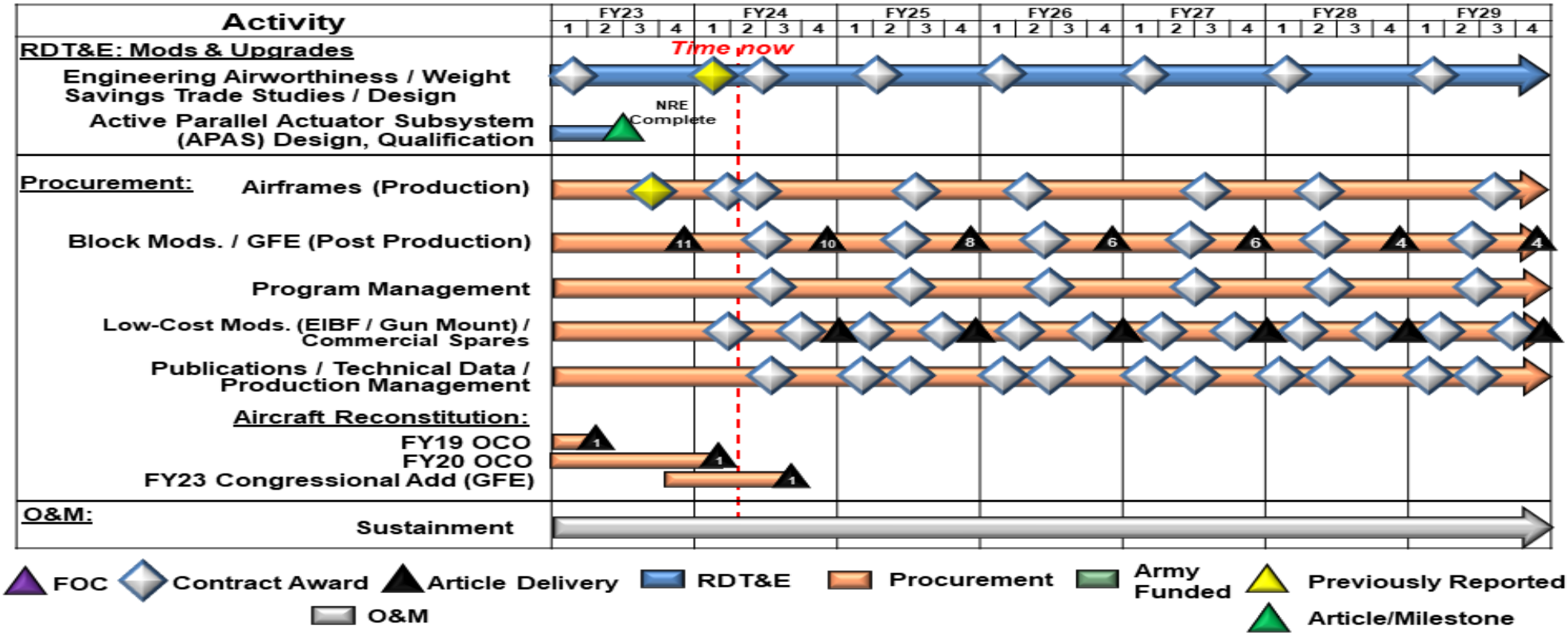


Exhibit R-4, RDT&E Schedule Profile: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** D615 / *Rotary Wing Aviation*

Mission Processor Upgrade (MPU) Schedule

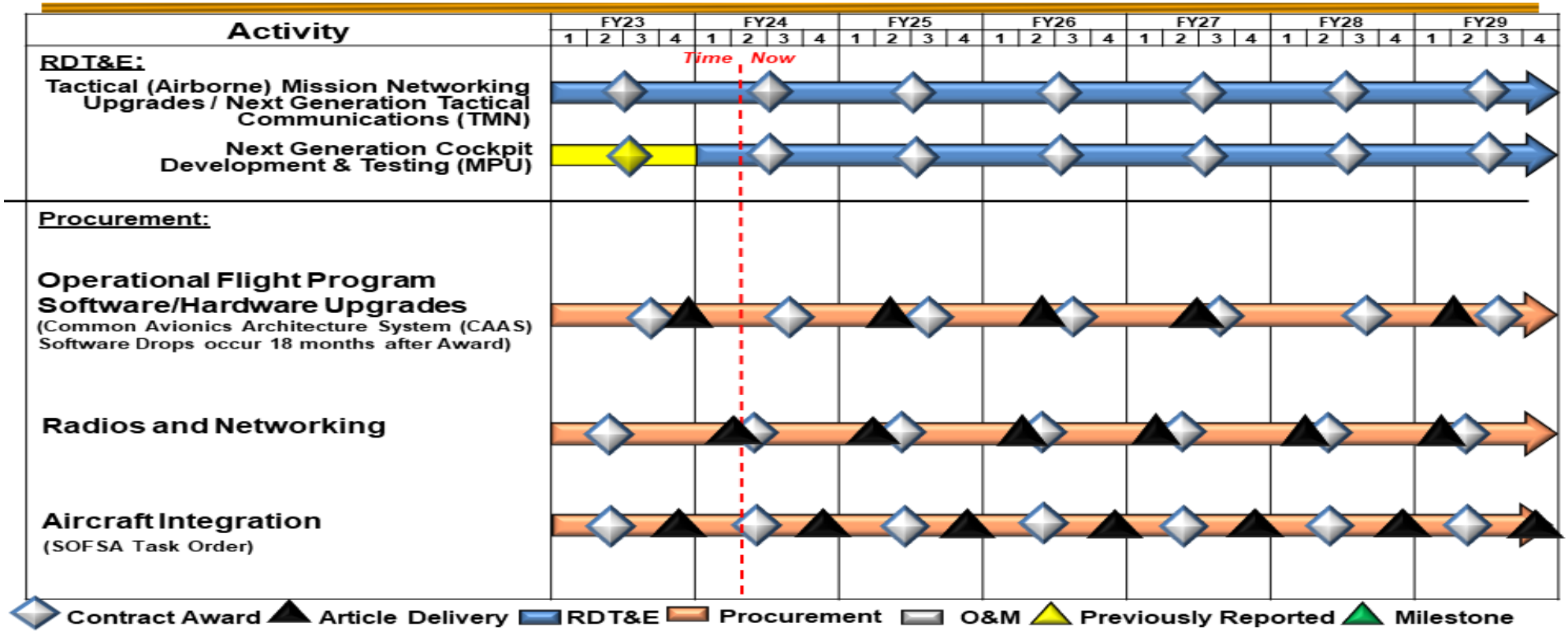


Exhibit R-4A, RDT&E Schedule Details: PB 2025 United States Special Operations Command		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160403BB / *Aviation Systems*	**Project (Number/Name)** D615 / *Rotary Wing Aviation*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
A/MH-6M Block 3.0 and Modifications				
Modifications and Upgrades	1	2023	4	2029
MH-60M Modifications and Block Upgrades				
Modifications and Upgrades	1	2023	4	2029
Improved Turbine Engine Program (ITEP)	1	2023	4	2027
Future Vertical Lift (FVL)				
SOF Future Attack Reconnaissance Aircraft (FARA) Engineering Study	1	2023	2	2024
SOF Future Long-Range Assault Aircraft (FLRAA) Engineering Study and Pre-EMD Activities	1	2023	4	2029
Modular Open Systems Architecture (MOSA)	1	2023	4	2029
Mission Equipment Package (MEP)	1	2023	4	2029
MH-47 Program				
Modifications and Upgrades	1	2023	4	2029
Active Parallel Actuator Subsystem (APAS) Design, Qualification	1	2023	2	2023
Mission Processor Upgrade (MPU)				
Next Generation Cockpit Development and Testing	1	2024	4	2029
Tactical Mission Networking Upgrades / Next Generation Tactical Communications	1	2023	4	2029