Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Air Force											Date: April 2022	
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force* / BA 7: *Operational Systems Development*					R-1 Program Element (Number/Name) PE 0208006F / *Mission Planning Systems*							
COST ($ in Millions)	**Prior Years**	**FY 2021**	**FY 2022**	**FY 2023 Base**	**FY 2023 OCO**	**FY 2023 Total**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**Cost To Complete**	**Total Cost**
Total Program Element	0.000	80.193	96.057	99.214	0.000	99.214	99.504	94.323	96.313	98.455	Continuing	Continuing
675302: *Precision Aerial Delivery Systems (PADS)*	0.000	0.132	1.865	1.964	0.000	1.964	2.002	2.041	2.083	2.130	Continuing	Continuing
675380: *Mission Planning Systems (MPS) Modernization*	0.000	80.061	94.192	97.250	0.000	97.250	97.502	92.282	94.230	96.325	Continuing	Continuing
Program MDAP/MAIS Code: 509												

Note

- Mission Planning Systems (MPS) software is a layered software, designed with open architected standards and modular construction. The core of the MPS Legacy Joint Mission Planning Systems (JMPS) software is the Framework software (FW) used by all MPS platforms and the Navy. Common Components are distinct services that are used by a select number of platforms. An example would be weapon specific capability that fighters share. The Unique Planning Component (UPC) is the platform specific software and associated software (install etc.) that is delivered to the users in the form of a mission planning environment. Traditionally, the MPS Systems Program Office had allocated FW funding to other Platform Operational Flight Program (OFP) development programs. Beginning in FY20, FW became a separate program code within the MPS Modernization Budget Program Activity Code (BPAC).

- As part of MPS Modernization, the Mission Planning program is updating the current JMPS architecture with an Open Mission Systems architecture to: Improve system lethality, survivability, readiness, affordability, and extensibility; Improve the user interface and overall user experience; Decrease time to plan; Address security vulnerabilities and cybersecurity mandates; And increase system affordability. MPS is also transitioning its software development processes to incorporate best practice Agile DevOps methodologies that will speed the development and delivery of capabilities to the user as well as improve our ability to address changing threats and cybersecurity requirements. This transition will drive changes in organizational and programmatic structures in the future to align with the Agile DevOps processes and practices. The integration of the agile development methodology will require some program office organizational restructuring into Agile Release Trains (ARTs). In FY21, three ARTs (Core Mission Planning, Strike, and Weapons) continued developing software capabilities for the JMPS Open Mission System (JOMS).

A. Mission Description and Budget Item Justification

Mission planning involves the creation of a flight plan based on multiple inputs including threats, targets, terrain, weather, aircraft performance capability, and configuration. The technology will provide wide area targeting quality data at scale and with operationally useful latency in dense, stressing contested time sensitive environments. Mission Planning is an essential task that must be completed prior to any fixed- or rotary wing aircraft sortie. The planner must have the ability to plan weapon, cargo, passenger, and/or fuel delivery, calculate fuel requirements, and assess the route based on known enemy threat location and type. Mission planners must be able to: Optimize and de-conflict flight routes with other aircraft; Review, print, and brief the plan; Download pertinent flight information to on-board aircraft avionics; And, conduct dynamic/in-flight re-planning as applicable.

Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Air Force	Date: April 2022
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force* / BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0208006F / *Mission Planning Systems*

The MPS program is a collaborative program with the U.S. Navy to leverage technical solutions and business practices for most Department of Defense (DoD) platforms. It provides automated mission planning tools and support for fixed- and rotary wing aircraft and guided munitions. It replaces two closed architecture legacy mission planning systems (UNIX-based MPS (UNIX-MPS) and the PC-based Portable Flight Planning Software (PFPS)), with a single multi-service, open architecture system, frequently referred to as JMPS. MPS has continually compressed the mission planning cycle by providing an improved integrated planning environment, reducing the time required to respond to changing situations and urgent needs such as striking time sensitive/critical targets and conducting combat search and rescue. MPS products have the potential to support all DoD fixed-wing and rotary wing aircraft and are shared with the selected programs in the U.S. Navy. MPS delivers significant benefits to command and control performance by enhancing information superiority for the warfighter and by providing unique capabilities in support of both precision engagement and dominant maneuver.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver Mission Planning System capability. The use of such programs funds would be in addition to the civilian pay expenses budgeted in program element 0605827F, 0605828F, 0605829F, 0605831F, 0605832F, 0605833F, 0605898F, 0606398F. In FY21 $0.281M was expended for civilian pay expenses in this program element, and in FY22 $0.732M is forecasted for civilian pay expenses in this program element.

This program is in Budget Activity 7, Operational System Development because this budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

B. Program Change Summary ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	91.601	92.557	0.000	0.000	0.000
Current President's Budget	80.193	96.057	99.214	0.000	99.214
Total Adjustments	-11.408	3.500	99.214	0.000	99.214
• Congressional General Reductions	0.000	0.000			
• Congressional Directed Reductions	0.000	0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds	0.000	3.500			
• Congressional Directed Transfers	0.000	0.000			
• Reprogrammings	-8.460	0.000			
• SBIR/STTR Transfer	-2.948	0.000			
• Other Adjustments	0.000	0.000	99.214	0.000	99.214

Change Summary Explanation

"The FY 2022 President's Budget submittal did not reflect FY 2023 through FY 2026 funding. Therefore, an explanation of the change between the two budget positions for FY2023 cannot be made in a relevant manner."

Exhibit R-2A, RDT&E Project Justification: PB 2023 Air Force			Date: April 2022
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0208006F / *Mission Planning Systems*	Project (Number/Name) 675302 / *Precision Aerial Delivery Systems (PADS)*	

COST ($ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
675302: *Precision Aerial Delivery Systems (PADS)*	0.000	0.132	1.865	1.964	0.000	1.964	2.002	2.041	2.083	2.130	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Mission planning involves the creation of a flight plan based on multiple inputs including threats, targets, terrain, weather, aircraft performance capability, and configuration. Mission Planning is an essential task that must be completed prior to any fixed- or rotary wing aircraft sortie. The planner must have the ability to plan weapon, cargo, passenger, and/or fuel delivery, calculate fuel requirement and assess the route based on known enemy threat location and type. Mission planners must be able to: Optimize and de-conflict flight routes with other aircraft; Review, print and brief the plan; Download pertinent flight information to on-board aircraft avionics; And, conduct dynamic/in-flight re-planning as applicable.

This project continues the development of a Joint Precision Airdrop System-Mission Planner (JPADS-MP) capability in conjunction with the Army. JPADS provides a planning capability for DoD airdrop requirements. It is the primary airdrop mission planning system for all ballistic airdrop missions as well as precision guided airdrops that are required when the mission profile or surface-to-air threat assessment warrants a high-altitude and/ or standoff precision delivery. It enables high-altitude, precise airdrop delivery to forward ground forces, while mitigating surface-to-air threats, reducing risk of exposure to Improvised Explosive Devices (IEDs) and insurgent attack on ground convoys. JPADS allows the warfighter to consider weather, terrain, aircraft capabilities, threat, and other data to accurately deliver payloads to U.S. and other friendly forces.

Consolidated Airdrop Tool (CAT) is the key JPADS-MP software deliverable. It will increase the accuracy of airdrop mission planning by improving aircraft, payload, and chute specific calculations along with weather analysis visualization tools specifically adapted for airdrop. Future initiatives are designated to achieve automation of airdrop planning and execution to reduce task saturation in the cockpit and support Air Mobility Command's (AMC) objective of moving to a two-man cockpit. These efforts include the ability to automatically receive and use real-time winds in any location, calculation of a release point and airdrop in a single pass, the ability to conduct real-time objective area analysis to calculate probable damage estimates and execute dynamic re-tasking, the ability to conduct post-drop assessments, and the implementation of new technologies (e.g. Service Oriented Architecture (SOA) Touch Screen environment).

This program is in Budget Activity 7, Operational System Development because this budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023
Title: JPADS-MP Phase I	0.132	1.865	1.964
Description: Continues development of a JPADS capability for precise, high altitude delivery of material to forward ground forces.			

Exhibit R-2A, RDT&E Project Justification: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0208006F / *Mission Planning Systems*	**Project (Number/Name)** 675302 / *Precision Aerial Delivery Systems (PADS)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023
FY 2022 Plans: Continue agile development with quarterly releases. The scope of each release will be determined at a planning session based on the warfighter prioritized requirements identified in the approved requirements document as well as enhancements identified in field performance. Each release will be incorporated into a Mobility Based Mission Planning Environment (MPE) for use by Air Mobility Command and Air Combat Command Aircraft. The Micro Services Oriented Architecture evolution will evolve to align with the JOMS/NOM architecture. ***FY 2023 Plans:*** JPADS will complete the JOMS/NOMS evolution and integration while maintaining quarterly releases. Each release will be proceeded with a planning session based on the warfighter prioritized requirements identified and approved as requirements. The goal of each release is to provide readiness at economical costs and meet the needs of the Mobility Based Mission Planning Environment (MPE) for use by Air Mobility Command and Air Combat Command Aircraft. ***FY 2022 to FY 2023 Increase/Decrease Statement:*** Minimal change in funding level from FY22-FY23 ($99K)			
Accomplishments/Planned Programs Subtotals	0.132	1.865	1.964

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
• OPAF 03 Line Item 833170: *Mission Planning Systems*	15.132	14.871	15.688	-	15.688	17.953	18.282	18.655	-	Continuing	Continuing

Remarks

D. Acquisition Strategy

The MPS PADS efforts are developed and fielded using a variety of contracting vehicles. Efforts to accomplish activities such as Scaled Agile Framework (SAFe) software development methodology, systems engineering and integration, training, and support are completed using competitively awarded contracts (e.g. Cost Plus Award Fee (CPAF), Fixed Price (FP)). Mission Planning will utilize established Government Wide Acquisition Contract (GWAC) ID/IQ schedules, with a larger pool of vendors, to competitively award future Task or Delivery Orders. These vehicles will be utilized to establish agile contracts to support transformation to agile devops approach.

Program Management Administration (PMA) contracts are awarded competitively and consist of various types of contracts at various locations. MITRE, a Federally Funded Research and Development Center (FFRDC) contractor, provides technical support via a no fee for service contract. The Systems Engineering & Integration

Exhibit R-2A, RDT&E Project Justification: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0208006F / *Mission Planning Systems*	**Project (Number/Name)** 675302 / *Precision Aerial Delivery Systems (PADS)*

Contract (SEIC) is a competitively awarded ID/IQ. Other efforts are accomplished using Purchase Orders (PO) and Military Interdepartmental Purchase Requests (MIPR).

For the efforts listed above, the Air Force Life Cycle Management Center at Hanscom AFB (AFLCMC/HB) is the Contracting Authority and provides contracts, legal, and comptroller support.

Air Force Program Executive Officer (PEO) for Digital is the PEO and Milestone Decision Authority (MDA) for the Precision Aerial Delivery Systems (PADS) program.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0208006F / *Mission Planning Systems*	**Project (Number/Name)** 675302 / *Precision Aerial Delivery Systems (PADS)*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Software Development	C/CPIF	Various : Various	0.000	0.110	Nov 2020	1.533	Nov 2021	1.214	Nov 2022	-		1.214	Continuing	Continuing	-
Systems Engineering and Integration	C/CPFF	Leidos, Inc. : Reston, VA	0.000	0.007	Jan 2021	0.090	Jan 2022	0.482	Jan 2023	-		0.482	Continuing	Continuing	-
		Subtotal	0.000	0.117		1.623		1.696		-		1.696	Continuing	Continuing	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Cost Estimating	C/T&M	Quantech Services : Lexington, MA	0.000	0.001	Nov 2020	0.017	Nov 2021	0.018	Nov 2022	-		0.018	Continuing	Continuing	-
		Subtotal	0.000	0.001		0.017		0.018		-		0.018	Continuing	Continuing	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Responsible Test Organization (RTO)	PO	96CTG : Eglin AFB, FL	0.000	0.014	Dec 2020	0.225	Dec 2021	0.230	Dec 2022	-		0.230	Continuing	Continuing	-
Operational Testing	PO	28TH TEST AND EVAL : Eglin AFB, FL	0.000	-		-		0.020	Apr 2023	-		0.020	Continuing	Continuing	-
		Subtotal	0.000	0.014		0.225		0.250		-		0.250	Continuing	Continuing	N/A

	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	0.132		1.865		1.964		-		1.964	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0208006F / *Mission Planning Systems*	**Project (Number/Name)** 675302 / *Precision Aerial Delivery Systems (PADS)*

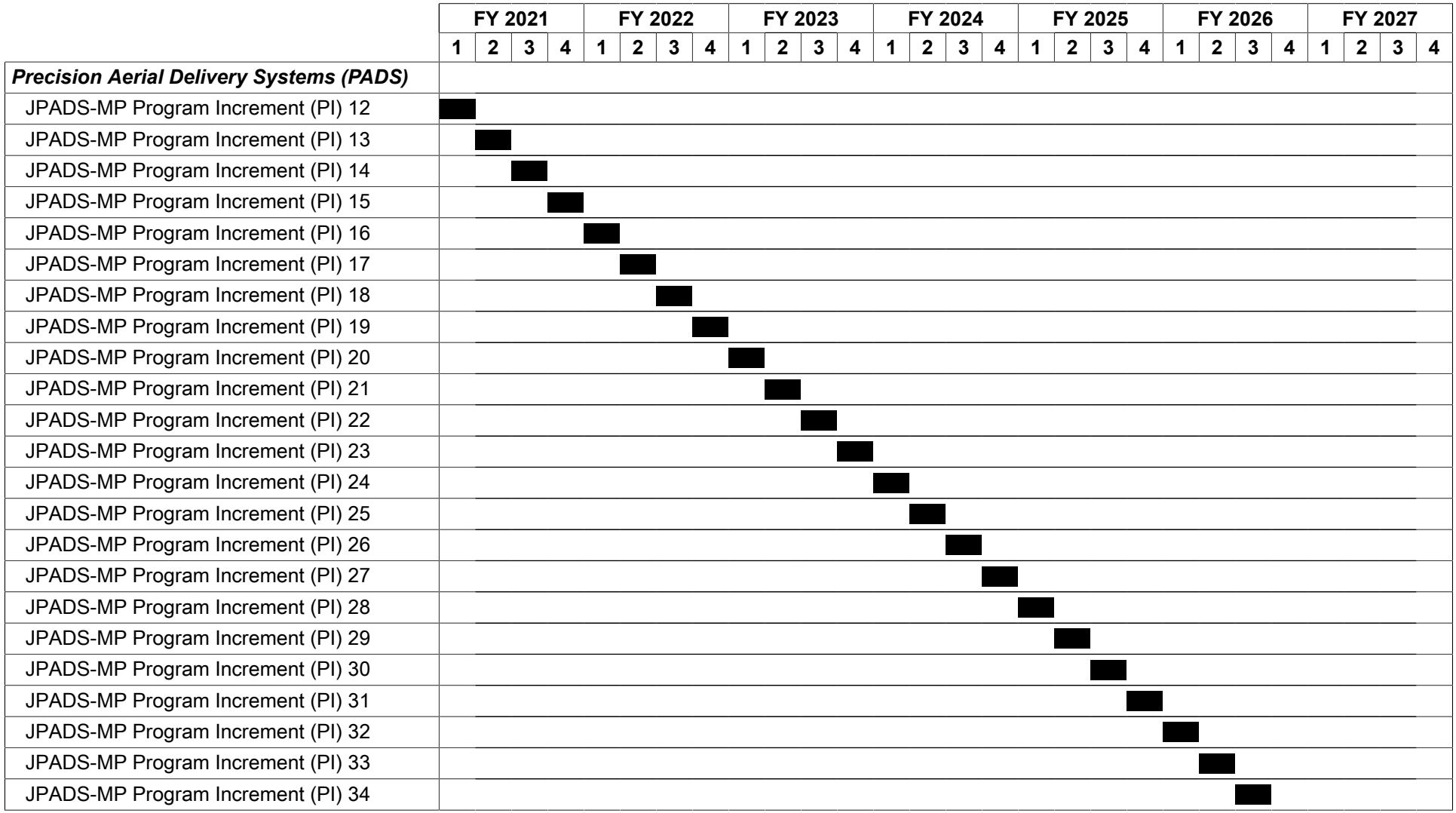

Exhibit R-4, RDT&E Schedule Profile: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0208006F / *Mission Planning Systems*	**Project (Number/Name)** 675302 / *Precision Aerial Delivery Systems (PADS)*

	FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
JPADS-MP Program Increment (PI) 35																								■				

Exhibit R-4A, RDT&E Schedule Details: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0208006F / *Mission Planning Systems*	**Project (Number/Name)** 675302 / *Precision Aerial Delivery Systems (PADS)*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Precision Aerial Delivery Systems (PADS)				
JPADS-MP Program Increment (PI) 12	1	2021	1	2021
JPADS-MP Program Increment (PI) 13	2	2021	2	2021
JPADS-MP Program Increment (PI) 14	3	2021	3	2021
JPADS-MP Program Increment (PI) 15	4	2021	4	2021
JPADS-MP Program Increment (PI) 16	1	2022	1	2022
JPADS-MP Program Increment (PI) 17	2	2022	2	2022
JPADS-MP Program Increment (PI) 18	3	2022	3	2022
JPADS-MP Program Increment (PI) 19	4	2022	4	2022
JPADS-MP Program Increment (PI) 20	1	2023	1	2023
JPADS-MP Program Increment (PI) 21	2	2023	2	2023
JPADS-MP Program Increment (PI) 22	3	2023	3	2023
JPADS-MP Program Increment (PI) 23	4	2023	4	2023
JPADS-MP Program Increment (PI) 24	1	2024	1	2024
JPADS-MP Program Increment (PI) 25	2	2024	2	2024
JPADS-MP Program Increment (PI) 26	3	2024	3	2024
JPADS-MP Program Increment (PI) 27	4	2024	4	2024
JPADS-MP Program Increment (PI) 28	1	2025	1	2025
JPADS-MP Program Increment (PI) 29	2	2025	2	2025
JPADS-MP Program Increment (PI) 30	3	2025	3	2025
JPADS-MP Program Increment (PI) 31	4	2025	4	2025
JPADS-MP Program Increment (PI) 32	1	2026	1	2026

Exhibit R-4A, RDT&E Schedule Details: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0208006F / *Mission Planning Systems*	**Project (Number/Name)** 675302 / *Precision Aerial Delivery Systems (PADS)*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
JPADS-MP Program Increment (PI) 33	2	2026	2	2026
JPADS-MP Program Increment (PI) 34	3	2026	3	2026
JPADS-MP Program Increment (PI) 35	4	2026	4	2026

Exhibit R-2A, RDT&E Project Justification: PB 2023 Air Force			Date: April 2022
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0208006F / *Mission Planning Systems*	Project (Number/Name) 675380 / *Mission Planning Systems (MPS) Modernization*	

COST ($ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
675380: *Mission Planning Systems (MPS) Modernization*	0.000	80.061	94.192	97.250	0.000	97.250	97.502	92.282	94.230	96.325	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Mission planning involves the creation of a flight plan based on multiple inputs including threats, targets, terrain, weather, aircraft performance capability, and configuration. Mission Planning is an essential task that must be completed prior to any fixed- or rotary wing aircraft sortie. The planner must have the ability to plan weapon, cargo, passenger, and/or fuel delivery, calculate fuel requirements, and assess the route based on known enemy threat location and type. Mission planners must be able to: Optimize and de-conflict flight routes with other aircraft; Review, print and brief the plan; Download pertinent flight information to on-board aircraft avionics; And conduct dynamic/in-flight re-planning as applicable. The MPS Modernization project, following a multi-year strategic roadmap to migrate mission planning capabilities as discussed above into a services-based open architecture, focuses on delivering JMPS Open Mission Systems (JOMS) environment for mission planning supporting Combat Air Forces (CAF) and Mobility Air Forces (MAF), which includes the development, test and support of Mission Planning Environments (MPEs) to support combat and mobility aircraft, including the B-1, C-5, C-17, C-130, HC-130, EC-130, E-3 DRAGON, E-3/E-8, F-15, F-22A, KC-10, KC-46, KC-135, RC-135, HH-60 other platforms, as well as training aircraft, Framework (FW) and all Common Component (CCs) software tools for mission requirements. Activities also include studies and analysis to support both current program planning and execution and future program planning. MPS Modernization efforts that support modernizing the system architecture to JOMS are as follows:

1) CAF MPS Modernization: These development efforts modernize CAF Mission Planning Environments (MPEs). The modernization effort will provide new and improved mission planning capability for individual Operational Flight Program (OFP) requirements, such as new weapons, avionics upgrades, communications systems, etc. The OFPs requiring MPE updates under the CAF modernization effort include, but are not limited to, B-1 (Sustainment Blocks 17b, 17c, 18 and 19), F-15 (Suites 9.1, 9.1RR (Re-Release) for Data Transfer Module II (DTMII), 9.2, 10.x/Continuous Development & Integration (CD&I)) and F-22 update Release 3 through 5. CAF modernization also includes updates to mission planning capabilities supporting associated weapons including, but not limited to, Small Diameter Bomb (SDB-II), Joint Direct Attack Munitions (JDAM) and the Joint Air-to-Surface Standoff Missile (JASSM). A key piece of the CAF modernization effort involves interfacing between the CAF platforms and the weapons using tools such as, but not limited to, Universal Armament Interface (UAI) and Mission Planning Certification Tool (MPCT). CAF modernization will address required improvements to CAF related JMPS MPE CCs, including Weapon Planning Software (WPS), Electronic Warfare CC (EWCC), GPS Crypto (including GPS M-code), Weather CC, etc. Finally, CAF modernization also includes development of JOMS' Strike Mission Planning capabilities in collaboration with the Navy's Mission Planning Program Office. CAF MPE Modernization includes, but is not limited to, the following platform efforts:

a. F-15 Modernization Phase II & III: The F-15 Modernization program consists of multiple software development efforts driven by OFP updates for F-15 Suites 9.19.2, 10.x/CD&I, including the F-15 EX. Suite 9 MPE capabilities include, but are not limited to, Data Transfer Device (DTD) improvements, updates for new features in weapons such as Joint Direct Attack Munition (JDAM), Small Diameter Bomb I and II (SDB I and II), AIM-9X, AIM-120D, and Network Enable Weapon support elements (e.g. key handling, weapon data link and Link 16). It will also include enhancements to the synthetic aperture radar planning tool (SAR-PT) and the global area reference

tool as well as radar modernization updates (e.g. combat identification, radar planning tool enhancements) and a variety of updates and enhancements for weapons and aircraft systems to include, but are not limited to, Eagle Passive Active Warning Survivability System (EPAWSS), a new Advanced Dual Core Process II (ADCP-II) computer as well as Digital Transfer Device/Modules (DTD/DTM) modernization. The integration of CD&I MPE capabilities into the F-15 OFP has not yet been scheduled by the OFP. The F-15 EX MPE will be created from the USAF and Qatar baselines. The overall end state is a common OFP and one MPE baseline that supports all F-15 models -C, D, E &EX. Finally, the F-15 Modernization program will begin to develop microservices to integrate JOMS into the F-15 MPE.

b. F-22 Modernization Phase II: The F-22 Modernization program consists of multiple software development efforts driven by OFP updates for Releases 3 through 5 as identified by ACC and the operational user. These new capabilities include sensor enhancements and updates to Link-16 Transmit, SP-1 and Mode 5 IFF Transmit and Interrogate. The F-22 contract transitioned to the Strike Agile contract and implements SAFe software development. F-22 Modernization program established a team under the Strike ART and began JOMS development. First JOMS efforts include creating a common baseline MPE/UPC that any platform can use and a blended MPE product that integrates initial JOMS capabilities into JMPS and generates mission data files in a test jet in FY23.

c. B-1 Modernization Phase I: The B-1 Modernization program consists of multiple software development efforts driven by OFP updates for Sustainment Blocks 17b, 17c, 8 and 19. It will incrementally deliver the B-1 MPE to increase aircraft mission capabilities, including JASSM and LRASM weapon updates, and incorporate crypto modernization for Link-16 network enabled weapons. Additionally, B-1 MPE will complete migration to a native 64-bit environment, replace the mass storage unit where pre-recorded map and mission data is stored and begin to develop microservices to integrate JOMS into the B-1 MPE.

2) MAF MPS Modernization: These development efforts modernize MAF MPEs for all Air Mobility Command platforms. The modernization effort will provide new and improved mission planning capability to support Aircraft individual Operational Flight Programs (OFP), Global C2, and AMC fuel efficiency requirements incorporating Mobility Air Forces Automated Flight Planning Service into the deployed squadron mission planning suite. It includes, but is not limited to, enhanced capabilities to accommodate avionics upgrades, precision airdrop improvements for increased combat battlefield airdrop accuracy, improved communications systems, interfaces with command and control systems, and improved weather data ingestion/utilization for various MAF platforms. Development efforts also include, but are not limited to, integrating improvements to MAF related CCs. Examples of these CCs include, but are not limited to, MAF tools, such as Assault Zone CC and the Air Refueling Tool (ART) CC, Consolidated Airdrop Tool (CAT), and the Weather CC.

3) The SMACC Modernization Program includes development, testing, and fielding of MP software for the E-3 DRAGON, E-3/E-8, RC-135 and EC-130. Combat Search and Rescue (CSAR) provides improved stability performance over the legacy mission planning system through enhanced architecture and baseline development, such as the improved transfer of mission data from the unique planning component to the HC-130J avionics suite and the 12 critical Digital Aeronautical Flight Information Files to integrate onto the smart multifunction color display for the HH-60G, resulting in mature JMPS mission planning environment for both CSAR platforms.

4) In FY20, MPS Framework was established as an independent ACAT III Program of Record (PoR). The funding for MPS Framework has historically been accomplished through an allocation to the platform budgets in Mission Planning. The Program office has segregated MPS Framework for future oversight. MPS Framework initiated a one year agile pathfinder effort that represents the basic core functions of the JMPS Software developed as microservices in a Common

Exhibit R-2A, RDT&E Project Justification: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0208006F / *Mission Planning Systems*	**Project (Number/Name)** 675380 / *Mission Planning Systems (MPS) Modernization*

Development Environment (CDE). MPS Framework has been renamed to Core Mission Planning (CMP) and will continue core modernization efforts utilizing the JOMS architecture to continuously develop and deploy core mission capabilities.

Test, Training, and Certification: Continues all MPS-related integration, test, and certification activities for all CAF and MAF platforms.

Program Support: Continues all program office management operations and support activities to ensure the timely development, testing, and delivery of mission planning systems to the warfighter.

This program is in Budget Activity 7, Operational System Development because this budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023
Title: F-15 Modernization Phase II and III	10.734	2.975	10.126
Description: Incorporates and enables use of new lethal and survivable capabilities being developed in the F-15 OFP. Increases readiness and affordability through incremental incorporation of JOMS microservices. ***FY 2022 Plans:*** - Continue development w/ quarterly builds/releases until v6.1 fielding in support of OFP Suite 9.2; continue to provide maintenance of fielded MPEs and begin transition to support CD&I and inclusion of EX in mission planning software development. The OFP Ste 9.2 adds (or improves) aircraft capabilities like Infared Search and Track (IRST), Mobile User Objective System (MUOS)/Second Generation Anti Jam Tactical UHF Radio (Saturn), Trident Pod, BLU 134, Advanced Crew Station, Crypto Modernization (Link 16), Re-gridded Digital Terrain Elevation Data (RDTED), ID Enhancements, and Multiresolution Seamless Image Database (MrSID). The MPE capabilities will be expanded to support the new F-15EX {Large Area Display (LAD), Low Profile Heads Up Display (LPHUD), Hybrid Digital Video Recorder (HDVRs)} and the aircraft transition to CD& I releases. ***FY 2023 Plans:*** - Continue transitioning of fielded MPE maintenance; continued transitioning to support CD&I and incorporation of EX. Begin next generation JOMS mission planning development and integration of JOMS products for creation of an initial "JOMS Common Baseline MPE/UPC" that can be used by any platform to start development and refine over time for all platform capabilities. ***FY 2022 to FY 2023 Increase/Decrease Statement:*** Increase is due to the realignment of funding in FY23 BES via Zero Balance Transfer to align funding to the way the program office is executing the new Program of Record structure using Agile Release Trains.			
Title: F-22 Modernization Phase I and II	11.135	14.387	9.010

Exhibit R-2A, RDT&E Project Justification: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0208006F / *Mission Planning Systems*	**Project (Number/Name)** 675380 / *Mission Planning Systems (MPS) Modernization*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023
Description: Incorporates and enables use of new lethal and survivable capabilities being developed in the F-22 OFP, including sensor enhancements, Link 16 Transmit, Mode 5 interrogate and transpond updates, SP1 upgrades, radar updates and pilot display updates. Increases readiness and affordability through incremental incorporation of JOMS microservices. ***FY 2022 Plans:*** Complete development, FQT, DT/OT and Field v14.22 Link 16 Transmit and SP1 capabilities to support OFP Release 2; begin development for v14.3 initial sensor enhancement capability to support OFP Release 3; begin next generation JOMS mission planning development and integration of JOMS products for creation of an initial "JOMS Common Baseline MPE/UPC" that can be used by any platform to start development and refine over time for all platform capabilities. ***FY 2023 Plans:*** Complete development, FQT, DT/OT and Field v14.3 sensor enhancements, radar updates and additional Link 16 and SP1 capabilities to support OFP Release 3; begin v14.4 development for mode 5 interrogate/transpond and sensor enhancement upgrades to support OFP Release 4; deploy a blended JMPS MPE with next generation JOMS Link 16 services for flight test in a jet. ***FY 2022 to FY 2023 Increase/Decrease Statement:*** Decrease is due to the realignment of funding in FY23 BES via Zero Balance Transfer to align funding to the way the program office is executing the new Program of Record structure using Agile Release Trains.			
Title: B-1 Modernization Phase I and II ***Description:*** Continues the modernization of previously fielded B-1 MPEs to enable efficient use of new and improved capabilities being developed in the OFPs. ***FY 2022 Plans:*** - Continue agile builds/releases (3 per year) to release 11.2 12.0, and 12.1. Complete development, FQT, DT/OT and Field Rel 11.2 to incorporate Crypto Modernization and 64-bit transition. Begin JOMS incorporation with the addition of the MSRP tool into the fielded MPE. Begin development for v12.0 to support the agile developed SB-19 OFP to provide additional weapon delivery capability as required. ***FY 2023 Plans:*** - Continue agile builds/releases (3 per year) to release 12.2, 13.0, and 13.1. Continue development, FQT, DT/OT and Field Rel 12.2 and 13.X to incorporate additional weapon delivery capability as required. Continue JOMS incorporation by transitioning appropriate route and weapon planning with the integration of the SPRTA tool into the fielded MPE. ***FY 2022 to FY 2023 Increase/Decrease Statement:***	11.491	12.456	10.051

Exhibit R-2A, RDT&E Project Justification: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0208006F / *Mission Planning Systems*	**Project (Number/Name)** 675380 / *Mission Planning Systems (MPS) Modernization*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023
Decrease is due to the realignment of funding in FY23 BES via Zero Balance Transfer to align funding to the way the program office is executing the new Program of Record structure using Agile Release Trains.			
Title: MAF Modernization ***Description:*** Continues the development, testing, and fielding of the Agile Global Mobility (AGM) effort for the modernization of the JMPS Mission Planning Environment (MPE) for the C-5, C-17, C-130, KC-10, KC 135 and KC-46 to account for changes in aircraft Operational Flight Program (OFP) and Global Command as well as operational mission requirements. ***FY 2022 Plans:*** Based on prioritized warfighter enhancements development of follow on releases to the initial 3 May 2021 will be conducted via agile development with multiple Program Increments (PIs) and Common Components on quarterly releases. Major improvements include architectural updates/refactoring of current capabilities into next generation micro-services, test automation, implementation of rapid deployment processes, and instantiation of a cross-contractor integrated development environment. Each of the PIs provide full and/or interim capabilities made available to the using command for fielding. Software will be updated based on user feedback to improve usability and efficiency. Software updates will ultimately support transition to the JOMS. ***FY 2023 Plans:*** Continue to improve fielded capability and update software design to improve lethality, survivability, readiness and affordability of the aircraft mission planning software while keeping current with aircraft OFP changes. Accomplished via agile development with multiple program increments, phased migration of capabilities to the JOMS and migration to the Cloud. ***FY 2022 to FY 2023 Increase/Decrease Statement:*** Increase is due to the realignment of funding in FY23 BES via Zero Balance Transfer to align funding to the way the program office is executing the new Program of Record structure using Agile Release Trains.	8.764	14.865	17.762
Title: Special Mission ACC (SMACC) ***Description:*** Continues the modernization of previously fielded mission planning software environments for the E-3 DRAGON, E-3/E-8, EC-130, and RC-135. In addition, this effort continues modernization efforts for SMACC CSAR component for the HC-130J and sustainment efforts for the HH-60G helicopters. ***FY 2022 Plans:*** Software release will continue on the 3 month agile cadence and include enhanced mission planning capabilities in support of an all-glass digital cockpit upgrade. The target list of other top priority items will be finalized through program increment planning sessions with Air Combat Command based on the backlog of items identified through agile software development/operations.	16.299	23.570	14.399

Exhibit R-2A, RDT&E Project Justification: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0208006F / *Mission Planning Systems*	**Project (Number/Name)** 675380 / *Mission Planning Systems (MPS) Modernization*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023
FY22 also brings the conversion to an open mission system architecture to modernize the software base for increased speed of operation and increased efficiency of software maintenance. ***FY 2023 Plans:*** Supporting the CSAF's Air Force Advanced Battle Management System (ABMS) Campaign Plan, in particular in the areas of readiness and affordability, in FY23, the combination of the four SMACC aircraft will be benchmarks in the conversion to an Mission Planning joint open modular system application framework (i.e, JOMS). This effort builds on planning begun in FY22 with application lessons which can be applied throughout the fleet. Additionally, continued agile development via quarterly software releases for the HH-60G helicopter will ensure application in advances in lethality and survivability to Air Combat Command to maintain the aircraft into 2026 while the replacement HH-60W completes development. The HC-130J fleet will also undergo a mission planning upgrade supporting the aircraft block change from version 6.0 to 8.1. ***FY 2022 to FY 2023 Increase/Decrease Statement:*** Decrease is due to the realignment of funding in FY23 BES via Zero Balance Transfer to align funding to the way the program office is executing the new Program of Record structure using Agile Release Trains.			
Title: MPS Core Mission Planning (CMP) ***Description:*** MPS Core Mission Planning, is the set of Mission Planning services that all platforms and common capabilities utilize on an open system software architecture. It provides the core services utilized by both MAF and CAF platforms to include transit route planning, weather services and airfield data. MPS CMP includes the infrastructure and interfaces required to be integrated into the various platforms and weapons systems as well as addresses data access, services, integrity and real-time operational communication. ***FY 2022 Plans:*** Will continue CMP development and deployment of services, modernizing from legacy development to micro-services in an Open Mission Systems/Service Oriented Architecture environment and improving quality, security, and automation of data supplied to mission planning systems. Deployments will include initial capability releases of improved transit route planning functionality, dynamic fuel usage, filing and collaborative planning functionality. ***FY 2023 Plans:*** Increased CMP development and deployment of services, modernizing from legacy development to micro-services in an Open Mission System/ Service Oriented Architecture environment and improving quality, security, and automation of data supplied to mission planning systems - reducing dependency on legacy functions. Deployments will include additional capability releases	21.638	25.939	35.902

Exhibit R-2A, RDT&E Project Justification: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0208006F / *Mission Planning Systems*	**Project (Number/Name)** 675380 / *Mission Planning Systems (MPS) Modernization*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023
of route planning functionality, for 4th and 5th generation platforms providing multi-ship planning to accommodate collaborative planning functionality. ***FY 2022 to FY 2023 Increase/Decrease Statement:*** Increase is due to the realignment of funding in FY23 BES via Zero Balance Transfer to align funding to the way the program office is executing the new Program of Record structure using Agile Release Trains.			
Accomplishments/Planned Programs Subtotals	80.061	94.192	97.250

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
• OPAF 03 Line Item 833170: *Mission Planning Systems*	15.132	14.871	15.688	-	15.688	17.953	18.282	18.655	-	Continuing	Continuing

Remarks

D. Acquisition Strategy

MPS Modernization consists of multiple capability upgrades across multiple platforms that are developed and fielded using a variety of contracting instruments. The Air Force Life Cycle Management Center at Hanscom AFB AFLCMC/HB) competitively awarded multiple (Indefinite Delivery/Indefinite Quantities) (ID/IQ) contracts for software development. Currently there are five (5) contractors, one of which is Small Business set aside, who are qualified sources. Each Delivery Order (DO) is competed among the five contractors. With expiration of this ID/IQ in June 2021, Mission Planning will utilize established GWAC ID/IQ schedules, with a larger pool of vendors, to competitively award future Task or Delivery Orders. These vehicles will be utilized to establish agile contracts to support transformation to agile devops approach. Efforts to accomplish program activities such as software development, systems engineering and integration, training, and support are competitively awarded using a variety of contract types to support agile development efforts.

Program Management Administration (PMA) contracts are awarded competitively and consist of various types of contracts at various locations. MITRE, a Federally Funded Research and Development Center (FFRDC) contractor provides technical support on a no fee for service contract.

The Systems Engineering & Integration Contract (SEIC) is a competitively awarded ID/IQ. Other efforts are accomplished via Purchase Orders (PO) and Military Interdepartmental Purchase Requests (MIPR). For the efforts listed above, the Air Force Life Cycle Management Center at Hanscom AFB (AFLCMC/HB) provides the program management, contracts, legal, and financial management support. The Air Force Program Executive Officer (PEO) for Digital (AFPEO/HB) is the Milestone Decision Authority (MDA) for all MPS Modernization projects.

Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Air Force			Date: April 2022
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0208006F / *Mission Planning Systems*	**Project (Number/Name)** 675380 / *Mission Planning Systems (MPS) Modernization*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Product Development	C/CPAF	Not specified. : TBD	0.000	-		-		-		-		-	0.000	0.000	-
Mission Planning Software Development	C/Various	Various : Various	0.000	26.831	Nov 2020	29.427	Nov 2021	28.174	Nov 2022	-		28.174	Continuing	Continuing	-
A-10 Modernization	PO	Organic : Hill AFB, UT	0.000	-		-		-		-		-	0.000	0.000	-
F-16 Modernization	PO	Organic : Hill AFB, UT	0.000	-		-		-		-		-	0.000	0.000	-
EC-130H Modernization	PO	Organic : Robins AFB, GA	0.000	0.850	Jan 2021	0.702	Jan 2022	0.902	Jan 2023	-		0.902	Continuing	Continuing	-
F-22 MilCloud SIL	MIPR	GSA : Washington, DC	0.000	-		-		-		-		-	0.000	0.000	-
MAF AMC Transition Tools	MIPR	AMCOM : Redstone Arsenal, AL	0.000	-		-		-		-		-	0.000	0.000	-
SMACC CSAR Tools	MIPR	Various : Various	0.000	0.529	Jan 2021	0.544	Jan 2022	0.560	Jan 2023	-		0.560	Continuing	Continuing	-
Digital Flight Scheduling (PUCKBOARD)	C/TBD	RevaComm : Honolulu, HI	0.000	-		3.500	May 2022	-		-		-	0.000	3.500	-
Systems Engineering and Integration	C/TBD	Leidos, Inc. : Reston, VA	0.000	10.484	Jan 2021	13.262	Jan 2022	16.558	Jan 2023	-		16.558	Continuing	Continuing	-
Framework	C/FPIF	Northrop Grumman : Herndon, VA	0.000	15.490	Jan 2021	21.533	Jan 2022	31.962	Jan 2023	-		31.962	Continuing	Continuing	-
Common Components	C/Various	Various : Various	0.000	15.395	Nov 2020	14.396	Nov 2021	7.883	Nov 2022	-		7.883	Continuing	Continuing	-
		Subtotal	0.000	69.579		83.364		86.039		-		86.039	Continuing	Continuing	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Support	C/CPAF	Not specified. : TBD	0.000	-		-		-		-		-	0.000	0.000	-
Software Engineering	C/T&M	SEI : Pittsburgh, PA	0.000	-		-		-		-		-	0.000	0.000	0.080
Cost Estimating	C/T&M	Tecolote Inc : Goleta, CA	0.000	0.145	Nov 2020	0.164	Nov 2021	0.184	Nov 2022	-		0.184	Continuing	Continuing	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0208006F / *Mission Planning Systems*	**Project (Number/Name)** 675380 / *Mission Planning Systems (MPS) Modernization*

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	0.000	0.145		0.164		0.184		-		0.184	Continuing	Continuing	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Test and Evaluation	C/CPAF	Not specified. : TBD	0.000	-		-		-		-		-	0.000	0.000	-
Responsible Test Organization (RTO)	PO	96CTG : Eglin AFB, FL	0.000	4.511	Dec 2020	4.943	Dec 2021	5.702	Dec 2022	-		5.702	Continuing	Continuing	-
Certification and Accreditation	MIPR	JITC : Fort Huachuca, AZ	0.000	0.092	Feb 2021	0.094	Feb 2022	0.050	Feb 2023	-		0.050	Continuing	Continuing	-
Operational Testing	PO	28TH TEST AND EVAL : Eglin AFB, FL	0.000	-		-		0.180	Apr 2023	-		0.180	Continuing	Continuing	-
Type I Training	PO	96CTG : Eglin AFB, FL	0.000	1.825	Jul 2021	2.149	Jul 2022	1.579	Jul 2023	-		1.579	Continuing	Continuing	-
Field Representative Hardware	C/Various	Various : Various	0.000	0.374	Nov 2020	0.453	Nov 2021	0.468	Nov 2022	-		0.468	Continuing	Continuing	-
		Subtotal	0.000	6.802		7.639		7.979		-		7.979	Continuing	Continuing	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Management Services	C/CPAF	Not specified. : TBD	0.000	-		-		-		-		-	0.000	0.000	-
Engineering and Technical Support	RO	MITRE Corp : Bedford, MA	0.000	3.535	Oct 2020	3.025	Oct 2021	3.048	Oct 2022	-		3.048	Continuing	Continuing	-
		Subtotal	0.000	3.535		3.025		3.048		-		3.048	Continuing	Continuing	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Air Force			Date: April 2022
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0208006F / *Mission Planning Systems*	Project (Number/Name) 675380 / *Mission Planning Systems (MPS) Modernization*	

	Prior Years	FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	80.061		94.192		97.250		-		97.250	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0208006F / *Mission Planning Systems*	**Project (Number/Name)** 675380 / *Mission Planning Systems (MPS) Modernization*

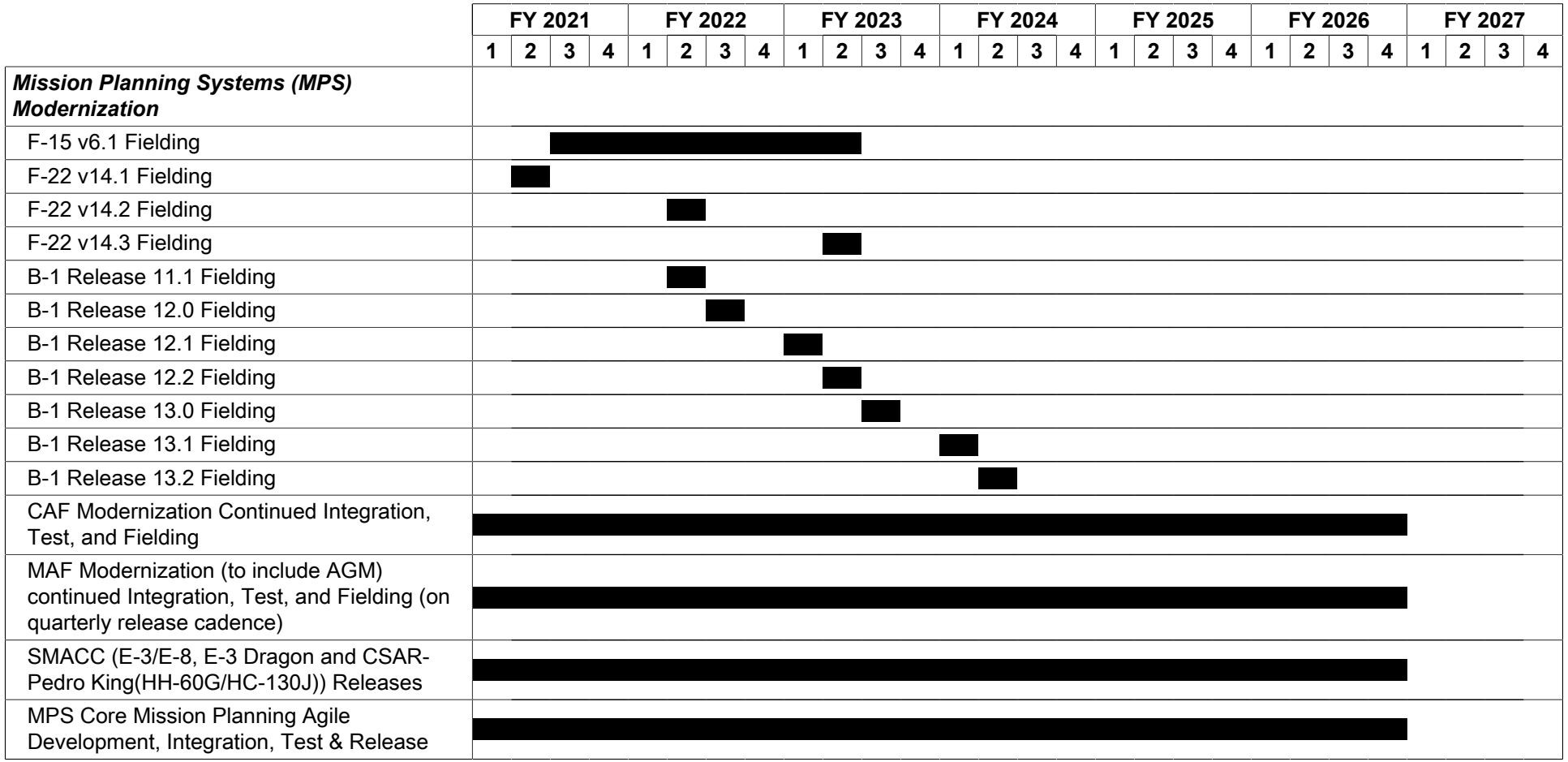

Exhibit R-4A, RDT&E Schedule Details: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0208006F / *Mission Planning Systems*	**Project (Number/Name)** 675380 / *Mission Planning Systems (MPS) Modernization*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Mission Planning Systems (MPS) Modernization				
F-15 v6.1 Fielding	3	2021	2	2023
F-22 v14.1 Fielding	2	2021	2	2021
F-22 v14.2 Fielding	2	2022	2	2022
F-22 v14.3 Fielding	2	2023	2	2023
B-1 Release 11.1 Fielding	2	2022	2	2022
B-1 Release 12.0 Fielding	3	2022	3	2022
B-1 Release 12.1 Fielding	1	2023	1	2023
B-1 Release 12.2 Fielding	2	2023	2	2023
B-1 Release 13.0 Fielding	3	2023	3	2023
B-1 Release 13.1 Fielding	1	2024	1	2024
B-1 Release 13.2 Fielding	2	2024	2	2024
CAF Modernization Continued Integration, Test, and Fielding	1	2021	4	2026
MAF Modernization (to include AGM) continued Integration, Test, and Fielding (on quarterly release cadence)	1	2021	4	2026
SMACC (E-3/E-8, E-3 Dragon and CSAR-Pedro King(HH-60G/HC-130J)) Releases	1	2021	4	2026
MPS Core Mission Planning Agile Development, Integration, Test & Release	1	2021	4	2026