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**Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army** **Date:** March 2023

<b>Appropriation/Budget Activity</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army / BA 5: System Development &amp; Demonstration (SDD)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0604201A / <i>Aircraft Avionics</i>
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COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
Total Program Element	-	6.411	3.335	13.673	-	13.673	2.212	2.904	2.934	2.967	Continuing	Continuing
C97: <i>ACFT Avionics</i>	-	5.595	2.278	1.271	-	1.271	-	-	-	-	0.000	9.144
VU3: <i>Networking And Mission Planning</i>	-	0.816	1.057	12.402	-	12.402	2.212	2.904	2.934	2.967	Continuing	Continuing

**Note**

FY 2024 base procurement funding in the amount of \$11.100 million was realigned from AA0712FPEP to PE 0604201A / Aircraft Avionics Project VU3 to support AMCS developmental activities.

**A. Mission Description and Budget Item Justification**

A portion of this funding line is directly aligned to the Assured Positioning, Navigation, & Timing (APNT) Army Modernization Priority. The Fiscal Year (FY) 2023 budget request funds the development of Aircraft Avionics systems required to horizontally and vertically integrate the battlefield and the integration of those systems into Army aircraft. Tasks in this Program Element support research, development, and test efforts in the Engineering and Manufacturing Development phases of these systems. Alternate capabilities (non-GPS) and/or complimentary PNT solutions will be investigated, studied, evaluated and developed as standalone or blended navigation functions.

The Enhanced Aviation Global Air Traffic Management (GATM) Localizer Performance with Vertical Guidance (LPV) Embedded Global Positioning System (GPS) Inertial Navigation System (EGI) (EAGLE-M) development program upgrades existing EGI hardware by incorporating M-Code to provide Assured Positioning, Navigation and Timing (A-PNT) capability in a GPS degraded environment.

The Alternate Position, Navigation, and Time (ALT-PNT) enables precise navigation and timing during Multidomain Operations (MDO) operations in the absence of GPS by leveraging ALT-NAV and Vision Based Navigation (VBN) efforts and providing a secure and reliable fused PNT solution utilizing new and existing high-grade sensors available on manned aviation aircraft. ALT-PNT utilizes Modular Open System Architecture (MOSA) standards allowing rapid and affordable platform integration, adopting of new technologies, and adjustment to changes in adversarial capability.

The Aviation Mission Common Server (AMCS) is an obsolescence replacement and capability upgrade for the current Army Improved Data Modem (IDM) 401, which enables the hosting of applications to communicate, navigate, sense, and deploy weapon systems across the Joint Force in support of Army 2030 and future aviation operations. It supports the future Common Digital Backbone for the enduring and future Army Aviation fleets with the ability for further growth to host flight critical capabilities. It will provide the ability to rapidly apply technology upgrades utilizing a Modular Open Systems Approach (MOSA) with a nonproprietary Open Systems Architecture (OSA) to keep pace with evolving threats in the Multi-Domain Battlefield.

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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2024 Army	<b>Date:</b> March 2023
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<b>Appropriation/Budget Activity</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army / BA 5: System Development &amp; Demonstration (SDD)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0604201A / <i>Aircraft Avionics</i>
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The Improved Data Modem (IDM) is the common solution for digitizing Army Aviation and is fielded on every modernized, rotary-wing Army aircraft, including the CH-47 Chinook, AH-64 Apache and UH-60 Black Hawk. The IDM provides the Army rotary wing fleet with critical communication capabilities, enables connectivity to multiple radios used by rotary-wing aircraft and the Blue Force Tracking transceiver, and provides the means for rapid data transfer.

The Aviation Mission Planning System (AMPS) is a system used to conduct pre-mission and aircraft performance planning. It receives data from multiple sources and provides that data digitally to the aircraft to support aviation missions. AMPS is used for automated mission planning, risk assessment, and transfer of mission data to aviation platforms within an Aviation unit. This includes route generation, performance planning, communications planning, terrain analysis, data transfer, and mission rehearsal. These efforts include development and testing of a new underlying architecture to support the move of Army Aviation Mission Planning from the current structure to one that supports synchronization both vertically and horizontally between Aviation and Ground forces. It will allow aircrews to continually plan and update route, threat, and performance data throughout all phases of an Aviation mission. Development of a mobile aircraft performance planning/weight and balance calculator is currently underway and will be the first migration of AMPS capabilities to a mobile hardware agnostic environment.

The AN/ARC-220 High Frequency (HF) Radio is a US Army rotary wing high frequency solution which is operational on over 2,400 Army helicopters (primarily CH-47, UH-60, and AH-64). Key capabilities are voice and data, Automatic Link Establishment, text messaging, position reporting, and Selective Calling. It is also Voice Interoperable with standard ground HF systems in use today. Efforts include development of an Airborne Radio Control Manager (ARCM) driver to enhance the modernization of the AN/ARC-220 HF Radio.

<b>B. Program Change Summary (\$ in Millions)</b>	<b><u>FY 2022</u></b>	<b><u>FY 2023</u></b>	<b><u>FY 2024 Base</u></b>	<b><u>FY 2024 OCO</u></b>	<b><u>FY 2024 Total</u></b>
Previous President's Budget	6.654	3.335	2.576	-	2.576
Current President's Budget	6.411	3.335	13.673	-	13.673
Total Adjustments	-0.243	0.000	11.097	-	11.097
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.243	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	11.097	-	11.097

**Change Summary Explanation**

FY 2024 base procurement funding in the amount of \$11.100 million was realigned from AA0712FPEP to PE 0604201A / Aircraft Avionics Project VU3 to support AMCS developmental activities.

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2024 Army										<b>Date:</b> March 2023		
<b>Appropriation/Budget Activity</b> 2040 / 5					<b>R-1 Program Element (Number/Name)</b> PE 0604201A / Aircraft Avionics				<b>Project (Number/Name)</b> C97 / ACFT Avionics			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024 Base</b>	<b>FY 2024 OCO</b>	<b>FY 2024 Total</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
C97: ACFT Avionics	-	5.595	2.278	1.271	-	1.271	-	-	-	-	0.000	9.144
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**A. Mission Description and Budget Item Justification**

The Fiscal Year (FY) 2024 budget request funds the development of Aircraft Avionics systems required to horizontally and vertically integrate the battlefield and the integration of those systems into Army aircraft. Tasks in this Program Element support research, development, and test efforts in the Engineering and Manufacturing Development phases of these systems. Alternate capabilities (non-GPS) and/or complimentary PNT solutions will be investigated, studied, evaluated and developed as standalone or blended navigation functions.

The Enhanced Aviation Global Air Traffic Management (GATM) Localizer Performance with Vertical Guidance (LPV) Embedded Global Positioning System (GPS) Inertial Navigation System (EGI) (EAGLE-M) development program upgrades existing EGI hardware by incorporating M-Code to provide Assured Positioning, Navigation and Timing (A-PNT) capability in a GPS degraded environment.

The Alternate Position, Navigation, and Time (ALT-PNT) enables precise navigation and timing during Multidomain Operations (MDO) operations in the absence of GPS by leveraging ALT-NAV and Vision Based Navigation (VBN) efforts, and providing a secure and reliable fused PNT solution utilizing new and existing high grade sensors available on manned aviation aircraft. ALT-PNT utilizes Modular Open System Architecture (MOSA) standards allowing rapid and affordable platform integration, adopting of new technologies, and adjustment to changes in adversarial capability.

Due to Selective Availability Anti-Spoofing Module (SAASM) obsolescence for currently fielded EGI Navigation Systems, reduction in EAGLE-M funding will result in a break in platform production lines and an inability to sustain the fielded fleet. Additionally, any reduction in funding would result delay fielding of critical A-PNT requirements resulting in inability to operate in a GPS degraded/denied environment.

**B. Accomplishments/Planned Programs (\$ in Millions)**

	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>
<b>Title:</b> EAGLE Navigation System A-PNT Integration	5.595	2.195	1.271
<b>Description:</b> The Enhanced Aviation Global Air Traffic Management (GATM) Localizer Performance with Vertical Guidance (LPV) Embedded Global Positioning System (GPS) Inertial Navigation System (EGI) (EAGLE-M) development program upgrades existing EGI hardware by incorporating M-Code to provide Assured Positioning, Navigation and Timing (A-PNT) capability in a GPS degraded environment.			
<b>FY 2023 Plans:</b> Conclude EAGLE-M full airworthiness testing/qualification and begin ALT-PNT technological maturation development efforts.			
<b>FY 2024 Plans:</b>			

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2024 Army		<b>Date:</b> March 2023
<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604201A / Aircraft Avionics	<b>Project (Number/Name)</b> C97 / ACFT Avionics

<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>
Conclude EAGLE-M full airworthiness testing/qualification and begin Alternate Position, Navigation, and Time (ALT-PNT) technological maturation development efforts.  <b>FY 2023 to FY 2024 Increase/Decrease Statement:</b> FY23 to FY24 decrease reflects completion of EAGLE-M Phase II efforts which provide the conclusion of Formal Qualification Testing (FQT) efforts and completion of qualification documentation. Also establishes ALT-PNT Modular Open System Architecture (MOSA) standards but is not sufficient to bring a full ALT-PNT program to fruition.			
<b>Title:</b> SBIR/STTR Transfer  <b>Description:</b> Title: Small Business Innovation Research (SBIR)/Small Business Technology Transfer (STTR)  <b>FY 2023 Plans:</b> Funding to be transferred in accordance with Title 15 USC §638  <b>FY 2023 to FY 2024 Increase/Decrease Statement:</b> Funding to be transferred in accordance with Title 15 USC §638	-	0.083	-
<b>Accomplishments/Planned Programs Subtotals</b>	5.595	2.278	1.271

<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<u>Line Item</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u> <u>Base</u>	<u>FY 2024</u> <u>OCO</u>	<u>FY 2024</u> <u>Total</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• AA0723: Comms, Nav Surveillance	58.117	72.387	74.912	-	74.912	62.802	37.707	37.714	37.637	Continuing	Continuing
• AA0704: GATM - Rotary Wing Aircraft	16.776	14.683	8.924	-	8.924	4.956	4.997	-	-	Continuing	Continuing
• A01006: Aviation ASSURED PNT	45.862	66.294	67.383	-	67.383	58.478	60.061	60.075	59.953	Continuing	Continuing
• C97: ACFT Avionics	5.595	2.278	1.271	-	1.271	-	-	-	-	Continuing	Continuing

**Remarks**  
APA funding associated with the Aircraft Avionics Project C97 RDT&E efforts is now in the Aviation Assured PNT line (SSN A01006) beginning in FY21. Aviation Assured PNT funding on the Comms, Nav Surveillance line (SSN AA0723) was realigned to A01006 beginning in FY21.

**D. Acquisition Strategy**  
This project is comprised of multiple systems supporting aircraft avionics. While the detailed acquisition strategy varies from program to program, the general strategy is for each individual program to complete the development and testing efforts in coordination with the aircraft platforms on integration issues, use the various contracts of the aircraft platforms original equipment manufacturers on integration efforts, and utilize the United States Army Combat Capabilities Development Command Aviation

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**Exhibit R-2A, RDT&E Project Justification:** PB 2024 Army **Date:** March 2023

<b>Appropriation/Budget Activity</b>	<b>R-1 Program Element (Number/Name)</b>	<b>Project (Number/Name)</b>
2040 / 5	PE 0604201A / <i>Aircraft Avionics</i>	C97 / <i>ACFT Avionics</i>

& Missile Center for software development. This requires the use of various contract methods and types to accomplish the aircraft avionics development efforts. All required acquisition program documentation is prepared.



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**Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army** **Date:** March 2023

<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604201A / Aircraft Avionics	<b>Project (Number/Name)</b> C97 / ACFT Avionics
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Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
AN/ARC-220 High Frequency Radio Modernization																												
Airborne Radio Control Manager Driver (AN/ARC-220 HF Radio)																												
EAGLE-M Development																												
ALT-PNT																												

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**Exhibit R-4A, RDT&E Schedule Details:** PB 2024 Army **Date:** March 2023

<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604201A / <i>Aircraft Avionics</i>	<b>Project (Number/Name)</b> C97 / <i>ACFT Avionics</i>
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
AN/ARC-220 High Frequency Radio Modernization	3	2021	3	2022
Airborne Radio Control Manager Driver (AN/ARC-220 HF Radio)	3	2021	3	2022
EAGLE-M Development	3	2021	1	2024
ALT-PNT	1	2024	4	2024

**Note**

DGNS: Doppler Global Positioning System (GPS) Navigation Set  
A-PNT: Assured-Position Navigation and Timing  
M-Code: Military-Code  
EGI: Embedded GPS Inertial

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**Exhibit R-2A, RDT&E Project Justification:** PB 2024 Army **Date:** March 2023

Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604201A / Aircraft Avionics				Project (Number/Name) VU3 / Networking And Mission Planning			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
VU3: <i>Networking And Mission Planning</i>	-	0.816	1.057	12.402	-	12.402	2.212	2.904	2.934	2.967	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**Note**

FY 2024 base procurement funding in the amount of \$11.100 million was realigned from AA0712FPEP to PE 0604201A / Aircraft Avionics Project VU3 to support AMCS developmental activities.

**A. Mission Description and Budget Item Justification**

The Fiscal Year (FY) 2024 budget request funds the development of Networking and Mission Planning systems required to horizontally and vertically integrate the battlefield and the integration of those systems into Army aircraft. Tasks in this Project support research, development, and test efforts in the Engineering and Manufacturing Development phases of these systems.

The AMCS is an obsolescence replacement and capability upgrade for the current Army Improved Data Modem (IDM) 401, which enables the hosting of applications to communicate, navigate, sense, and deploy weapon systems across the Joint Force in support of Army 2030 and future aviation operations. It supports the future Common Digital Backbone for the enduring and future Army Aviation fleets with the ability for further growth to host flight critical capabilities. It will provide the ability to rapidly apply technology upgrades utilizing a Modular Open Systems Approach (MOSA) with a nonproprietary Open Systems Architecture (OSA) to keep pace with evolving threats in the Multi-Domain Battlefield. FY 2024 base procurement funding in the amount of \$11.100 million was realigned from AA0712FPEP to 0604201A project VU3 to support the Aviation Mission Common Server (AMCS) developmental activities.

The Improved Data Modem (IDM) is the common solution for digitizing Army Aviation and is fielded on every modernized, rotary-wing Army aircraft, including the CH-47 Chinook, AH-64 Apache and UH-60 Black Hawk. The IDM provides the Army rotary wing fleet with critical communication capabilities, enables connectivity to multiple radios used by rotary-wing aircraft and the Blue Force Tracking transceiver, and provides the means for rapid data transfer.

The Aviation Mission Planning System (AMPS) is a system used to conduct pre-mission and aircraft performance planning. It receives data from multiple sources and provides that data digitally to the aircraft to support aviation missions. AMPS is used for automated mission planning, risk assessment, and transfer of mission data to aviation platforms within an Aviation unit. This includes route generation, performance planning, communications planning, terrain analysis, data transfer, and mission rehearsal. These efforts include development and testing of a new underlying architecture to support the move of Army Aviation Mission Planning from the current structure to one that supports synchronization both vertically and horizontally between Aviation and Ground forces. It will allow aircrews to continually plan and update route, threat, and performance data throughout all phases of an Aviation mission. Development of a mobile aircraft performance planning/weight and balance calculator is currently underway and will be the first migration of AMPS capabilities to a mobile hardware agnostic environment.

**B. Accomplishments/Planned Programs (\$ in Millions)**

	FY 2022	FY 2023	FY 2024
<b>Title:</b> Aviation Mission Common Server (AMCS)	0.816	1.018	12.402

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2024 Army	<b>Date:</b> March 2023
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<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604201A / Aircraft Avionics	<b>Project (Number/Name)</b> VU3 / Networking And Mission Planning
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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>	FY 2022	FY 2023	FY 2024
<p><b>Description:</b> The AMCS is an obsolescence replacement and capability upgrade for the current Army Improved Data Modem (IDM) 401, which enables the hosting of applications to communicate, navigate, sense, and deploy weapon systems across the Joint Force in support of Army 2030 and future aviation operations. It supports the future Common Digital Backbone for the enduring and future Army Aviation fleets with the ability for further growth to host flight critical capabilities. It will provide the ability to rapidly apply technology upgrades utilizing a Modular Open Systems Approach (MOSA) with a nonproprietary Open Systems Architecture (OSA) to keep pace with evolving threats in the Multi-Domain Battlefield.</p> <p><b>FY 2023 Plans:</b> Perform and support production representative assessments, testing, demonstration, and qualification activities in support of the Aviation Mission Common Server (AMCS) Modular Capabilities Demonstration Qualification and Delivery Phases. Support software functionality integration and testing activities required for integration into the AMCS hardware and initial platform integration lab.</p> <p><b>FY 2024 Plans:</b> Perform modification work order, testing and airworthiness development to support fielding of the Aviation Mission Common Server (AMCS). Perform and support software functionality integration and testing activities required to support integration into the AMCS hardware and initial platform integration lab and Safety of Flight testing for platform airworthiness qualification.</p> <p><b>FY 2023 to FY 2024 Increase/Decrease Statement:</b> Increase from FY23 to FY24 due to the AMCS initial system and platform level integration that provides the future architecture, hardware, and software capabilities for the next generation of IDM functionality and expanded mission processing.</p>			
<p><b>Title:</b> SBIR/STTR Transfer</p> <p><b>Description:</b> Small Business Innovation Research (SBIR)/Small Business Technology Transfer (STTR)</p> <p><b>FY 2023 Plans:</b> Funding to be transferred in accordance with Title 15 USC §638</p> <p><b>FY 2023 to FY 2024 Increase/Decrease Statement:</b> Funding to be transferred in accordance with Title 15 USC §638</p>	-	0.039	-
<b>Accomplishments/Planned Programs Subtotals</b>	0.816	1.057	12.402

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2024 Army	<b>Date:</b> March 2023
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<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604201A / Aircraft Avionics	<b>Project (Number/Name)</b> VU3 / Networking And Mission Planning
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**C. Other Program Funding Summary (\$ in Millions)**

<u>Line Item</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u> <u>Base</u>	<u>FY 2024</u> <u>OCO</u>	<u>FY 2024</u> <u>Total</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• AA0712: Network And Mission Plan	29.206	42.450	32.418	-	32.418	33.464	41.135	73.524	75.162	Continuing	Continuing

**Remarks**

FY 2024 AA0712 base procurement funding in the amount of \$11.100 million was realigned from AA0712FPEP to 654201VU3 to support of the Aviation Mission Common Server (AMCS) developmental activities.

**D. Acquisition Strategy**

The AMCS Acquisition Strategy for development and production leverages a competitively awarded Other Transaction agreement for a Hardware and Software Open Systems Architecture (OSA) Family of Systems Line Replaceable Unites (LRUs) which align with DoD's Modular Open System Approach (MOSA) and PEO Aviation's Aviation Mission Computing Environment (AMCE).

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army** **Date:** March 2023

<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604201A / Aircraft Avionics	<b>Project (Number/Name)</b> VU3 / Networking And Mission Planning
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<b>Management Services (\$ in Millions)</b>				<b>FY 2022</b>		<b>FY 2023</b>		<b>FY 2024 Base</b>		<b>FY 2024 OCO</b>		<b>FY 2024 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>			
PM Support (AMCS)	Various	Combat Communications Development Command, Aviation & Missile Center : Redstone Arsenal, AL	0.010	0.110	Feb 2023	-		0.493	Dec 2023	-		0.493	Continuing	Continuing	-
SBIR/STTR Transfer	TBD	To Be Determined : To Be Determined	-	-		0.039	Sep 2023	-		-		-	0.000	0.039	-
<b>Subtotal</b>			0.010	0.110		0.039		0.493		-		0.493	Continuing	Continuing	N/A

<b>Product Development (\$ in Millions)</b>				<b>FY 2022</b>		<b>FY 2023</b>		<b>FY 2024 Base</b>		<b>FY 2024 OCO</b>		<b>FY 2024 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>			
Hardware and Software Development/ Demonstration for the Aviation Mission Common Server (AMCS)	C/Various	Combat Communications Development Command, Aviation & Missile Center : Redstone Arsenal, AL	0.618	0.706	Dec 2021	-		-		-		-	0.000	1.324	-
AMCS Hardware and Software Prototype Development OTA	C/FFP	Mercury Systems : Mesa, AZ	0.199	-		0.171	Feb 2023	-		-		-	0.000	0.370	-
<b>Subtotal</b>			0.817	0.706		0.171		-		-		-	0.000	1.694	N/A

<b>Support (\$ in Millions)</b>				<b>FY 2022</b>		<b>FY 2023</b>		<b>FY 2024 Base</b>		<b>FY 2024 OCO</b>		<b>FY 2024 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>			
Hardware and Software Development Support	C/Various	Combat Communications Development	0.447	-		0.847	Mar 2023	-		-		-	Continuing	Continuing	-

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army** **Date:** March 2023

<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604201A / Aircraft Avionics	<b>Project (Number/Name)</b> VU3 / Networking And Mission Planning
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<b>Support (\$ in Millions)</b>				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
for the Aviation Mission Common Server (AMCS)		Command, Aviation & Missile Center, Redstone Test Center and Platform SIL : Redstone Arsenal, AL													
PM Airworthiness Support (AMCS Documentation)	C/Various	Combat Communications Development Command : Redstone Arsenal, AL	-	-		-		0.825	Feb 2024	-		0.825	Continuing	Continuing	-
AMCS Cybersecurity	C/Various	Combat Communications Development Command : Redstone Arsenal, AL	-	-		-		0.648	Aug 2024	-		0.648	Continuing	Continuing	-
AMCS Enduring Fleet SIL Assets (RSA)	C/Various	Combat Communications Development Command, Aviation & Missile Center, Redstone Test Center and Platform SIL : Redstone Arsenal, AL	-	-		-		0.828	Apr 2024	-		0.828	Continuing	Continuing	-
Engineering Services	C/Various	Combat Communications Development Command, Aviation & Missile Center : Redstone Arsenal, AL	-	-		-		3.919	Feb 2024	-		3.919	Continuing	Continuing	-
<b>Subtotal</b>			0.447	-		0.847		6.220		-		6.220	Continuing	Continuing	N/A



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**Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army** **Date:** March 2023

<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604201A / Aircraft Avionics	<b>Project (Number/Name)</b> VU3 / Networking And Mission Planning
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Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
AMCS OTA Contract Award Phase 3	Awarded Phase 3 OTA																											
AMCS Critical Design Review (CDR)					1 AMCS CDR																							
AMCS OTA Contract Award Phase 4					Awarded Phase 4 OTA																							
AMCS Deemonstrations					2 AMCS Demo																							
AMCS OTA Contract Award Phase 5					Awarded Phase 5 OTA																							
AMCS Production Decision									3 AMCS Production Decision																			
AMCS Deliveries									4 AMCS Deliveries																			

**Note**  
The Aviation Mission Common Server Modular Capabilities Demonstration Other Transaction Authority awarded 24 June 20. The schedule depicts the OTA's 5 Individual phases and their associated award and effort duration.

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**Exhibit R-4A, RDT&E Schedule Details:** PB 2024 Army **Date:** March 2023

<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604201A / Aircraft Avionics	<b>Project (Number/Name)</b> VU3 / Networking And Mission Planning
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Develop IDM Software	4	2018	4	2018
AMCS Airworthiness Studies and Assessments	2	2019	2	2019
AMCS OTA Prototype Contract Award Phase 1	3	2020	3	2020
AMCS Alternative Systems Review (ASR)	4	2020	1	2021
AMCS OTA Prototype Contract Award Phase 2	1	2021	1	2021
AMCS preliminary Design Review (PDR)	1	2021	2	2021
AMCS OTA Contract Award Phase 3	3	2021	3	2023
AMCS Critical Design Review (CDR)	2	2023	2	2023
AMCS OTA Contract Award Phase 4	4	2022	3	2023
AMCS Demonstrations	3	2023	3	2023
AMCS OTA Contract Award Phase 5	3	2023	3	2024
AMCS Production Decision	3	2024	3	2024
AMCS Deliveries	3	2024	3	2024