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

Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force / BA 5: System Development & Demonstration (SDD)</i>	R-1 Program Element (Number/Name) PE 0401221F / <i>KC-46A Tanker Squadrons</i>
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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	60.734	140.395	124.662	93.620	0.000	93.620	58.744	53.345	36.584	0.000	0.000	568.084
651120: <i>Pegasus Capability Improvements</i>	0.000	53.697	54.860	58.509	0.000	58.509	46.382	53.345	36.584	0.000	0.000	303.377
655271: <i>KC-46 RDT&E</i>	60.734	86.698	69.802	35.111	0.000	35.111	12.362	0.000	0.000	0.000	0.000	264.707

Program MDAP/MAIS Code: 387

Note

This program, BA 5, PE 0401221F, project 651120, Mobility Air Forces (MAF) Connectivity, is a new start.

In FY 2023, PE 0401221F, KC-46A Tanker Squadrons, Project 655KCY, was transferred to a new PE 0605164F, Air Refueling Capability Modernization (ARCM), Project 645164, Continued Tanker Recapitalization RDT&E due to Congressional request.

A. Mission Description and Budget Item Justification

Replacement of the legacy tanker fleet will take place in several stages. The initial tanker replacement increment of KC-46As will replace roughly a third of the current capability. Future programs will ultimately recapitalize the entire tanker fleet over a period of more than 30 years. The Air Force completed an Analysis of Alternatives (AoA) in Apr 2006 to determine the most appropriate strategy to recapitalize the aging fleet of aerial refueling aircraft. Based on this analysis, the Air Force concluded a strategy of full and open competition to select a commercial derivative replacement tanker aircraft would result in a best value tanker contract. To initiate the first phase of the tanker replacement, the KC-46A program released a final Request for Proposal (RFP) on 24 Feb 2010, and entered source selection on 9 Jul 2010. The KC-46A program held a Milestone B (MS B) Defense Acquisition Board (DAB) on 23 Feb 2011, received approval to enter Engineering and Manufacturing Development (EMD) from the Undersecretary of Defense (Acquisition, Technology and Logistics) (USD(AT&L)) on 24 Feb 2011, and awarded the KC-46A EMD contract to Boeing on 24 Feb 2011 to develop and procure 179 KC-46A aircraft. The program is procuring four RDT&E aircraft for integration and demonstration of capability which will ultimately be operationally fielded. During production, the program plans to procure 175 aircraft throughout 13 lots. The KC-46A program held a MS C DAB on 12 Aug 2016 and received approval to enter Low Rate Initial Production (LRIP). The program awarded LRIP Lots 1 and 2 on 18 Aug 2016, LRIP Lot 3 on 27 Jan 2017, LRIP Lot 4 on 10 Sep 2018, and LRIP Lot 5 on 27 Sep 2019. Lot 6 awarded on 12 Jan 2021, Lot 7 awarded on 20 Jan 2021, Lot 8 awarded 31 Aug 2022, Lot 9 awarded 27 Jan 2023, and Lot 10 was converted to LRIP on 17 Nov 2023 and was put on contract 28 Nov 2023 bringing the total number of aircraft on production contract to 139. Initial sustainment effort is provided via Interim Contractor Support (ICS) as the program is transitioning to organic sustainment. KC-46A funding also supports Training Systems, Support Equipment, Operational Site Activation, Depot Stand-Up, Alternate Mission Equipment (AME), Direct Mission Support, Program Support Costs (PSC) activities, Other Government Costs (OGC), various studies and analyses, future tanker planning activities, long lead items, and potential Diminishing Manufacturing Sources (DMS) and obsolescence planning activities.

The KC-46A has been validated at the Joint Requirements Oversight Council (JROC) multiple times from Nov 2004 to May 2018, and is a critical force extender in our Joint Warfighting Concept. In addition to its air refueling capability, the KC-46 is planned to be a key joint and coalition communications node. The KC-46A will

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<p>provide the capability to fuel joint and coalition receivers via a boom or drogue system on every mission and will also augment the airlift fleet with cargo, passenger, and aeromedical evacuation capabilities. The KC-46A will operate in day, night, and adverse weather conditions to enable deployment, employment, sustainment, and redeployment of U.S. joint, allied, and coalition forces. The KC-46A will have communication, navigation, and surveillance equipment for world-wide operations; the capability to perform missions in chemical and biological environments; the ability to operate in up to medium threat environments with self-defense/protection (both active and passive) capabilities; and the necessary battle space awareness to mitigate survivability threats. The first DD250 was signed on 10 Jan 2019. The Air Force delivered the first KC-46A to McConnell Air Force Base on 25 Jan 2019. As of 12 January 2024, 80 aircraft have been delivered to the Air Force via DD250.</p> <p>Mobility Air Forces (MAF) Connectivity is a requirement for Line-of-Sight (LOS) and Beyond-Line-of-Sight (BLOS) connectivity capability on the KC-46A. This will enable maximum MAF connectivity and real-time secure command and control for aircrew situational awareness.</p> <p>The Aircrew Training System (ATS) and Maintenance Training System (MTS) are being procured using KC-46A funding. The ATS contract was awarded on 1 May 2013 to Flight Safety Services Corporation, now known as Flight Safety International - Defense. The ATS contract will provide Aircrew Training Devices (ATDs), to include Weapon System Trainers (WSTs), Boom Operator Trainers (BOTs), Fuselage Trainers (FuTs), Part-Task Trainers (PTTs), and emerging technologies to meet validated Air Mobility Command (AMC) aircrew training requirements at each Main Operating Base (MOB) and the Formal Training Unit (FTU). The ATS contract will also support Distributed Mission Operations (DMO), provide aircrew instruction, develop courseware, provide logistics support, acquire a technical data package to support future competition efforts, and manage training device/courseware concurrency with the aircraft. The first eight ATS production options were exercised on 19 Aug 2015, 31 May 2017, 30 Apr 2018, 31 Mar 2019, 27 Feb 2020, 4 Mar 2021, 24 Feb 2022, and 15 Nov 2022. Option year nine was put on Un-definitized Contract Action (UCA) 10 Oct 2023. Option nine is scheduled to definitize in March 2024.</p> <p>The MTS contract was awarded 6 Jul 2016 to The Boeing Company. The MTS acquisition focuses on designing, developing, testing, producing, and fielding an optimized training system for KC-46A maintainers by integrating various forms of training media and Maintenance Training Devices (MTDs) into a "blended" solution. This blended solution includes the appropriate mix of hardware and software, "high-fidelity" Augmented Hardware Training Devices (AHTDs), Part Task Trainers (PTTs), Interactive Multimedia Instruction (IMI), and emerging technologies to meet validated AMC maintenance training requirements.</p> <p>This requirement supports performance of a full financial audit as required by U.S.C. Title 10, Subtitle A, Part I, Chapter 9A, Sec 240-D, Financial Improvement and Audit Remediation (FIAR) Plan.</p> <p>This program element may include necessary civilian pay expenses required to manage, execute, and deliver weapon 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, and 0606398F. In FY 2023 \$1.292 million was expended for civilian pay expenses in this program element, and in FY 2024 \$3.268 million is forecast for civilian pay expenses in this program element.</p> <p>This program is in Budget Activity 5, System Development and Demonstration (SDD) because it has passed Milestone B approval and is conducting engineering and manufacturing development tasks aimed at meeting validated requirements prior to full rate production.</p>		

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Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Air Force	Date: March 2024
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Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 5: System Development & Demonstration (SDD)</i>	R-1 Program Element (Number/Name) PE 0401221F / KC-46A Tanker Squadrons
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B. Program Change Summary (\$ in Millions)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Previous President's Budget	177.529	124.662	67.702	0.000	67.702
Current President's Budget	140.395	124.662	93.620	0.000	93.620
Total Adjustments	-37.134	0.000	25.918	0.000	25.918
• Congressional General Reductions	0.000	0.000			
• Congressional Directed Reductions	0.000	0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds	0.000	0.000			
• Congressional Directed Transfers	0.000	0.000			
• Reprogrammings	-37.134	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.000	0.000	25.918	0.000	25.918

Change Summary Explanation

FY 2023 funding request was reduced by \$37.134 million to account for the availability of prior year execution balances.

FY 2025 funding request was increased by \$25.918 million for PACS development and KC-46A aircrew training systems development.

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Exhibit R-2A, RDT&E Project Justification: PB 2025 Air Force **Date:** March 2024

Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0401221F / KC-46A Tanker Squadrons	Project (Number/Name) 651120 / Pegasus Capability Improvements
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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
651120: <i>Pegasus Capability Improvements</i>	0.000	53.697	54.860	58.509	0.000	58.509	46.382	53.345	36.584	0.000	0.000	303.377
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

This program, BA 5, PE 0401221F, project 651120, Mobility Air Forces (MAF) Connectivity, is a new start.

A. Mission Description and Budget Item Justification

The KC-46A will provide the capability to fuel joint and coalition receivers via a boom or drogue system on every mission and will also augment the airlift fleet with cargo, passenger, and aeromedical evacuation capabilities. The KC-46A will operate in day/night and adverse weather conditions to enable deployment, employment, sustainment, and redeployment of U.S. joint, allied, and coalition forces. The KC-46A will have communication, navigation, and surveillance equipment for worldwide operations; the capability to perform missions in chemical and biological environments; the ability to operate in up to medium threat environments with self-defense/ protection (both active and passive) capabilities; and the necessary battlespace awareness to mitigate survivability threats.

The dynamics and mission urgency of the post-production (post-DD-250) environment require the program to maintain a flexible and responsive posture to support a broad range of mission support needs. The KC-46A will continue to identify, design, develop, integrate, verify, certify, produce, install, field, and sustain a comprehensive range of non-recurring and recurring post-production, air vehicle enhancements and field support needs. These needs may originate from programmed Mobility Air Forces (MAF) requirements, Combatant Commander Joint or Urgent Operational Needs (JUON/UON), non-programmed Federal Aviation Administration (FAA) directives, requirements identified and supported by HHQ Enterprise Capability Collaboration Teams (i.e., High Value Airborne Asset [HVAA], Air Superiority 2030, and Multi-Domain Command and Control [MDC2]), or correction of field deficiencies.

The KC-46A will continue to develop, field, and sustain warfighter capabilities to meet evolving threats and mission support requirements through Block or discrete modification or modernization programs depending on mission urgency, available funding, and programmatic and technical risks. Post-production requirements can include but will not be limited to avionics and structural systems/ architecture and subsystem updates, general mission equipment updates and procurement, general sustainment support, studies and analyses, future Tanker requirements simulation and training, and correction of field deficiencies.

Mobility Air Forces (MAF) Connectivity is a requirement for Line-of-Sight (LOS) and Beyond-Line-of-Sight (BLOS) connectivity capability on the KC-46A. This will enable maximum MAF connectivity and real-time secure command and control for aircrew situational awareness.

Project 651120 funding will also support Program Support Costs (PSC) activities, test support, mission planning capability development and various studies and analyses.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver weapon 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,

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Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0401221F / KC-46A Tanker Squadrons	Project (Number/Name) 651120 / Pegasus Capability Improvements		
and 0606398F. In FY 2023 \$1.292 million was expended for civilian pay expenses in this program element, and in FY 2024 \$3.268 million is forecast for civilian pay expenses in this program element.				
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2023	FY 2024	FY 2025
Title: KC-46A Block 1 Pegasus Advanced Communications Suite (PACS)				
Description: The KC-46A Block 1 Pegasus Advanced Communications Suite (PACS) program will satisfy Department of Defense (DoD), National Security Agency (NSA), Department of Transportation (DoT), and USAF mandates by upgrading legacy Tactical Data Link 16, Beyond Line-of-Sight (BLOS) Ultra High Frequency (UHF) Line-of-Sight (LOS) capabilities with next-generation Link 16 terminals and UHF secure, global, BLOS and anti-jam LOS satellite voice communications capabilities for the KC-46A weapon system. PACS enables compatibility and interoperability with current and planned future joint and allied forces while simultaneously increasing the survivability of secure global voice and data communications capabilities between Mobility Air Force (MAF) C2 agencies and MAF aircraft operating worldwide in or near contested environments.				
FY 2024 Plans: Continue Block 1 PACS EMD program and associated contracting efforts.				
FY 2025 Plans: Continuation of Block 1 PACS EMD program and associated contracting efforts.				
FY 2024 to FY 2025 Increase/Decrease Statement: Funding increased due to the ramp up of support and upgrade activities, to include but not limited to test and test support.				
Title: Mobility Air Forces (MAF) Connectivity				
Description: Mobility Air Forces (MAF) Connectivity Efforts: Aircraft Connectivity is a requirement for Line-of-Sight (LOS) and Beyond-Line-of-Sight (BLOS) connectivity capability on the KC-46A. This will enable maximum MAF connectivity and real-time secure command and control for aircrew situational awareness.				
FY 2024 Plans: N/A				
FY 2025 Plans: Initial planning of MAF Connectivity capability for the KC-46A to include but not limited to real-time secure command and control for aircrew situational awareness.				
FY 2024 to FY 2025 Increase/Decrease Statement: Funding increase due to ramp up of initial MAF Connectivity program office efforts.				
Title: Support				
		1.292	5.352	2.306

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Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0401221F / KC-46A Tanker Squadrons	Project (Number/Name) 651120 / Pegasus Capability Improvements

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2023	FY 2024	FY 2025
<p>Description: Studies and analyses to support planning activities for future initiatives for upgrades, future tanker efforts, test support, test execution and other Program Support Costs.</p> <p>FY 2024 Plans: Initiate testing and test support, modernization programs, studies, analyses and planning activities to support future upgrade initiatives.</p> <p>FY 2025 Plans: Continuation of Studies and analyses to support planning activities for future initiatives for upgrades, future tanker efforts, test support, test execution and other Program Support Costs.</p> <p>FY 2024 to FY 2025 Increase/Decrease Statement: Funding decrease due to reduced planning activities for future tanker efforts.</p>			
Accomplishments/Planned Programs Subtotals	53.697	54.860	58.509

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
• APAF 05 41221F/ KC046A: KC-46A Tanker	0.467	0.000	24.954	0.000	24.954	19.566	55.653	92.243	87.543	5,615.672	5,896.098

Remarks

D. Acquisition Strategy

The KC-46A Post-Production Change Management (PPCM) construct is comprised of processes and tools, specifically tailored to a broad spectrum of post-production requirements to support the KC-46A enterprise (e.g. weapon system, sustainability, training devices). PPCM is designed to leverage competition when applicable and emphasize configuration management and discrete cost accounting methodologies. KC-46A PPCM oversight will promote competition throughout the life cycle of the KC-46A fleet. All KC-46A post-production requirements and associated acquisition strategies will be carefully managed, reviewed, and approved at the appropriate levels by the KC-46A Division and/or Tanker Directorate senior functional leaders. PPCM requirements will employ multiple contract-types, tailored to the requirement and documented in discrete Acquisition Strategy Panel briefings, to minimize cost, technical, and schedule execution risks and ensure on-time deliverables. In addition, all ACAT-level programs, deriving from the PPCM process, will follow Department of Defense (DoD) Directive 5000.01 and DoD Instruction 5000.02 guidelines and directives, as applicable, to ensure management controls--commensurate with the scope and cost of the supported requirement.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Air Force **Date:** March 2024

Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0401221F / KC-46A Tanker Squadrons	Project (Number/Name) 651120 / Pegasus Capability Improvements
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Product Development (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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			
KC-46A Capability Upgrades (to include modification and modernization)	SS/CPFF	The Boeing Company : Seattle, WA	0.000	52.385	Mar 2023	48.933	Mar 2024	55.628	Mar 2025	-		55.628	Continuing	Continuing	-
Subtotal			0.000	52.385		48.933		55.628		-		55.628	Continuing	Continuing	N/A

Remarks
Target Value is TBD because PACS Block 2 has not awarded

Support (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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			
Direct Cite Authority for Civilian Pay	RO	KC-46 Program Office : Dayton, W-P AFB, OH	0.000	1.292	Oct 2022	3.268	Oct 2023	2.306	Oct 2024	-		2.306	Continuing	Continuing	-
Direct Mission Support	Various	KC-46 Program Office : Dayton, W-P AFB, OH	0.000	0.020	Mar 2023	2.084	Mar 2024	0.000	Feb 2025	-		0.000	Continuing	Continuing	-
Subtotal			0.000	1.312		5.352		2.306		-		2.306	Continuing	Continuing	N/A

Remarks
Target value is blank for Direct Mission Support since there are various contracts. Target Value is blank for Direct Cite Authority for Civilian Pay since funds are provided to the center to fund manpower.

Test and Evaluation (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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			
KC-46A testing and planning support of development & operational test, FAA & military	Various	Various : TBD	0.000	0.000	Jan 2024	0.575	Jan 2024	0.575	Jan 2025	0.000		0.575	Continuing	Continuing	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Air Force **Date:** March 2024

Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0401221F / KC-46A Tanker Squadrons	Project (Number/Name) 651120 / Pegasus Capability Improvements
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Test and Evaluation (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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			
certification, and aircraft qualification activities															
KC-46A Long Term Test Aircraft Maintenance Support	SS/CPAF	The Boeing Company : Edwards AFB, CA	0.000	0.000	Sep 2023	0.000	Sep 2024	0.000	Sep 2025	-		0.000	Continuing	Continuing	-
Subtotal			0.000	0.000		0.575		0.575		0.000		0.575	Continuing	Continuing	N/A

Remarks
LTTAMS is funded out of ACAT 1 Baseline.

	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	0.000	53.697	54.860	58.509	0.000	58.509	Continuing	Continuing	N/A

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2025 Air Force		Date: March 2024
Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0401221F / <i>KC-46A Tanker Squadrons</i>	Project (Number/Name) 651120 / <i>Pegasus Capability Improvements</i>

	FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029			
	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

<i>Pegasus Capability Improvements</i>	
KC-46A Block I PACS	
Long Term Test Aircraft Maintenance Support	

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Exhibit R-4A, RDT&E Schedule Details: PB 2025 Air Force		Date: March 2024
Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0401221F / <i>KC-46A Tanker Squadrons</i>	Project (Number/Name) 651120 / <i>Pegasus Capability Improvements</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Pegasus Capability Improvements</i>				
KC-46A Block I PACS	2	2023	2	2028
Long Term Test Aircraft Maintenance Support	4	2023	4	2025

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Exhibit R-2A, RDT&E Project Justification: PB 2025 Air Force										Date: March 2024		
Appropriation/Budget Activity 3600 / 5					R-1 Program Element (Number/Name) PE 0401221F / KC-46A Tanker Squadrons				Project (Number/Name) 655271 / KC-46 RDT&E			
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
655271: KC-46 RDT&E	60.734	86.698	69.802	35.111	0.000	35.111	12.362	0.000	0.000	0.000	0.000	264.707
Quantity of RDT&E Articles	4	-	-	-	-	-	-	-	-	-		

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Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0401221F / KC-46A Tanker Squadrons	Project (Number/Name) 655271 / KC-46 RDT&E
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Distributed Mission Operations (DMO), provide aircrew instruction, develop courseware, provide logistics support, acquire a technical data package to support future competition efforts, and manage training device/courseware concurrency with the aircraft. The first eight ATS production options were exercised on 19 Aug 2015, 31 May 2017, 30 Apr 2018, 31 Mar 2019, 27 Feb 2020, 4 Mar 2021, 24 Feb 2022, and 15 Nov 2022. Option nine was put on Un-definitized Contract Action (UCA) on 10 Oct 2023. Definitization is planned for March 2024.

The MTS contract was awarded 6 Jul 2016 to The Boeing Company. The MTS acquisition focuses on designing, developing, testing, producing, and fielding an optimized training system for KC-46A maintainers by integrating various forms of training media and Maintenance Training Devices (MTDs) into a "blended" solution. This blended solution includes the appropriate mix of hardware and software, "high-fidelity" Augmented Hardware Training Devices (AHTDs), Part Task Trainers (PTTs), Interactive Multimedia Instruction (IMI), and emerging technologies to meet validated AMC maintenance training requirements.

This requirement supports performance of a full financial audit as required by U.S.C. Title 10, Subtitle A, Part I, Chapter 9A, Sec 240-D, Financial Improvement and Audit Remediation (FIAR) Plan.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver weapon system capability. The use of such program funds would be in addition to the civilian pay expenses budgeted in program elements 0605827F, 0605828F, 0605829F, 0605831F, 0605832F, 0605833F, 0605898F, and 0606398F. In FY 2023 \$2.646 million was expended for civilian pay expenses in this program element. In FY 2024 \$0.000 million was expended for civilian pay expenses in this program element.

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

	FY 2023	FY 2024	FY 2025
<p>Title: KC-46A Aircraft Product Development</p> <p>Description: EMD activities will be conducted to include the following types of activities: develop a commercial 767-2C aircraft upon which the KC-46 is based; develop the KC-46A military capability and integrate it into the aircraft; build four EMD aircraft; procure live fire assets; procure required Government Furnished Equipment (GFE); procure simulator and maintenance data; develop technical manuals and Type 1 training; and conduct development and operational testing.</p> <p>FY 2024 Plans: Continuation of product refinement, studies, ground, and flight testing in support of the KC-46A weapon system to include receiver certifications, simulator data collection, and completion of IOT&E events/reporting. Incrementally fund boom telescope actuator redesign (BTAR) Engineering Change Proposal (ECP) efforts (ongoing since 2020) and support other government costs associated with solution for Remote Vision System (RVS). Study, analyze, test and update documentation in order to certify and increase KC-46A capability for aerial refueling (AR) onload. Incrementally fund work for Take Off and Landing Data (TOLD) to address deficiencies and improve capability.</p> <p>FY 2025 Plans: Product refinement, studies, ground, and flight testing in support of the KC-46A weapon system to include but not limited to Remote Vision System (RVS), receiver certifications, simulator data collection, and completion of IOT&E events/reporting. Incrementally fund Take Off and Landing Data (TOLD) and boom telescope actuator redesign (BTAR) Engineering Change</p>	46.852	45.652	12.800

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Exhibit R-2A, RDT&E Project Justification: PB 2025 Air Force		Date: March 2024		
Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0401221F / KC-46A Tanker Squadrons	Project (Number/Name) 655271 / KC-46 RDT&E		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2023	FY 2024	FY 2025
<p>Proposal (ECP) efforts. Study, analyze, test and update documentation to certify and increase KC-46A capability for aerial refueling (AR) onload.</p> <p>FY 2024 to FY 2025 Increase/Decrease Statement: Funding decreased due to schedule delays for multiple efforts.</p>				
<p>Title: KC-46A Trainer Product Development - Aircrew Training System (ATS)</p> <p>Description: Trainer development activities will be conducted to include the following types of activities: development and procurements of ATDs, courseware, and associated support equipment.</p> <p>FY 2024 Plans: Continue development of eRVS, BTAR, NVG, LAIRCM, RVS 2.0, and TOLD upgrades</p> <p>FY 2025 Plans: Continuation of Trainer development activities will be conducted to include the following types of activities: development and procurements of ATDs, courseware, and associated support equipment, eRVS, BTAR, NVG, LAIRCM, RVS 2.0, and TOLD Upgrade Development.</p> <p>FY 2024 to FY 2025 Increase/Decrease Statement: Funding increased due to the ramp up of support and upgrade activities, to include but not limited to test, test support, software and hardware development.</p>		2.979	0.947	7.785
<p>Title: KC-46A Test & Evaluation</p> <p>Description: Test & Evaluation (T&E) activities will be conducted to include the following types of activities: Development Test & Evaluation, Operational Test & Evaluation, Tanker Qualification, Receiver Certifications, Live Fire Test & Evaluation (LFT&E), Federal Aviation Administration (FAA) support, and other test planning and organizational support.</p> <p>FY 2024 Plans: Continuation of Test & Evaluation (T&E) activities will be conducted to include the following types of activities: Development Test & Evaluation, Operational Test & Evaluation, Tanker Qualification, Receiver Certifications, Live Fire Test & Evaluation (LFT&E), Federal Aviation Administration (FAA) support, and other test planning and organizational support.</p> <p>FY 2025 Plans: Continuation of Test & Evaluation (T&E) activities to include but not limited to Development Test & Evaluation, Operational Test & Evaluation, Tanker Qualification, Receiver Certifications, Live Fire Test & Evaluation (LFT&E), Federal Aviation Administration (FAA) support, and other test planning and organizational support.</p> <p>FY 2024 to FY 2025 Increase/Decrease Statement:</p>		23.703	21.599	13.006

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Exhibit R-2A, RDT&E Project Justification: PB 2025 Air Force		Date: March 2024
Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0401221F / KC-46A Tanker Squadrons	Project (Number/Name) 655271 / KC-46 RDT&E

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2023	FY 2024	FY 2025
Funding decreased due to reduced efforts and schedule slips.			
Title: KC-46A Support	13.164	1.604	1.520
Description: Development, integration, and demonstration of the KC-46A mission planning capability. In addition, studies and analysis to support planning activities for future efficiency initiatives, business case analyses, and miscellaneous Program Office support and planning. Also includes requirements such as travel, office supplies, training courses, and service contracts.			
FY 2024 Plans: Continued Program Office Support and Planning.			
FY 2025 Plans: Continuation of Development, integration, and demonstration of the KC-46A mission planning capability. Studies and analysis to support planning activities for future efficiency initiatives, business case analyses, and future tanker planning.			
FY 2024 to FY 2025 Increase/Decrease Statement: Funding decreased due to air refueling airplane simulator qualification (ARASQ) support schedule slip.			
Accomplishments/Planned Programs Subtotals	86.698	69.802	35.111

C. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u> <u>Base</u>	<u>FY 2025</u> <u>OCO</u>	<u>FY 2025</u> <u>Total</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>FY 2029</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• APAF 02 Line Item KC046A: KC-46A Tanker	2,458.717	2,882.590	2,854.748	-	2,854.748	2,833.054	2,429.705	0.000	-	0.000	13,458.814
• APAF 06 Line Item 000999: Initial Spares	100.938	195.184	216.754	-	216.754	252.725	452.761	0.000	-	0.000	1,218.362

Remarks

D. Acquisition Strategy

The KC-46A Program acquisition strategy is to procure an existing commercial, Federal Aviation Administration (FAA) certified aircraft modified to meet USAF requirements. The KC-46A program released a final RFP on 24 Feb 2010, and entered source selection on 9 Jul 2010. The KC-46A program held a Milestone B (MS B) Defense Acquisition Board (DAB) on 23 Feb 2011, received approval to enter EMD from the Undersecretary of Defense (Acquisition, Technology and Logistics) (USD(AT&L)) on 24 Feb 2011, and awarded the KC-46A contract to Boeing on 24 Feb 2011 to develop and procure 179 KC-46A aircraft. The KC-46A contract procurement was conducted via a full and open competition per Federal Acquisition Regulation (FAR) Part 15, and resulted in a FY 2011 Engineering and Manufacturing Development (EMD) Fixed Price Incentive Firm (FPIF) contract. The EMD phase is developing, building, and testing four KC-46A aircraft, and will qualify the KC-46A as a tanker and certify pairings with receiver aircraft.

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Exhibit R-2A, RDT&E Project Justification: PB 2025 Air Force		Date: March 2024
Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0401221F / <i>KC-46A Tanker Squadrons</i>	Project (Number/Name) 655271 / <i>KC-46 RDT&E</i>
<p>The MS B acquisition strategy planned for two LRIP lots followed by 11 Full-Rate Production (FRP) lots for a total aircraft procurement of 175 production aircraft. An update to the acquisition strategy occurred in support of MS C that increased LRIP from two to four lots, with the total aircraft buy remaining at 175 production aircraft. A Dec 2017 USD(AT&L) Acquisition Decision Memorandum expanded LRIP to include Lot 5. Another Program Deviation Report was submitted on June 8, 2020, to declare a breach to the Full Rate Production Decision. A new APB dated October 19, 2020 was approved, and a new ADM dated October 20, 2020 re-designated Lots 6 through 9 as LRIP with the total aircraft buy remaining at 175 Production aircraft (+4 EMD aircraft for a grand total of 179 aircraft).</p> <p>LRIP now consists of two Firm Fixed Price (FFP) and seven FFP Not to Exceed (NTE) options (LRIP-1 Qty 7, LRIP-2 Qty 12, LRIP-3 Qty 15, LRIP-4 Qty 18, LRIP-5 Qty 15, LRIP-6 Qty 12, LRIP-7 Qty 15, LRIP-8 Qty 15, LRIP-9 Qty 15). This will be followed by four (Lots 10-13) FFP production options [via NTE values + Economic Price Adjustment (EPA)]. LRIP Lots 1 and 2 were awarded Aug 2016, LRIP Lot 3 was awarded Jan 2017, LRIP Lot 4 was awarded Sep 2018, LRIP Lot 5 was awarded Sep 2019, and LRIP Lots 6 and 7 were awarded Jan 2021. LRIP Lot 8 was awarded August 2022 and LRIP Lot 9 was awarded January 2023. Lot 10 was converted to LRIP on 17 Nov 2023 and was put on contract 28 Nov 2023.</p> <p>The Aircrew Training System (ATS) acquisition strategy is to provide Aircrew Training Devices (ATDs), and associated support structure, to each Main Operating Base (MOB) and the Flying Training Unit (FTU). The ATS EMD FPIF contract with production options was conducted via a full and open competition per FAR Part 15, and awarded to FlightSafety Services Corporation in FY 2013. The ATS EMD phase will develop and procure ATDs; and will be supported with courseware, Training System Support Center, the technical data package, and support equipment to ensure system availability and concurrency with the aircraft. The first eight ATS production options were exercised on 19 Aug 2015, 31 May 2017, 30 Apr 2018, 31 Mar 2019, 2 Sep 2020, 4 Mar 2021, 23 May 2022, and 2 February 2023. Lot 9 of 10 total lots is planned to be awarded in January 2024.</p> <p>The Maintenance Training System (MTS) acquisition strategy is to acquire Maintenance Training Devices (MTDs), and associated support structure, for two AMC active duty Regional Maintenance Training Facilities. The MTS EMD FFP contract with production options was conducted via a full and open competition per FAR Part 15, and awarded to The Boeing Company in FY 2016. The MTS EMD phase will develop and procure MTDs; and will be supported with courseware, Training System Support Center, the technical data package, and support equipment to ensure system availability and concurrency with the aircraft.</p> <p>The KC-46A Program is responsible for the development, testing, and production of a drogue-equipped, wing-mounted refueling system to meet Capability Production Document (CPD) thresholds and objectives for simultaneous refueling of two probe-equipped receivers. The system can be installed or removed from the KC-46A as mission needs dictate.</p> <p>The long-term support concept for the KC-4A is organic two-level maintenance (2LM): organization level (O-level) and depot level (D-level). For the purposes of this program, all maintenance other than O-level shall be referred to as D-level. The product support strategy will initially employ Interim Contractor Support (ICS) before transitioning to a 100% organically-managed maintenance and supply support capability. Performance Based Logistics (PBL) solutions will be evaluated during EMD as viable approaches to facilitate the transition.</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Air Force **Date:** March 2024

Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0401221F / KC-46A Tanker Squadrons	Project (Number/Name) 655271 / KC-46 RDT&E
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Product Development (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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			
KC-46A aircraft non-recurring development, integration, and testing; 4 RDT&E tanker aircraft; and support	SS/FPIF	The Boeing Company : Seattle, WA	10.757	44.957	Mar 2023	33.487	Dec 2023	9.816	Oct 2024	-		9.816	17.064	116.081	-
KC-46A Take Off and Landing Data (TOLD) Development Capability	SS/TBD	The Boeing Company : Seattle, WA	0.000	0.000	Dec 2023	12.365	Jan 2024	2.984	Jan 2025	-		2.984	36.576	51.925	-
KC-46A Aircrew Training System	SS/FPIF	Flight Safety Services Co : Centennial, CO	0.000	2.979	Feb 2024	0.947	Dec 2024	7.785	Dec 2025	-		7.785	2.714	14.425	-
Subtotal			10.757	47.936		46.799		20.585		-		20.585	56.354	182.431	N/A

Remarks
 The KC-46A EMD contract was awarded 24 Feb 2011. The total cost represents the current Program Office Estimate (POE) which accounts for the ceiling price of the contract plus the financial and schedule risk of potential design changes for the KC-46A aircraft.

Target value is blank for the KC-46A aircraft category since the contract is fully funded. Target value is TBD for TOLD since it has not awarded yet. Target value is blank for the KC-46A Aircrew Training System category since the contract is fully funded.

FINANCIAL PERFORMANCE: The KC-46A is evaluated against traditional Research and Development (R&D) program expenditure benchmarks. Unlike many traditional R&D programs, the KC-46A EMD contract is a Fixed Price Incentive Fee (FPIF) contract with progress payments. Twenty percent (20%) of incurred costs are withheld until the end of the contract, when they are liquidated. Mandatory funding obligations and progress payment withholds will cause the program to lag traditional expenditure benchmarks, painting an inaccurate portrait of overall program health.

Support (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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			
KC-46A studies and analysis associated with the development, integration, and demonstration of KC-46 capability & future planning	C/CPAF	Various : Various	1.851	13.664	Jun 2023	1.404	Apr 2024	1.520	Apr 2025	-		1.520	0.000	18.439	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Air Force **Date:** March 2024

Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0401221F / KC-46A Tanker Squadrons	Project (Number/Name) 655271 / KC-46 RDT&E
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Support (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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			
Direct Cite Authority for Civilian Pay	RO	KC-46 Program Office : Dayton, W-PAFB	0.000	2.646	Oct 2022	0.000	Oct 2023	0.000	Oct 2024	-		0.000	0.000	2.646	-
Subtotal			1.851	16.310		1.404		1.520		-		1.520	0.000	21.085	N/A

Remarks
These contracts are on an as needed basis, with various contract types and performing activities. Target value is blank since there are various contracts.

Test and Evaluation (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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			
KC-46A testing and planning support of development & operational test, FAA & military certification, and aircraft qualification activities	MIPR	418th FLTS : Edwards AFB, CA	30.370	12.772	Dec 2022	8.933	Dec 2023	2.209	Dec 2024	-		2.209	8.327	62.611	-
KC-46A Long Term Test Aircraft Maintenance Support	SS/CPAF	The Boeing Company : Edwards AFB, CA	17.756	9.680	Sep 2023	12.666	Sep 2024	10.797	Sep 2025	-		10.797	0.000	50.899	46.636
Subtotal			48.126	22.452		21.599		13.006		-		13.006	8.327	113.510	N/A

Remarks
Integrated testing and planning activities are performed by government organizations, with some contractor technical subject matter experts and teaming with the prime contractor. Target value is blank for the KC-46A testing and planning support of development & operational test because this is funding provided to government agencies.

	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	60.734	86.698	69.802	35.111	-	35.111	64.681	317.026	N/A

Remarks

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Exhibit R-4A, RDT&E Schedule Details: PB 2025 Air Force **Date:** March 2024

Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0401221F / <i>KC-46A Tanker Squadrons</i>	Project (Number/Name) 655271 / <i>KC-46 RDT&E</i>
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
KC-46A				
Initial Operational Test & Evaluation (for WARPs)	1	2024	2	2024
Government Testing for Correction of Deficiencies	1	2023	1	2026
Boom Telescope Actuator Redesign ECP	4	2023	2	2025
Aircrew Training System Development & Updates	1	2023	4	2025
Take Off and Landing Data (TOLD)	3	2023	2	2027
Long Term Test Aircraft Maintenance Support (LTTAMS)	4	2023	4	2024