

UNCLASSIFIED

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

Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 4: Advanced Component Development & Prototypes (ACD&P)</i>	R-1 Program Element (Number/Name) PE 0605164F / <i>Air Refueling Capability Modernization</i>
--	---

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	-	0.000	11.281	19.400	0.000	19.400	93.999	193.925	107.417	111.304	0.000	537.326
645164: <i>Continued Tanker Recapitalization RDT&E</i>	-	0.000	11.281	19.400	0.000	19.400	93.999	193.925	107.417	111.304	0.000	537.326
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-	-	-

Note

In FY 2023, PE 0401221F, KC-46A Tanker Squadrons, Project 655KCY, KC-Y efforts were transferred to PE 0605164F, Air Refueling Capabilities Modernization, Project 645164, Continued Tanker Recapitalization RDT&E.

A. Mission Description and Budget Item Justification

In FY 2024, the Department of the Air Force will break from its previous recapitalization approaches (KC-X, KC-Y, KC-Z) in favor of more agile methods, prioritizing and accelerating the right capabilities to deliver fuel to the fight. This new approach replaces KC-Z with an accelerated Next Generation Air-refueling System (NGAS) (PE 0605057F) and continues Tanker Recapitalization (PE 0605164F) between KC-46A and NGAS. To do so, the DAF will procure a limited number of air refuelable, commercial derivative, limited development tankers, whose funding is covered in this Program Element. The number of air refuelable, commercial derivative tankers will be flexible and dependent on NGAS's first delivery, likely in the mid to late 2030s.

The Tanker Recapitalization effort will be a commercial derivative, limited development tanker that provides fuel to U.S. and coalition aircraft receivers via a boom or drogue system that can operate in day/night and adverse weather conditions to enable deployment, employment, sustainment, and redeployment of U.S. and coalition forces. The Tanker Recapitalization program will have communication, navigation, and surveillance equipment to support worldwide operations and refueling competences in chemical, biological and hostile threat environments through self-defense/protection (both active and passive) capabilities to include the necessary battlespace awareness to mitigate 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. Tanker Recapitalization will 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 to include but not limited to programmed Mobility Air Force (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.

Tanker Recapitalization will 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 may include but not 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.

UNCLASSIFIED

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

Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 4: Advanced Component Development & Prototypes (ACD&P)</i>	R-1 Program Element (Number/Name) PE 0605164F / <i>Air Refueling Capability Modernization</i>
--	---

Project 645164, Continued Tanker Recapitalization RDT&E will also support Program Support Costs (PSC) activities to include but not limited to market research, acquisition planning, pre-milestone activities, RFP development, test planning, mission planning capability development, future tanker development, and various studies and analyses.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver Tanker Recapitalization weapon system capability. The use of such program funds would be in addition to the civilian pay expenses budgeted in program element 0605827F, 0605828F, 0605829F, 0605831F, 0605832F, 0605833F, 0605898F, 0606398F. In FY 2022, \$0.000 million was expended for civilian pay expenses in this program element, and in FY 2023 \$4.000 million is forecast for civilian pay expenses in this program element.

This effort is in Budget Activity 4, Advanced Component Development and Prototypes (ACD&P), because efforts are necessary to evaluate integrated technologies, representative modes or prototype systems in a high fidelity and realistic operating environment.

B. Program Change Summary (\$ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget	0.000	0.000	0.000	0.000	0.000
Current President's Budget	0.000	11.281	19.400	0.000	19.400
Total Adjustments	0.000	11.281	19.400	0.000	19.400
• 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	11.281			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.000	0.000	19.400	0.000	19.400

Change Summary Explanation

FY 2023 funding increase of \$11.281 million due to Congressional Directed Transfer from PE 41221F, KC-46A Tanker Squadron to PE 65164F, Air Refueling Capabilities Modernization.

FY 2024 funding increase of \$19.400 million for Air Refueling Capability Modernization Program Office standup to support acquisition activities.

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2022	FY 2023	FY 2024
Title: Support	-	11.281	19.400

UNCLASSIFIED

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

Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 4: Advanced Component Development & Prototypes (ACD&P)</i>	R-1 Program Element (Number/Name) PE 0605164F / <i>Air Refueling Capability Modernization</i>
--	---

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2022	FY 2023	FY 2024
<p>Description: Studies and analyses to support Tanker Recapitalization planning activities for future initiatives, future tanker replacement planning, and other Program Office support to include but not limited to market research, acquisition planning, pre-milestone activities, Request for Proposal (RFP) development, test planning, and various studies and analyses.</p> <p>FY 2023 Plans: Market research, acquisition planning, pre-milestone activities, RFP development, test planning, and various studies and analyses for tanker recapitalization development and other future tanker development.</p> <p>FY 2024 Plans: Continued market research, acquisition planning, pre-milestone activities, RFP development and release, test planning, and various studies and analyses for tanker recapitalization and other future tanker development efforts.</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Funding increased due to ramp up of program office activities to include but not limited to test planning and studies and analyses.</p>			
Accomplishments/Planned Programs Subtotals	-	11.281	19.400

D. Other Program Funding Summary (\$ in Millions)

Line Item	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
• APAF 02 KC000Y: <i>Tanker Recapitalization</i>	-	-	-	-	-	-	-	1,341.077	2,966.731	Continuing	Continuing
• APAF 06 000999: <i>Initial Spares/Repair Parts</i>	-	-	-	-	-	-	-	-	136.207	Continuing	Continuing

Remarks

E. Acquisition Strategy
The program office estimates it will have final Joint Requirements Oversight Council (JROC) validated requirements in 3QFY23. The Air Force will determine the acquisition strategy based on final Business Case Analysis (BCA) results and JROC validated requirements.

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2024 Air Force		Date: March 2023
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0605164F / Air Refueling Capability Modernization	Project (Number/Name) 645164 / Continued Tanker Recapitalization RDT&E

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

Tanker Recap Development	
JROC Validated KC-135 Replacement Aircraft CDD Coordination and Approval	██████████
Develop/Present Pre-Acquisition Strategy Panel	██████████
Industry engagement	██████████
Acquisition Strategy Panel Coordination and Approval	████
RFP Development and Release	████████████████████
Contract Award	████
Milestone B	████████████████████
Pre-Contract Award Activities and Contract Award	██
EMD	██

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2024 Air Force		Date: March 2023
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0605164F / Air Refueling Capability Modernization	Project (Number/Name) 645164 / Continued Tanker Recapitalization RDT&E

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Tanker Recap Development</i>				
JROC Validated KC-135 Replacement Aircraft CDD Coordination and Approval	2	2023	3	2023
Develop/Present Pre-Acquisition Strategy Panel	2	2023	4	2023
Industry engagement	2	2023	4	2023
Acquisition Strategy Panel Coordination and Approval	1	2024	1	2024
RFP Development and Release	2	2023	3	2024
Contract Award	4	2025	4	2025
Milestone B	4	2025	1	2027
Pre-Contract Award Activities and Contract Award	3	2024	1	2027
EMD	4	2025	4	2028