

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Air Force **Date:** May 2021

| | |
|--|---|
| Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force</i> / BA 5: <i>System Development & Demonstration (SDD)</i> | R-1 Program Element (Number/Name) PE 0605221F / KC-46 |
|--|---|

| COST (\$ in Millions) | Prior Years | FY 2020 | FY 2021 | FY 2022 Base | FY 2022 OCO | FY 2022 Total | FY 2023 | FY 2024 | FY 2025 | FY 2026 | Cost To Complete | Total Cost |
|--------------------------------|-------------|---------|---------|--------------|-------------|---------------|---------|---------|---------|---------|------------------|------------|
| Total Program Element | 5,643.988 | 52.623 | 0.000 | 0.001 | 0.000 | 0.001 | - | - | - | - | - | - |
| 655271: <i>KC-46 RDT&E</i> | 5,643.988 | 52.623 | 0.000 | 0.001 | 0.000 | 0.001 | - | - | - | - | - | - |

Program MDAP/MAIS Code: 387

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-46s 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-46 program released a final Request for Proposal (RFP) on 24 Feb 2010, and entered source selection on 9 Jul 2010. The KC-46 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-46 EMD contract to Boeing on 24 Feb 2011 to develop and procure 179 KC-46 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-46 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. Awards for Lot 6 occurred on 12 Jan 2021 and Lot 7 awarded on 20 Jan 2021 totaling 94 aircraft to date. Lot 8 award is planned for Jan 2022. The Air Force delivered the first KC-46 to McConnell Air Force Base on 25 Jan 2019. As of 31 Mar 2021, 44 aircraft have been delivered to the Air Force. KC-46 funding also supports Training Systems, Direct Mission Support, Program Management Administration (PMA) activities, government developmental and operational test support, mission planning capability development, various studies and analyses, KC-46 requirements definition and demonstrations in support of Air Force Advanced Battle Management System (ABMS) initiative, engineering changes, and future tanker replacement planning activities.

The KC-46 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-46 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-46 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 Aircrew Training System (ATS) and the Maintenance Training System (MTS) are being developed and procured using KC-46 funding. The ATS contract was awarded on 1 May 2013 to FlightSafety Services Corporation. The ATS contract will provide Aircrew Training Devices (ATDs), to include but not limited to Weapon System Trainers (WSTs), Boom Operator Trainers (BOTs), Fuselage Trainers (FuTs), and Part-Task Trainers (PTTs) 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 concurrency with the aircraft.

UNCLASSIFIED

| | |
|--|-----------------------|
| Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Air Force | Date: May 2021 |
|--|-----------------------|

| | |
|---|---|
| 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 0605221F / KC-46 |
|---|---|

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-46 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), PTTs, Interactive Multimedia Instruction (IMI), and emerging technologies to meet validated Air Mobility Command (AMC) maintenance training requirements.

In FY2021, PE 0605221F, KC-46, Project 655271 KC-46 RDT&E, and Project 651120 Pegasus Capability Improvements efforts were transferred to PE 401221F, Project 655271 KC-46 RDT&E, and Project 651120 Pegasus Capability Improvements in order to consolidate all KC-46 activity under a single PE. PE 0401221F also has historical Tanker Replacement costs from FY 2005-2008.

This requirement supports performance of a full financial audit as required by title 10 U.S.C. Chapter 9A, Sec 240-D.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver KC-46 weapon system capability. The use of such programs funds would be in addition to the civilian pay expenses budgeted in program element 0605831F. In FY20 \$0.351M was expended for civilian pay expenses in this program element, and in FY21 \$0.000M is forecasted for civilian pay expenses in this program element.

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.

| B. Program Change Summary (\$ in Millions) | <u>FY 2020</u> | <u>FY 2021</u> | <u>FY 2022 Base</u> | <u>FY 2022 OCO</u> | <u>FY 2022 Total</u> |
|---|-----------------------|-----------------------|----------------------------|---------------------------|-----------------------------|
| Previous President's Budget | 59.561 | 0.000 | 0.000 | 0.000 | 0.000 |
| Current President's Budget | 52.623 | 0.000 | 0.001 | 0.000 | 0.001 |
| Total Adjustments | -6.938 | 0.000 | 0.001 | 0.000 | 0.001 |
| • 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 | -5.281 | 0.000 | | | |
| • SBIR/STTR Transfer | -1.657 | 0.000 | | | |
| • Other Adjustments | 0.000 | 0.000 | 0.001 | 0.000 | 0.001 |

Change Summary Explanation

FY 2020 funding reduced due to Below Threshold Reprogrammings of \$5.281 million and Small Business Innovation Research of \$1.657 million.
 FY 2022 funding increase of \$0.001 million due to an inadvertent system error. No funding requested in FY 2022.

UNCLASSIFIED

| | | | | | | | | | | | | |
|---|--------------------|----------------|----------------|---------------------|---|----------------------|----------------|----------------|--|-----------------------|-------------------------|-------------------|
| Exhibit R-2A, RDT&E Project Justification: PB 2022 Air Force | | | | | | | | | | Date: May 2021 | | |
| Appropriation/Budget Activity 3600 / 5 | | | | | R-1 Program Element (Number/Name) PE 0605221F / KC-46 | | | | Project (Number/Name) 655271 / KC-46 RDT&E | | | |
| COST (\$ in Millions) | Prior Years | FY 2020 | FY 2021 | FY 2022 Base | FY 2022 OCO | FY 2022 Total | FY 2023 | FY 2024 | FY 2025 | FY 2026 | Cost To Complete | Total Cost |
| 655271: KC-46 RDT&E | 5,643.988 | 52.623 | 0.000 | 0.001 | 0.000 | 0.001 | - | - | - | - | - | - |
| Quantity of RDT&E Articles | - | - | - | - | - | - | - | - | - | - | - | - |

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-46s 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-46 program released a final Request for Proposal (RFP) on 24 Feb 2010, and entered source selection on 9 Jul 2010. The KC-46 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-46 EMD contract to Boeing on 24 Feb 2011 to develop and procure 179 KC-46 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-46 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. Awards for Lot 6 occurred on 12 Jan 2021 and Lot 7 awarded on 20 Jan 2021 totaling 94 aircraft to date. Lot 8 award is planned for Jan 2022. The Air Force delivered the first KC-46 to McConnell Air Force Base on 25 Jan 2019. As of 31 Mar 2021, 44 aircraft have been delivered to the Air Force. KC-46 funding also supports Training Systems, Direct Mission Support, Program Management Administration (PMA) activities, government developmental and operational test support, mission planning capability development, various studies and analyses, engineering changes, and future tanker replacement planning activities.

The KC-46 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-46 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-46 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 Aircrew Training System (ATS) and the Maintenance Training System (MTS) are being developed and procured using KC-46 funding. The ATS contract was awarded on 1 May 2013 to FlightSafety Services Corporation. The ATS contract will provide Aircrew Training Devices (ATDs), to include Weapon System Trainers (WSTs), Boom Operator Trainers (BOTs), Fuselage Trainers (FuTs), and Part-Task Trainers (PTTs) 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 concurrency with the aircraft.

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-46 maintainers by integrating various forms of training media and Maintenance Training Devices (MTDs) into a "blended" solution. This

UNCLASSIFIED

| | |
|---|-----------------------|
| Exhibit R-2A, RDT&E Project Justification: PB 2022 Air Force | Date: May 2021 |
|---|-----------------------|

| | | |
|--|---|--|
| Appropriation/Budget Activity 3600 / 5 | R-1 Program Element (Number/Name) PE 0605221F / KC-46 | Project (Number/Name) 655271 / KC-46 RDT&E |
|--|---|--|

blended solution includes the appropriate mix of hardware and software, "high-fidelity" Augmented Hardware Training Devices (AHTDs), PTTs, Interactive Multimedia Instruction (IMI), and emerging technologies to meet validated Air Mobility Command (AMC) maintenance training requirements.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver KC-46 weapon system capability. The use of such programs funds would be in addition to the civilian pay expenses budgeted in program element 0605831F. In FY20 \$0.351M was expended for civilian pay expenses in this program element, and in FY21 \$0.000M is forecasted for civilian pay expenses in this program element.

| B. Accomplishments/Planned Programs (\$ in Millions) | FY 2020 | FY 2021 | FY 2022 |
|---|----------------|----------------|----------------|
| <p>Title: KC-46 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-46 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 2021 Plans: N/A</p> <p>FY 2022 Plans: N/A</p> <p>FY 2021 to FY 2022 Increase/Decrease Statement: N/A - This is an inadvertent system error. No funding requested in FY 2022.</p> | 23.698 | 0.000 | 0.001 |
| <p>Title: KC-46 Trainer Product Development - Maintenance Training System (MTS)</p> <p>Description: Trainer development activities will be conducted to include the following types of activities: development and procurement of MTDs, courseware, and associated support equipment.</p> <p>FY 2021 Plans: N/A</p> <p>FY 2022 Plans: N/A</p> <p>FY 2021 to FY 2022 Increase/Decrease Statement: N/A</p> | 0.059 | 0.000 | 0.000 |
| <p>Title: KC-46 Support</p> <p>Description: Development, integration, and demonstration of the KC-46 mission planning capability. In addition, studies and analysis to support planning activities for future efficiency initiatives, business case analyses, future tanker replacement planning,</p> | 5.331 | 0.000 | 0.000 |

UNCLASSIFIED

| | | |
|---|---|--|
| Exhibit R-2A, RDT&E Project Justification: PB 2022 Air Force | | Date: May 2021 |
| Appropriation/Budget Activity 3600 / 5 | R-1 Program Element (Number/Name) PE 0605221F / KC-46 | Project (Number/Name) 655271 / KC-46 RDT&E |

| B. Accomplishments/Planned Programs (\$ in Millions) | FY 2020 | FY 2021 | FY 2022 |
|---|----------------|----------------|----------------|
| and miscellaneous Program Office support and planning. Also includes requirements such as travel, office supplies, training courses, and service contracts. | | | |
| FY 2021 Plans: N/A | | | |
| FY 2022 Plans: N/A | | | |
| Title: KC-46 Test & Evaluation | 23.535 | 0.000 | 0.000 |
| 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. | | | |
| FY 2021 Plans: N/A | | | |
| FY 2022 Plans: N/A | | | |
| Accomplishments/Planned Programs Subtotals | 52.623 | 0.000 | 0.001 |

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

| <u>Line Item</u> | <u>FY 2020</u> | <u>FY 2021</u> | <u>FY 2022</u> <u>Base</u> | <u>FY 2022</u> <u>OCO</u> | <u>FY 2022</u> <u>Total</u> | <u>FY 2023</u> | <u>FY 2024</u> | <u>FY 2025</u> | <u>FY 2026</u> | <u>Cost To</u> <u>Complete</u> | <u>Total Cost</u> |
|---|----------------|----------------|-------------------------------|------------------------------|--------------------------------|----------------|----------------|----------------|----------------|-----------------------------------|-------------------|
| • APAF 02 Line Item KC046A: KC-46A Tanker | 1,930.117 | - | - | - | - | - | - | - | - | - | - |
| • APAF 06 Line Item 000999: Initial Spares | 0.000 | - | - | - | - | - | - | - | - | - | - |

Remarks

D. Acquisition Strategy

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

UNCLASSIFIED

| | | |
|---|---|--|
| Exhibit R-2A, RDT&E Project Justification: PB 2022 Air Force | | Date: May 2021 |
| Appropriation/Budget Activity 3600 / 5 | R-1 Program Element (Number/Name) PE 0605221F / KC-46 | Project (Number/Name) 655271 / KC-46 RDT&E |

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).

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, and LRIP-7 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 (Qty 12) is planned for award Jan 2022.

The ATS acquisition strategy is to provide ATDs, and associated support structure, to each MOB and the 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 six ATS production options were exercised on 19 Aug 2015, 31 May 2017, 30 Apr 2018, 31 Mar 2019, 2 Sep 2020, and 4 Mar 2021. Lot 7 of 10 total lots is planned to be awarded in Jan 2022.

The MTS acquisition strategy is to acquire 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.

The KC-46 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-46 as mission needs dictate.

The long-term support concept for the KC-46 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.

UNCLASSIFIED

| | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|
| Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Air Force | | | | | | | | | | | Date: May 2021 | | | | |
| Appropriation/Budget Activity 3600 / 5 | | | | | | R-1 Program Element (Number/Name) PE 0605221F / KC-46 | | | | | Project (Number/Name) 655271 / KC-46 RDT&E | | | | |

| Product Development (\$ in Millions) | | | | FY 2020 | | FY 2021 | | FY 2022 Base | | FY 2022 OCO | | FY 2022 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 | C/FPIF | The Boeing Company : Seattle, WA | 5,072.993 | 23.698 | Apr 2021 | - | | - | | - | | - | - | - | 5,087.168 |
| KC-46A Aircrew Training System | C/FPIF | FlightSafety Services Corp. : Centennial, CO | 86.863 | - | | - | | - | | - | | - | - | - | 86.863 |
| KC-46A Maintenance Training System | C/FFP | The Boeing Company : St. Louis, MO | 46.358 | 0.059 | Mar 2021 | - | | - | | - | | - | - | - | 46.417 |
| Subtotal | | | 5,206.214 | 23.757 | | - | | - | | - | | - | - | - | N/A |

Remarks

The KC-46 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-46 aircraft.

FINANCIAL PERFORMANCE: The KC-46 is evaluated against traditional Research and Development (R&D) program expenditure benchmarks. Unlike many traditional R&D programs, the KC-46 EMD contract is a FPIF contract with progress payments. Twenty percent 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 2020 | | FY 2021 | | FY 2022 Base | | FY 2022 OCO | | FY 2022 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 | 94.201 | 4.980 | Oct 2020 | - | | 0.001 | | - | | 0.001 | - | - | - |
| KC-46A Direct Cite Authority for Civilian Pay | Various | KC-46 Program Office : Dayton, W-P AFB, OH | 0.045 | 0.351 | Oct 2019 | - | | - | | - | | - | - | - | - |

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Air Force **Date:** May 2021

| | | |
|--|---|--|
| Appropriation/Budget Activity 3600 / 5 | R-1 Program Element (Number/Name) PE 0605221F / KC-46 | Project (Number/Name) 655271 / KC-46 RDT&E |
|--|---|--|

| Support (\$ in Millions) | | | | FY 2020 | | FY 2021 | | FY 2022 Base | | FY 2022 OCO | | FY 2022 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 | | | |
| Subtotal | | | 94.246 | 5.331 | - | - | 0.001 | - | - | 0.001 | - | - | - | - | N/A |

Remarks
These contracts are on an as needed basis, with various contract types and performing activities.

| Test and Evaluation (\$ in Millions) | | | | FY 2020 | | FY 2021 | | FY 2022 Base | | FY 2022 OCO | | FY 2022 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 | Various | Various : Various | 219.207 | 16.055 | Oct 2020 | - | - | - | - | - | - | - | - | - | - |
| KC-46A Long Term Test Aircraft Maintenance Support | SS/CPAF | The Boeing Company : Edwards AFB, CA | 0.000 | 7.480 | Sep 2020 | - | - | - | - | - | - | - | - | - | - |
| Subtotal | | | 219.207 | 23.535 | - | - | - | - | - | - | - | - | - | - | 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.

| Management Services (\$ in Millions) | | | | FY 2020 | | FY 2021 | | FY 2022 Base | | FY 2022 OCO | | FY 2022 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 Program Management Administration - Program A&AS Support | C/FFP | US Falcon : Dayton, OH | 65.378 | - | - | - | - | - | - | - | - | - | - | - | 65.378 |
| KC-46A Program Management | C/CPFF | HX5 : Fort Walton Beach, FL | 11.575 | - | - | - | - | - | - | - | - | - | - | - | 11.575 |

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Air Force **Date:** May 2021

| | | |
|--|---|--|
| Appropriation/Budget Activity 3600 / 5 | R-1 Program Element (Number/Name) PE 0605221F / KC-46 | Project (Number/Name) 655271 / KC-46 RDT&E |
|--|---|--|

| Management Services (\$ in Millions) | | | | FY 2020 | | FY 2021 | | FY 2022 Base | | FY 2022 OCO | | FY 2022 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 | | | |
| Administration - Trainer A&AS Support | | | | | | | | | | | | | | | |
| KC-46A Program Management Administration - Other | Various | KC-46 Program Office : Dayton, W-P AFB, OH | 47.368 | 0.000 | Oct 2020 | - | | - | | - | | - | - | - | - |
| Subtotal | | | 124.321 | 0.000 | | - | | - | | - | | - | - | - | N/A |

Remarks
Two Direct Mission Support contracts in FY20 over \$1M.

| | Prior Years | FY 2020 | FY 2021 | FY 2022 Base | FY 2022 OCO | FY 2022 Total | Cost To Complete | Total Cost | Target Value of Contract |
|----------------------------|-------------|---------|---------|--------------|-------------|---------------|------------------|------------|--------------------------|
| Project Cost Totals | 5,643.988 | 52.623 | 0.000 | 0.001 | - | 0.001 | - | - | N/A |

Remarks

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2022 Air Force **Date: May 2021**

| | | |
|--|---|--|
| Appropriation/Budget Activity 3600 / 5 | R-1 Program Element (Number/Name) PE 0605221F / KC-46 | Project (Number/Name) 655271 / KC-46 RDT&E |
|--|---|--|

| | FY 2020 | | | | FY 2021 | | | | FY 2022 | | | | FY 2023 | | | | FY 2024 | | | | FY 2025 | | | | FY 2026 | | | |
|--|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|
| | 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 |
| KC-46 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EMD: KC-46 Aircraft | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Developmental Test and Evaluation to support aircraft delivery | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Receiver Certification | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Initial Operational Test and Evaluation | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Government Testing for Correction of Deficiencies | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Boom Telescope Actuator Redesign ECP | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mission Planning Support | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aircrew Training System Development and Updates | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Maintenance Training System Development & Updates | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2022 Air Force **Date:** May 2021

| | | |
|--|---|--|
| Appropriation/Budget Activity 3600 / 5 | R-1 Program Element (Number/Name) PE 0605221F / KC-46 | Project (Number/Name) 655271 / KC-46 RDT&E |
|--|---|--|

Schedule Details

| Events by Sub Project | Start | | End | |
|--|---------|------|---------|------|
| | Quarter | Year | Quarter | Year |
| KC-46 | | | | |
| EMD: KC-46 Aircraft | 1 | 2020 | 4 | 2020 |
| Developmental Test and Evaluation to support aircraft delivery | 1 | 2020 | 4 | 2020 |
| Receiver Certification | 1 | 2020 | 4 | 2020 |
| Initial Operational Test and Evaluation | 1 | 2020 | 4 | 2020 |
| Government Testing for Correction of Deficiencies | 1 | 2020 | 4 | 2020 |
| Boom Telescope Actuator Redesign ECP | 1 | 2020 | 4 | 2020 |
| Mission Planning Support | 1 | 2020 | 4 | 2020 |
| Aircrew Training System Development and Updates | 1 | 2020 | 4 | 2020 |
| Maintenance Training System Development & Updates | 1 | 2020 | 4 | 2020 |

Note
Events after Q4 2020 are reflected in PE 0401221F. Funding moved to PE 0401221F in FY 2021.