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| Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Air Force | | | | | | | | | DATE: February 2010 | | |
| APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development | | | | R-1 ITEM NOMENCLATURE PE 0401218F: KC-135s | | | | | | | |
| COST (\$ in Millions) | FY 2009 Actual | FY 2010 Estimate | FY 2011 Base Estimate | FY 2011 OCO Estimate | FY 2011 Total Estimate | FY 2012 Estimate | FY 2013 Estimate | FY 2014 Estimate | FY 2015 Estimate | Cost To Complete | Total Cost |
| Total Program Element | 11.917 | 10.220 | 20.453 | 0.000 | 20.453 | 6.211 | 0.000 | 0.000 | 0.000 | Continuing | Continuing |
| 674494: KC-135 Aging Aircraft Program | 6.134 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 4.348 |
| 675261: KC-135 Upgrades | 5.783 | 10.220 | 20.453 | 0.000 | 20.453 | 6.211 | 0.000 | 0.000 | 0.000 | 0.000 | 47.682 |
| A. Mission Description and Budget Item Justification | | | | | | | | | | | |
| KC-135 Aging Aircraft Program (674494). This program supports projects that keep the KC-135 viable for the future. Projects include the analysis and testing efforts in the area of aging aircraft, to include structural, corrosion, fatigue, and stress corrosion cracking. Additionally, the Functional System Integrity Program (FSIP) proactively examines individual aircraft systems for potential impacts due to aging components. The USAF will utilize these activities to improve KC-135 Programmed Depot Maintenance efficiency and to provide direction for future aircraft efforts to sustain the KC-135 as a viable airframe until the planned fleet retirement completion date of 2040. | | | | | | | | | | | |
| In addition, Congress added funds in FY09 to procure equipment that will enable the Air Force to deploy advanced ultrasonic inspection techniques that may dramatically reduce the time required to inspect aircraft for defects. The deployment of the ultrasonic inspection technology will provide significantly improved identification and characterization of defects. This can be accomplished with little risk, as the technology is adapted from ultrasonic array technologies and medical grade imaging techniques that have been successfully implemented in the medical industry for many years. | | | | | | | | | | | |
| The original add was for \$1.25M. Approximately \$340K was executed as Operations and Maintenance (O&M) funding. The remaining \$900K was reprogrammed as RDT&E funding and will be used for development of the inspection technology. | | | | | | | | | | | |
| KC-135 Upgrades (675261). Block 45 program - Supports a modification program performing analysis, testing, software development, prototyping, documenting source data, and incorporating a new Digital Flight Director (DFD), Radio Altimeter (RA), Autopilot (AP) and Electronic Engine Instrument Displays (EEID). | | | | | | | | | | | |
| This program has associated APAF funding in Program Elements 041218F and 041897F. | | | | | | | | | | | |
| These efforts support a fielded weapons system and therefore are assigned to Budget Activity 7, Operational Systems Development. | | | | | | | | | | | |

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| Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Air Force | | | | DATE: February 2010 | |
| APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development | | R-1 ITEM NOMENCLATURE PE 0401218F: KC-135s | | | |
| B. Program Change Summary (\$ in Millions) | | | | | |
| | FY 2009 | FY 2010 | FY 2011 Base | FY 2011 OCO | FY 2011 Total |
| Previous President's Budget | 10.305 | 10.297 | 0.000 | 0.000 | 0.000 |
| Current President's Budget | 11.917 | 10.220 | 20.453 | 0.000 | 20.453 |
| Total Adjustments | 1.612 | -0.077 | 20.453 | 0.000 | 20.453 |
| • Congressional General Reductions | | 0.000 | | | |
| • Congressional Directed Reductions | | 0.000 | | | |
| • Congressional Rescissions | 0.000 | 0.000 | | | |
| • Congressional Adds | | 0.000 | | | |
| • Congressional Directed Transfers | | 0.000 | | | |
| • Reprogrammings | 0.000 | 0.000 | | | |
| • SBIR/STTR Transfer | 0.000 | 0.000 | | | |
| • Other Adjustments | 1.612 | -0.077 | 20.453 | 0.000 | 20.453 |
| Congressional Add Details (\$ in Millions, and Includes General Reductions) | | | | | |
| Project: 674494: KC-135 Aging Aircraft Program | | | | | |
| Congressional Add: Congressional EARMARK for KC-135R Blended Winglet Development | | | | | |
| Congressional Add: Congressional EARMARK supports the development of Ultrasonic Inspection Equipment Technology | | | | | |
| Congressional Add Subtotals for Project: 674494 | | | | | |
| Congressional Add Totals for all Projects | | | | | |
| Change Summary Explanation | | | | | |
| FY2009: Increase due to Congressional Add for Ultrasonic Inspection Technology development and activities associated with Congressionally-directed Blended Winglet Development project. | | | | | |
| FY2010: Funds support continuation of the Block 45 EMD activities, including finishing the overall system design, modifying the System Integration Laboratory (SIL), conducting initial system software testing, and beginning production of the prototype aircraft and operational flight trainer hardware and kits. | | | | | |

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| Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Air Force | | DATE: February 2010 |
| APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development | R-1 ITEM NOMENCLATURE PE 0401218F: KC-135s | |
| FY2011: Funds will support continuation of the Block 45 EMD activities including Formal Qualification testing of the system software, completion of the aircraft prototype kit development/installation of two kits on the aircraft and the initaition of formal ground tesing and flight testing at Edwards AFB, CA. | | |

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| Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force | | | | | | | | | DATE: February 2010 | | |
| APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development | | | | R-1 ITEM NOMENCLATURE PE 0401218F: KC-135s | | | | PROJECT 674494: KC-135 Aging Aircraft Program | | | |
| COST (\$ in Millions) | FY 2009 Actual | FY 2010 Estimate | FY 2011 Base Estimate | FY 2011 OCO Estimate | FY 2011 Total Estimate | FY 2012 Estimate | FY 2013 Estimate | FY 2014 Estimate | FY 2015 Estimate | Cost To Complete | Total Cost |
| 674494: KC-135 Aging Aircraft Program | 6.134 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 4.348 |
| Quantity of RDT&E Articles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| A. Mission Description and Budget Item Justification | | | | | | | | | | | |
| This program supports projects that keep the KC-135 viable into the future. Projects include the analysis and testing efforts in the area of aging aircraft, to include structural, corrosion, fatigue, and stress corrosion cracking. Additionally, the Functional System Integrity Program (FSIP) proactively examines individual aircraft systems for potential impacts due to aging components. The USAF will utilize these activities to improve KC-135 Programmed Depot Maintenance efficiency and to provide direction for future aircraft efforts to sustain the KC-135 as a viable airframe until the planned fleet retirement completion date of 2040. | | | | | | | | | | | |
| NOTE: The FY2009 budget contains a \$3.187M Congressional add for KC-135R blended winglet development and a \$900K Congressional add for Ultrasonic Inspection Test Equipment technology. | | | | | | | | | | | |
| B. Accomplishments/Planned Program (\$ in Millions) | | | | | | | | | | | |
| | | | | | | | FY 2009 | FY 2010 | FY 2011 Base | FY 2011 OCO | FY 2011 Total |
| MAJOR THRUST: Aging Aircraft efforts | | | | | | | 2.047 | 0.000 | 0.000 | 0.000 | 0.000 |
| FY 2009 Accomplishments: IN FY2009: Funds support the Corrosion & Fatigue testing, Functional System Integrity Program (FSIP), implementation of the Magnetoresistive Sensor Responses with Mobil Augmented Ultrasonic Scanner (MAUS) and the final support of Teardown Study planning effort for the KC-135. | | | | | | | | | | | |
| FY 2010 Plans: IN FY2010: N/A | | | | | | | | | | | |

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| Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force | | | | DATE: February 2010 | |
| APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i> | | R-1 ITEM NOMENCLATURE PE 0401218F: <i>KC-135s</i> | | PROJECT 674494: <i>KC-135 Aging Aircraft Program</i> | |
| B. Accomplishments/Planned Program (\$ in Millions) | | | | | |
| | FY 2009 | FY 2010 | FY 2011 Base | FY 2011 OCO | FY 2011 Total |
| <i>FY 2011 Base Plans:</i> IN FY2011: N/A <i>FY 2011 OCO Plans:</i> IN FY2011 OCO: N/A | | | | | |
| Accomplishments/Planned Programs Subtotals | 2.047 | 0.000 | 0.000 | 0.000 | 0.000 |
| | FY 2009 | FY 2010 | | | |
| Congressional Add: Congressional EARMARK for KC-135R Blended Winglet Development <i>FY 2009 Accomplishments:</i> IN FY2009: Congressional EARMARK for KC-135R Blended Winglet Development <i>FY 2010 Plans:</i> IN FY2010: N/A | 3.187 | 0.000 | | | |
| Congressional Add: Congressional EARMARK supports the development of Ultrasonic Inspection Equipment Technology <i>FY 2009 Accomplishments:</i> IN FY2009: Funds support Ultrasonic Inspection Equipment Technology for which funds execute through FY10 <i>FY 2010 Plans:</i> IN FY2010: N/A | 0.900 | 0.000 | | | |

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| Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force | | | | | | | DATE: February 2010 | | | | |
| APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i> | | | | R-1 ITEM NOMENCLATURE PE 0401218F: <i>KC-135s</i> | | | PROJECT 674494: <i>KC-135 Aging Aircraft Program</i> | | | | |
| B. Accomplishments/Planned Program (\$ in Millions) | | | | | | | | | | | |
| | | | | | | | FY 2009 | FY 2010 | | | |
| Congressional Adds Subtotals | | | | | | | 4.087 | 0.000 | | | |
| C. Other Program Funding Summary (\$ in Millions) | | | | | | | | | | | |
| Line Item | FY 2009 | FY 2010 | FY 2011 Base | FY 2011 OCO | FY 2011 Total | FY 2012 | FY 2013 | FY 2014 | FY 2015 | Cost To Complete | Total Cost |
| • PE Not Provided (3556): <i>None</i> | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| D. Acquisition Strategy | | | | | | | | | | | |
| The acquisition strategy consists primarily of separate task orders (with separate statements of work) ranging from fixed price to cost plus contracts. These task orders address a myriad of aging aircraft activities against existing contract vehicles, such as the SPO-managed KC-135 Fleet Support Contract and Design Engineering Program contracts managed through the Air Logistics Centers. | | | | | | | | | | | |
| E. Performance Metrics | | | | | | | | | | | |
| Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission. | | | | | | | | | | | |

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| Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force | | | | | | | | | | | DATE: February 2010 | | |
| APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i> | | | | R-1 ITEM NOMENCLATURE PE 0401218F: <i>KC-135s</i> | | | | PROJECT 674494: <i>KC-135 Aging Aircraft Program</i> | | | | | |
| Support (\$ in Millions) | | | | | | | | | | | | | |
| | | | | FY 2010 | | FY 2011 Base | | FY 2011 OCO | | FY 2011 Total | | | |
| Cost Category Item | Contract Method & Type | Performing Activity & Location | Total Prior Years Cost | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Cost To Complete | Total Cost | Target Value of Contract |
| Aging Aircraft Studies | Various | Air Force Academy Colorado Springs, CO | 1.212 | 0.000 | | 0.000 | | 0.000 | | 0.000 | 0.000 | 1.212 | 0.000 |
| Subtotal | | | 1.212 | 0.000 | | 0.000 | | 0.000 | | 0.000 | 0.000 | 1.212 | 0.000 |
| Remarks | | | | | | | | | | | | | |
| Test and Evaluation (\$ in Millions) | | | | | | | | | | | | | |
| | | | | FY 2010 | | FY 2011 Base | | FY 2011 OCO | | FY 2011 Total | | | |
| Cost Category Item | Contract Method & Type | Performing Activity & Location | Total Prior Years Cost | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Cost To Complete | Total Cost | Target Value of Contract |
| Corrosion & Fatigue Testing/Functional Systems Integrity Program | Various | Boeing Wichita KS | 2.881 | 0.000 | | 0.000 | | 0.000 | | 0.000 | 0.000 | 2.881 | 0.000 |
| Subtotal | | | 2.881 | 0.000 | | 0.000 | | 0.000 | | 0.000 | 0.000 | 2.881 | 0.000 |
| Remarks | | | | | | | | | | | | | |

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| Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force | | | | | | | | | | | DATE: February 2010 | | |
| APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i> | | | | R-1 ITEM NOMENCLATURE PE 0401218F: <i>KC-135s</i> | | | | PROJECT 674494: <i>KC-135 Aging Aircraft Program</i> | | | | | |
| Management Services (\$ in Millions) | | | | | | | | | | | | | |
| | | | | FY 2010 | | FY 2011 Base | | FY 2011 OCO | | FY 2011 Total | | | |
| Cost Category Item | Contract Method & Type | Performing Activity & Location | Total Prior Years Cost | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Cost To Complete | Total Cost | Target Value of Contract |
| (includes the FY09 congressional add for winglets) | TBD/TBD | TBD TBD | 5.847 | 0.000 | | 0.000 | | 0.000 | | 0.000 | 0.000 | 5.847 | 0.000 |
| Subtotal | | | 5.847 | 0.000 | | 0.000 | | 0.000 | | 0.000 | 0.000 | 5.847 | 0.000 |
| Remarks (includes the FY09 congressional add for winglets) | | | | | | | | | | | | | |
| | | | Total Prior Years Cost | FY 2010 | | FY 2011 Base | | FY 2011 OCO | | FY 2011 Total | Cost To Complete | Total Cost | Target Value of Contract |
| Project Cost Totals | | | 9.940 | 0.000 | | 0.000 | | 0.000 | | 0.000 | 0.000 | 9.940 | 0.000 |
| Remarks Total Prior Years Cost may include only FY 2009 data. | | | | | | | | | | | | | |

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| Exhibit R-4, RDT&E Schedule Profile: PB 2011 Air Force | | DATE: February 2010 |
| APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i> | R-1 ITEM NOMENCLATURE PE 0401218F: <i>KC-135s</i> | PROJECT 674494: <i>KC-135 Aging Aircraft Program</i> |

| Fiscal Year | FY09 | | | | FY10 | | | | FY11 | | | | FY12 | | | | FY13 | | | | FY14 | | | | FY15 | | | | | | | | | |
|---|------|---|---|---|------|---|---|---|------|---|---|---|------|---|---|---|------|---|---|---|------|---|---|---|------|---|---|---|--|--|--|--|--|--|
| | 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 | | | | | | |
| Corrosion & Fatigue Testing | | | | | | | | | △ | | | | | | | | | | | | | | | | | | | | | | | | | |
| FSIP | | | | | ▲ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ultrasonic Inspection Technique Development | | | | | ★ | | | | △ | | | | | | | | | | | | | | | | | | | | | | | | | |
| Contractor/Management Support | | | | | ▲ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ★ Contract Award | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▲ Completion of Program | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| △ Ongoing event | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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| Exhibit R-4A, RDT&E Schedule Details: PB 2011 Air Force | | | DATE: February 2010 |
| APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i> | R-1 ITEM NOMENCLATURE PE 0401218F: <i>KC-135s</i> | PROJECT 674494: <i>KC-135 Aging Aircraft Program</i> | |

Schedule Details

| Event | Start | | End | |
|--|---------|------|---------|------|
| | Quarter | Year | Quarter | Year |
| Corrosion & Fatigue Testing Part 1 | 1 | 2009 | 4 | 2009 |
| Corrosion & Fatigue Testing Part 2 | 1 | 2010 | 4 | 2010 |
| FSIP | 1 | 2009 | 4 | 2009 |
| Ultrasonic Inspection Technique Development Part 1 | 3 | 2010 | 4 | 2010 |
| Ultrasonic Inspection Technique Development Part 2 | 1 | 2011 | 2 | 2011 |
| Contractor/Management Support | 1 | 2009 | 4 | 2009 |

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| APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i> | | | | R-1 ITEM NOMENCLATURE PE 0401218F: KC-135s | | | | PROJECT 675261: KC-135 Upgrades | | | |
| COST (\$ in Millions) | FY 2009 Actual | FY 2010 Estimate | FY 2011 Base Estimate | FY 2011 OCO Estimate | FY 2011 Total Estimate | FY 2012 Estimate | FY 2013 Estimate | FY 2014 Estimate | FY 2015 Estimate | Cost To Complete | Total Cost |
| 675261: KC-135 Upgrades | 5.783 | 10.220 | 20.453 | 0.000 | 20.453 | 6.211 | 0.000 | 0.000 | 0.000 | 0.000 | 47.682 |
| Quantity of RDT&E Articles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| A. Mission Description and Budget Item Justification <p>The C/KC-135 CNS/ATM (Block 45) modification upgrades the Digital Flight Director (DFD), Radar Altimeter (RA), Autopilot (AP) and the Electronic Engine Instrument Display (EEID) and is needed to extend the KC-135 as a viable weapon system through Fiscal Year (FY) 2040. The Block 45 systems mitigates capability gaps identified in the Initial Capabilities Document (ICD) for Aerial Refueling (AR) and the Air Force (AF) Integrated Capability Review and Risk Assessment (I-CRRA), address anticipated airspace restrictions within the global CNS/ATM system and improves overall KC-135 shortcomings in reliability, maintainability and supportability. C/KC-135 CNS/ATM (Block 45) will upgrade 417 KC-135 R/T aircraft.</p> <p>These efforts support a fielded weapons system and therefore are assigned to Budget Activity 7, Operational Systems Development.</p> | | | | | | | | | | | |
| B. Accomplishments/Planned Program (\$ in Millions) | | | | | | | | | | | |
| | | | | | | | FY 2009 | FY 2010 | FY 2011 Base | FY 2011 OCO | FY 2011 Total |
| MAJOR THRUST: Non-Recurring Engineering and test efforts/tasks for all Block 45 sub programs FY 2009 Accomplishments: In FY2009: Initiate engineering development of system requirements for hardware, software, maintainability, reliability, testing, safety and training to include System Functional Review (SFR) and Preliminary Design Review (PDR). Tailor Communication Navigation Surveillance/ Air Traffic Management (CNS/ATM) generic matrices to support operational certification. Develop requirements verification matrix, program execution plans, integrated logistics support approach, and subsystems design requirements traceability. | | | | | | | 5.783 | 10.220 | 20.453 | 0.000 | 20.453 |

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| APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development | | R-1 ITEM NOMENCLATURE PE 0401218F: KC-135s | | PROJECT 675261: KC-135 Upgrades | | |
| B. Accomplishments/Planned Program (\$ in Millions) | | | | | | |
| | | FY 2009 | FY 2010 | FY 2011 Base | FY 2011 OCO | FY 2011 Total |
| FY 2010 Plans: In FY2010: Finish system design to include draft engineering technical data, verify technical problems and design anomalies that have been resolved without comprising system performance, reliability and safety to be verified during Critical Design Review (CDR). Modify the System Integration Laboratory (SIL) and conduct initial system software dry-run testing. Begin production of prototype aircraft and operational flight trainer (OFT) hardware and kits. Start developing the Modification Airworthiness Certification Criteria (MACC), Technical Orders (TO) and training materials for both maintenance and aircrew training. Continue integration and verification of software requirements and processes to achieve desired design. | | | | | | |
| FY 2011 Base Plans: In FY2011: Complete Formal Qualification Test of system software on SIL producing red label software to support Developmental Testing followed by Black Label software to support Low Rate Initial Production and Operational Testing. Finish aircraft prototype kit development and install kits on two test aircraft. Initiate formal ground testing at contractors facilities followed by flight testing at Edwards AFB. Complete prototype development of operational flight trainer (OFT). Finalize TOs, engineering technical data, and training development. Conduct aircrew and maintenance type 1 training for both developmental and operational test crews. Complete the MACC, CNS/ATM compliance report and all reports and data required to support operational and airworthiness certification. | | | | | | |
| FY 2011 OCO Plans: In FY2011 OCO: N/A | | | | | | |
| Accomplishments/Planned Programs Subtotals | | 5.783 | 10.220 | 20.453 | 0.000 | 20.453 |

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| Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force | | | | | | | | | DATE: February 2010 | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|----------------|----------------|-------------------------------|---|--------------------------------|----------------|----------------|--|----------------------------|-----------------------------------|-------------------|------------------|----------------|----------------|-------------------------------|------------------------------|--------------------------------|----------------|----------------|----------------|----------------|-----------------------------------|-------------------|--------------------------------|-------|-------|-------|-------|-------|--------|--------|--------|--------|---------|-------|
| APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i> | | | | R-1 ITEM NOMENCLATURE PE 0401218F: <i>KC-135s</i> | | | | PROJECT 675261: <i>KC-135 Upgrades</i> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>C. Other Program Funding Summary (\$ in Millions)</p> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Line Item</u></th> <th style="text-align: right;"><u>FY 2009</u></th> <th style="text-align: right;"><u>FY 2010</u></th> <th style="text-align: right;"><u>FY 2011</u> <u>Base</u></th> <th style="text-align: right;"><u>FY 2011</u> <u>OCO</u></th> <th style="text-align: right;"><u>FY 2011</u> <u>Total</u></th> <th style="text-align: right;"><u>FY 2012</u></th> <th style="text-align: right;"><u>FY 2013</u></th> <th style="text-align: right;"><u>FY 2014</u></th> <th style="text-align: right;"><u>FY 2015</u></th> <th style="text-align: right;"><u>Cost To</u> <u>Complete</u></th> <th style="text-align: right;"><u>Total Cost</u></th> </tr> </thead> <tbody> <tr> <td>• PE 0401218F: <i>C/KC-135</i></td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">8.394</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">8.394</td> <td style="text-align: right;">31.118</td> <td style="text-align: right;">42.701</td> <td style="text-align: right;">48.568</td> <td style="text-align: right;">52.097</td> <td style="text-align: right;">322.147</td> <td style="text-align: right;">0.000</td> </tr> </tbody> </table> <p>D. Acquisition Strategy Block 45 - The strategy is to have a contracted integrator accomplish the task of performing analysis, testing, software development, prototypes, documentation of source data, and integrating a new Digital Flight Director (DFD), digital Autopilot (AP), digital Radar Altimeter (RA), and Electronic Engine Instrument Display (EEID). The contractor will be responsible for acquiring the necessary information and personnel to integrate each item stated above into the KC-135 legacy systems. The contractor will be responsible for developing and subcontracting the components.</p> <p>E. Performance Metrics Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.</p> | | | | | | | | | | | | <u>Line Item</u> | <u>FY 2009</u> | <u>FY 2010</u> | <u>FY 2011</u> <u>Base</u> | <u>FY 2011</u> <u>OCO</u> | <u>FY 2011</u> <u>Total</u> | <u>FY 2012</u> | <u>FY 2013</u> | <u>FY 2014</u> | <u>FY 2015</u> | <u>Cost To</u> <u>Complete</u> | <u>Total Cost</u> | • PE 0401218F: <i>C/KC-135</i> | 0.000 | 0.000 | 8.394 | 0.000 | 8.394 | 31.118 | 42.701 | 48.568 | 52.097 | 322.147 | 0.000 |
| <u>Line Item</u> | <u>FY 2009</u> | <u>FY 2010</u> | <u>FY 2011</u> <u>Base</u> | <u>FY 2011</u> <u>OCO</u> | <u>FY 2011</u> <u>Total</u> | <u>FY 2012</u> | <u>FY 2013</u> | <u>FY 2014</u> | <u>FY 2015</u> | <u>Cost To</u> <u>Complete</u> | <u>Total Cost</u> | | | | | | | | | | | | | | | | | | | | | | | | |
| • PE 0401218F: <i>C/KC-135</i> | 0.000 | 0.000 | 8.394 | 0.000 | 8.394 | 31.118 | 42.701 | 48.568 | 52.097 | 322.147 | 0.000 | | | | | | | | | | | | | | | | | | | | | | | | |

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| Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force | | | | | | | | | | | DATE: February 2010 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|------------------------|-----------------------------------|------------------------|---|------------|--------------|------------|--|------------|---------------|----------------------------|------------|--------------------------|--|--|--|--|---------|--|--------------|--|-------------|--|---------------|--|--|--|--------------------|------------------------|--------------------------------|------------------------|------|------------|------|------------|------|------------|------|------------------|------------|--------------------------|---|------------------|-----------------------------------|-------|-------|--|--------|--|-------|--|--------|-------|--------|------------|-----------------|--|--|-------|-------|--|--------|--|-------|--|--------|-------|--------|-------|
| APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i> | | | | R-1 ITEM NOMENCLATURE PE 0401218F: <i>KC-135s</i> | | | | PROJECT 675261: <i>KC-135 Upgrades</i> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Product Development (\$ in Millions) <table border="1" style="width:100%; border-collapse: collapse; margin-top: 10px;"> <tr> <th colspan="4"></th> <th colspan="2">FY 2010</th> <th colspan="2">FY 2011 Base</th> <th colspan="2">FY 2011 OCO</th> <th>FY 2011 Total</th> <th colspan="3"></th> </tr> <tr> <th>Cost Category Item</th> <th>Contract Method & Type</th> <th>Performing Activity & Location</th> <th>Total Prior Years Cost</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Cost To Complete</th> <th>Total Cost</th> <th>Target Value of Contract</th> </tr> <tr> <td>Block 45 - NRE, engineering, development, and prototype</td> <td>SS/FP</td> <td>Rockwell Collins Cedar Rapids, IA</td> <td align="right">7.898</td> <td align="right">8.488</td> <td></td> <td align="right">16.000</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">16.000</td> <td align="right">4.600</td> <td align="right">36.986</td> <td>Continuing</td> </tr> <tr> <td align="right" colspan="3">Subtotal</td> <td align="right">7.898</td> <td align="right">8.488</td> <td></td> <td align="right">16.000</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">16.000</td> <td align="right">4.600</td> <td align="right">36.986</td> <td></td> </tr> </table> | | | | | | | | | | | | | | | | | | FY 2010 | | FY 2011 Base | | FY 2011 OCO | | FY 2011 Total | | | | Cost Category Item | Contract Method & Type | Performing Activity & Location | Total Prior Years Cost | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Cost To Complete | Total Cost | Target Value of Contract | Block 45 - NRE, engineering, development, and prototype | SS/FP | Rockwell Collins Cedar Rapids, IA | 7.898 | 8.488 | | 16.000 | | 0.000 | | 16.000 | 4.600 | 36.986 | Continuing | Subtotal | | | 7.898 | 8.488 | | 16.000 | | 0.000 | | 16.000 | 4.600 | 36.986 | |
| | | | | FY 2010 | | FY 2011 Base | | FY 2011 OCO | | FY 2011 Total | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cost Category Item | Contract Method & Type | Performing Activity & Location | Total Prior Years Cost | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Cost To Complete | Total Cost | Target Value of Contract | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Block 45 - NRE, engineering, development, and prototype | SS/FP | Rockwell Collins Cedar Rapids, IA | 7.898 | 8.488 | | 16.000 | | 0.000 | | 16.000 | 4.600 | 36.986 | Continuing | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Subtotal | | | 7.898 | 8.488 | | 16.000 | | 0.000 | | 16.000 | 4.600 | 36.986 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Remarks | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Support (\$ in Millions) <table border="1" style="width:100%; border-collapse: collapse; margin-top: 10px;"> <tr> <th colspan="4"></th> <th colspan="2">FY 2010</th> <th colspan="2">FY 2011 Base</th> <th colspan="2">FY 2011 OCO</th> <th>FY 2011 Total</th> <th colspan="3"></th> </tr> <tr> <th>Cost Category Item</th> <th>Contract Method & Type</th> <th>Performing Activity & Location</th> <th>Total Prior Years Cost</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Cost To Complete</th> <th>Total Cost</th> <th>Target Value of Contract</th> </tr> <tr> <td>Program Office Support</td> <td>Various/ Various</td> <td>Various Various</td> <td align="right">2.736</td> <td align="right">0.431</td> <td></td> <td align="right">0.450</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.450</td> <td align="right">0.000</td> <td align="right">3.617</td> <td align="right">0.000</td> </tr> <tr> <td align="right" colspan="3">Subtotal</td> <td align="right">2.736</td> <td align="right">0.431</td> <td></td> <td align="right">0.450</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.450</td> <td align="right">0.000</td> <td align="right">3.617</td> <td align="right">0.000</td> </tr> </table> | | | | | | | | | | | | | | | | | | FY 2010 | | FY 2011 Base | | FY 2011 OCO | | FY 2011 Total | | | | Cost Category Item | Contract Method & Type | Performing Activity & Location | Total Prior Years Cost | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Cost To Complete | Total Cost | Target Value of Contract | Program Office Support | Various/ Various | Various Various | 2.736 | 0.431 | | 0.450 | | 0.000 | | 0.450 | 0.000 | 3.617 | 0.000 | Subtotal | | | 2.736 | 0.431 | | 0.450 | | 0.000 | | 0.450 | 0.000 | 3.617 | 0.000 |
| | | | | FY 2010 | | FY 2011 Base | | FY 2011 OCO | | FY 2011 Total | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cost Category Item | Contract Method & Type | Performing Activity & Location | Total Prior Years Cost | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Cost To Complete | Total Cost | Target Value of Contract | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Program Office Support | Various/ Various | Various Various | 2.736 | 0.431 | | 0.450 | | 0.000 | | 0.450 | 0.000 | 3.617 | 0.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Subtotal | | | 2.736 | 0.431 | | 0.450 | | 0.000 | | 0.450 | 0.000 | 3.617 | 0.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Remarks | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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|--|-----------------------------------|---|-------------------------------|---|-------------------|---------------------|-------------------|--|-------------------|----------------------|----------------------------|-------------------|---------------------------------|
| Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force | | | | | | | | | | | DATE: February 2010 | | |
| APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i> | | | | R-1 ITEM NOMENCLATURE PE 0401218F: <i>KC-135s</i> | | | | PROJECT 675261: <i>KC-135 Upgrades</i> | | | | | |
| | | | | | | | | | | | | | |
| Test and Evaluation (\$ in Millions) | | | | | | | | | | | | | |
| | | | | FY 2010 | | FY 2011 Base | | FY 2011 OCO | | FY 2011 Total | | | |
| Cost Category Item | Contract Method & Type | Performing Activity & Location | Total Prior Years Cost | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Cost To Complete | Total Cost | Target Value of Contract |
| Block 45 developmental ground and flight test | PO | 418 FTS Edwards AFB, CA | 0.356 | 0.660 | | 3.100 | | 0.000 | | 3.100 | 0.703 | 4.819 | 0.000 |
| Subtotal | | | 0.356 | 0.660 | | 3.100 | | 0.000 | | 3.100 | 0.703 | 4.819 | 0.000 |
| Remarks | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| Management Services (\$ in Millions) | | | | | | | | | | | | | |
| | | | | FY 2010 | | FY 2011 Base | | FY 2011 OCO | | FY 2011 Total | | | |
| Cost Category Item | Contract Method & Type | Performing Activity & Location | Total Prior Years Cost | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Cost To Complete | Total Cost | Target Value of Contract |
| TBD:TBD | TBD/TBD | TBD TBD | 0.175 | 0.641 | | 0.903 | | 0.000 | | 0.903 | 0.908 | 2.627 | 0.000 |
| Subtotal | | | 0.175 | 0.641 | | 0.903 | | 0.000 | | 0.903 | 0.908 | 2.627 | 0.000 |
| Remarks | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | Total Prior Years Cost | FY 2010 | | FY 2011 Base | | FY 2011 OCO | | FY 2011 Total | Cost To Complete | Total Cost | Target Value of Contract |
| Project Cost Totals | | | 11.165 | 10.220 | | 20.453 | | 0.000 | | 20.453 | 6.211 | 48.049 | |
| Remarks | | | | | | | | | | | | | |
| Total Prior Years Cost may include only FY 2009 data. | | | | | | | | | | | | | |

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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Air Force

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force
BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0401218F: KC-135s

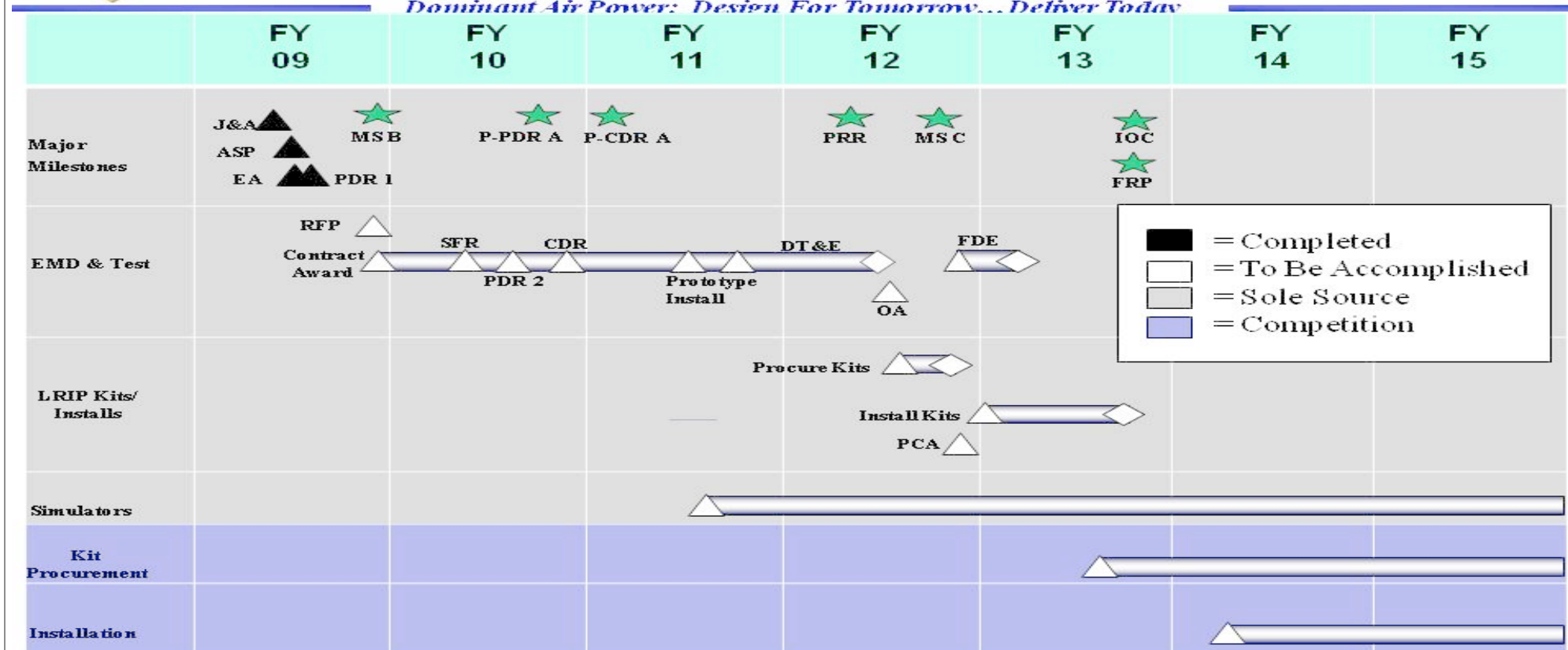
PROJECT

675261: KC-135 Upgrades

FOUO

Program Schedule

Dominant Air Power: Design For Tomorrow... Deliver Today



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| | | | |
|---|---|------------------------------------|---------------------|
| Exhibit R-4A, RDT&E Schedule Details: PB 2011 Air Force | | | DATE: February 2010 |
| APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i> | R-1 ITEM NOMENCLATURE PE 0401218F: KC-135s | PROJECT 675261: KC-135 Upgrades | |

Schedule Details

| Event | Start | | End | |
|---|---------|------|---------|------|
| | Quarter | Year | Quarter | Year |
| Acquisition Strategy Panel (ASP) | 2 | 2009 | 2 | 2009 |
| Engineering Manufacturing Development (EMD) RFP Release | 4 | 2009 | 4 | 2009 |
| Milestone B (MS B) | 4 | 2009 | 4 | 2009 |
| EMD Contract Award | 4 | 2009 | 4 | 2009 |
| EMD Phase I | 4 | 2009 | 4 | 2009 |
| EMD Phase II | 1 | 2010 | 4 | 2010 |
| EMD Phase III | 1 | 2011 | 4 | 2011 |

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