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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 0207445F: FIGHTER TACTICAL DATA LINK | | | | | | | |
| 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 | 55.069 | 66.872 | 85.492 | 0.000 | 85.492 | 169.748 | 118.655 | 0.000 | 0.000 | Continuing | Continuing |
| 675043: Fighter Tactical Data Link | 55.069 | 66.872 | 85.492 | 0.000 | 85.492 | 169.748 | 118.655 | 0.000 | 0.000 | 0.000 | 607.872 |

A. Mission Description and Budget Item Justification

Tactical Data Links (TDL) as a subset of the broader Airborne Network are used in a combat environment to exchange information such as messages, data, radar tracks, target information, platform status, imagery, and command assignments. TDLs provide interoperability, local and global connectivity, and situational awareness to the user when operating under rapidly changing operational conditions. TDLs provide a jam-resistant; secure digital data transfer network capability with a new and standardized waveforms and data formats allowing Line of Sight (LOS) and Beyond Line of Sight (BLOS) intra- and inter-flight communications. TDLs are used by all Service theater Command and Control (C2) elements, weapons platforms, and sensors. TDLs include, but are not limited to: Link 16, Link 11, Situational Awareness Data Link (SADL), Variable Message Format (VMF), Integrated Broadcast Service (IBS), Intra-Flight Data Link (IFDL), Tactical Targeting Network Technology (TTNT), and Multifunction Advanced Data Link (MADL). The Joint Requirements Oversight Council (JROC) recently approved the MADL waveform for all low observable platforms, to include the F-22, B-2, and F-35 and the MADL Overarching Integrated Product Team (OIPT) approved enterprise level management and support for MADL Development.

This effort provides critical capability and enhancements to the Airborne Network by creating common development, integration and interoperability among all Air Force fighter platforms to include but not limited to A-10, F-15A-E, F-16 Blocks 30/40/50, F-22A, and F-35 aircraft. Keeps all fighter platforms and datalinked weapons current, interoperable in the network, and enables Global Strike (GS), Global Persistent Attack (GPA), Offensive and Defensive Counterair (OCA and DCA) and Suppression of Enemy Air Defenses (SEAD) missions. Also expands LOS and BLOS data link capabilities. TDLs increase mission effectiveness, provide situational awareness, and provide positive identification of aircraft in the network, correlate on- and off-board sensor data sharing, target, and threat information, and provide the datalink to accomplish time critical targeting and other mission update functions. TDL efforts include incorporating changes and additions to TDL message standards (e.g. MIL-STD-6016D) and applicable Interface Change Proposals (ICPs); future development of MADL waveform specification, message standards (MIL-STD-6019) and modeling and simulation; MADL enterprise level planning and testing; assisting with AF and Joint interoperability certification testing; future development, integration, and verification of Operational Flight Program (OFP) upgrades due to TDL integration; support of data gathering processes; studying and incorporating data link technologies to ensure effectiveness and efficiency of the Global Strike and Global Persistent Attack CONOPS; and incorporating Interoperable Systems Management and Requirements Transformation (iSMART), a process which enables network centric interoperability assessments to be made more quickly and effectively.

Activities also include studies and analysis to support both current program planning and execution and future program planning.

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| Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Air Force | | | | DATE: February 2010 | |
| APPROPRIATION/BUDGET ACTIVITY | | R-1 ITEM NOMENCLATURE | | | |
| 3600: Research, Development, Test & Evaluation, Air Force | | PE 0207445F: FIGHTER TACTICAL DATA LINK | | | |
| BA 7: Operational Systems Development | | | | | |
| Fighter Tactical Data Link program is in Budget Activity 7, Operational System Development, since it supports integration of tactical data links into operational systems. | | | | | |
| B. Program Change Summary (\$ in Millions) | | | | | |
| | FY 2009 | FY 2010 | FY 2011 Base | FY 2011 OCO | FY 2011 Total |
| Previous President's Budget | 57.264 | 72.106 | 0.000 | 0.000 | 0.000 |
| Current President's Budget | 55.069 | 66.872 | 85.492 | 0.000 | 85.492 |
| Total Adjustments | -2.195 | -5.234 | 85.492 | 0.000 | 85.492 |
| • Congressional General Reductions | | -5.000 | | | |
| • 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 | -2.195 | -0.234 | 85.492 | 0.000 | 85.492 |
| Change Summary Explanation | | | | | |
| The FY 2010 President's Budget submittal did not reflect FY 2011 through FY 2015 funding. Therefore, explanation of changes between the two budget positions cannot be made in a relevant manner | | | | | |

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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 0207445F: <i>FIGHTER TACTICAL DATA LINK</i> | | | | PROJECT 675043: <i>Fighter Tactical Data Link</i> | | | |
| 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 |
| 675043: <i>Fighter Tactical Data Link</i> | 55.069 | 66.872 | 85.492 | 0.000 | 85.492 | 169.748 | 118.655 | 0.000 | 0.000 | 0.000 | 607.872 |
| Quantity of RDT&E Articles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| <p>A. Mission Description and Budget Item Justification</p> <p>Tactical Data Links (TDL) as a subset of the broader Airborne Network are used in a combat environment to exchange information such as messages, data, radar tracks, target information, platform status, imagery, and command assignments. TDLs provide interoperability, local and global connectivity, and situational awareness to the user when operating under rapidly changing operational conditions. TDLs provide a jam-resistant; secure digital data transfer network capability with a new and standardized waveforms and data formats allowing Line of Sight (LOS) and Beyond Line of Sight (BLOS) intra- and inter-flight communications. TDLs are used by all Service theater Command and Control (C2) elements, weapons platforms, and sensors. TDLs include, but are not limited to: Link 16, Link 11, Situational Awareness Data Link (SADL), Variable Message Format (VMF), Integrated Broadcast Service (IBS), Intra-Flight Data Link (IFDL), Tactical Targeting Network Technology (TTNT), and Multifunction Advanced Data Link (MADL). The Joint Requirements Oversight Council (JROC) recently approved the MADL waveform for all low observable platforms, to include the F-22, B-2, and F-35 and the MADL Overarching Integrated Product Team (OIPT) approved enterprise level management and support for MADL Development.</p> <p>This effort provides critical capability and enhancements to the Airborne Network by creating common development, integration and interoperability among all Air Force fighter platforms to include but not limited to A-10, F-15A-E, F-16 Blocks 30/40/50, F-22A, and F-35 aircraft. Keeps all fighter platforms and datalinked weapons current, interoperable in the network, and enables Global Strike (GS), Global Persistent Attack (GPA), Offensive and Defensive Counterair (OCA and DCA) and Suppression of Enemy Air Defenses (SEAD) missions. Also expands LOS and BLOS data link capabilities. TDLs increase mission effectiveness, provide situational awareness, and provide positive identification of aircraft in the network, correlate on- and off-board sensor data sharing, target, and threat information, and provide the datalink to accomplish time critical targeting and other mission update functions. TDL efforts include incorporating changes and additions to TDL message standards (e.g. MIL-STD-6016D) and applicable Interface Change Proposals (ICPs); future development of MADL waveform specification, message standards (MIL-STD-6019) and modeling and simulation; MADL enterprise level planning and testing; assisting with AF and Joint interoperability certification testing; future development, integration, and verification of Operational Flight Program (OFP) upgrades due to TDL integration; support of data gathering processes; studying and incorporating data link technologies to ensure effectiveness and efficiency of the Global Strike and Global Persistent Attack CONOPS; and incorporating Interoperable Systems Management and Requirements Transformation (iSMART), a process which enables network centric interoperability assessments to be made more quickly and effectively.</p> <p>Activities also include studies and analysis to support both current program planning and execution and future program planning.</p> | | | | | | | | | | | |

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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 0207445F: FIGHTER TACTICAL DATA LINK | | PROJECT 675043: Fighter Tactical Data Link | |
| Fighter Tactical Data Link program is in Budget Activity 7, Operational System Development, since it supports integration of tactical data links into operational systems. | | | | | |
| B. Accomplishments/Planned Program (\$ in Millions) | | | | | |
| | FY 2009 | FY 2010 | FY 2011 Base | FY 2011 OCO | FY 2011 Total |
| MAJOR THRUST: Develop and integrate MADL onto the F-22 to provide a secure, jam resistant, low-observable waveform for operation in the anti-access environment. FY 2009 Accomplishments: In FY 2009: Conducted Pre-Phase A risk reduction and candidate definition for MADL on F-22. Conducted capability requirements review and began development for radio, data processor and crypto processor modules. FY 2010 Plans: In FY 2010: Continue Pre-Phase A risk reduction, begin Phase A Requirements Definition and conduct System Requirements Review for MADL on F-22. Continue hardware and software development for radio, processor and crypto processor modules. Define MADL information exchange requirements and waveform enhancements to be included in F-22 Inc 3.2. FY 2011 Base Plans: In FY 2011: Continue Phase A Requirements Definition and conduct System Design Review and Preliminary Design Review for MADL on F-22. Continue hardware and software design. Continue development of MADL information exchange requirements and waveform enhancements to be included in F-22 Inc 3.2. FY 2011 OCO Plans: In FY 2011 OCO: Not Applicable. | 33.574 | 49.768 | 61.415 | 0.000 | 61.415 |
| MAJOR THRUST: Ensure a well-documented, interoperable data link capability for Low Observable platforms in the anti access region. | 10.061 | 12.458 | 18.136 | 0.000 | 18.136 |

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| B. Accomplishments/Planned Program (\$ in Millions) | | | | | | |
| | | FY 2009 | FY 2010 | FY 2011 Base | FY 2011 OCO | FY 2011 Total |
| FY 2009 Accomplishments: In FY 2009: Established the MADL Enterprise program management office. Began the development of a waveform specification based on the in-process development of the initial MADL capability on the Joint Strike Fighter. Began development of a Message Standard to capture message content, formats and protocols. Developed a modeling and simulation capability to support decision making, capability tradeoffs and technical decisions. | | | | | | |
| FY 2010 Plans: In FY 2010: Bring the MADL Enterprise to a Materiel Development Decision and mature initial documentation. Continue the development of a waveform specification, incorporating any new waveform improvements. Finalize the MADL Message Standard with the content, formats and protocols for Increment 1 capability. Continue to increase the fidelity of modeling and simulation capabilities to support decision making, expectation setting and employment procedures. Begin to develop a test and evaluation strategy for MADL. Document the Information Assurance Strategy from an enterprise perspective. | | | | | | |
| FY 2011 Base Plans: In FY 2011: Bring the MADL Enterprise to a Milestone A Decision and prepare for a Milestone B Decision. Finalize the Waveform Specification for the MADL Increment 1 capability. Begin development of a new MADL Message Standard revision for future MADL increments/capabilities. Continue to use modeling and simulation capabilities to develop MADL employment procedures and assess the mission utility of future MADL capabilities. Monitor Test and Evaluation activities on the Joint Strike Fighter. | | | | | | |
| FY 2011 OCO Plans: In FY 2011 OCO: Not Applicable. | | | | | | |
| MAJOR THRUST: F-15 Suite 6 Upgrades. | | 5.475 | 0.000 | 0.000 | 0.000 | 0.000 |

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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 0207445F: FIGHTER TACTICAL DATA LINK | | PROJECT 675043: Fighter Tactical Data Link | | |
| B. Accomplishments/Planned Program (\$ in Millions) | | | | | | |
| | | FY 2009 | FY 2010 | FY 2011 Base | FY 2011 OCO | FY 2011 Total |
| FY 2009 Accomplishments: In FY 2009: The F-15 Operational Flight Plan (OFP) Suite 6 Upgrade provided additional Link 16 combat capability, improved interoperability and compliance with MIL STD 6016C. The additional capabilities included increased transmission throughput, transmission of imagery, improved threat warning, precision targeting and improved navigation. The upgrade gave Link 16 the function of engage on remote with the AIM 120D. Engage on remote allows target track data to be passed from donor aircraft to the shooter and reduces the delay in track updates. | | | | | | |
| FY 2010 Plans: In FY 2010: N/A. | | | | | | |
| FY 2011 Base Plans: In FY 2011: N/A. | | | | | | |
| FY 2011 OCO Plans: In FY 2011 OCO: Not Applicable. | | | | | | |
| MAJOR THRUST: Development and integration of A-10 SADL/Enhanced Precision Location Reporting System (EPLRS) and IDM capabilities. | | 1.459 | 0.000 | 0.000 | 0.000 | 0.000 |
| FY 2009 Accomplishments: In FY 2009: The A-10 Improved Data Modem (IDM) program improved the time sensitive targeting capability of the A-10 by implementing digital data links to allow digital connectivity, including imagery, with dismounted Forward Air Controllers (FACs). Digital 9-line CAS Targeting enables machine-to-machine passing of digital targeting data from JTAC/TACP to A-10. Image Capture provides ability to capture a video frame from a sensor of interest, annotate the image with drop-on symbology, and send to other flight members and/or TACP for target verification, post damage assessment, etc. | | | | | | |

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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 0207445F: FIGHTER TACTICAL DATA LINK | | PROJECT 675043: Fighter Tactical Data Link | | |
| B. Accomplishments/Planned Program (\$ in Millions) | | | | | | |
| | | FY 2009 | FY 2010 | FY 2011 Base | FY 2011 OCO | FY 2011 Total |
| FY 2010 Plans: In FY 2010: N/A. | | | | | | |
| FY 2011 Base Plans: In FY 2011: N/A. | | | | | | |
| FY 2011 OCO Plans: In FY 2011 OCO: Not Applicable. | | | | | | |
| MAJOR THRUST: Fighter Tactical Data Link system engineering analysis, development, testing, integration, and technical support of common Fighter data link technology and capabilities. | | 4.500 | 4.646 | 5.941 | 0.000 | 5.941 |
| FY 2009 Accomplishments: In FY 2009: Funds provided centralized Program Management Administration (PMA) allowing management and oversight activities in direct support of F-22 Advanced TDL development, MADL Enterprise, F-15 OFP Suite 6 upgrades and A-10 SADL/IDM development. | | | | | | |
| FY 2010 Plans: In FY 2010: Funds will provide PMA in direct support of F-22 Advanced TDL development and MADL Enterprise. | | | | | | |
| FY 2011 Base Plans: In FY 2011: Funds will provide PMA in direct support of F-22 Advanced TDL development and MADL Enterprise. | | | | | | |
| FY 2011 OCO Plans: In FY 2011 OCO: Not Applicable. | | | | | | |
| Accomplishments/Planned Programs Subtotals | | 55.069 | 66.872 | 85.492 | 0.000 | 85.492 |

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| Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force | | | | | | | | | DATE: February 2010 | | |
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| APPROPRIATION/BUDGET ACTIVITY | | | | R-1 ITEM NOMENCLATURE | | | PROJECT | | | | |
| 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development | | | | PE 0207445F: FIGHTER TACTICAL DATA LINK | | | 675043: Fighter Tactical Data Link | | | | |
| 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 0207434F: Link 16 Sup & Sus, (RDT&E) | 278.961 | 65.619 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| • PE 0207446F: Bomber TDL, (RDT&E) | 21.603 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| • PE 0207448F: C2ISR TDL, (RDT&E) | 1.671 | 1.659 | 1.584 | 0.000 | 1.584 | 1.608 | 1.633 | 1.658 | 1.682 | 0.000 | 0.000 |
| • PE 0401839F: Airlift TDL, (RDT&E) | 7.700 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| • PE 0604281F: TDN Enterprise, (RDT&E) | 0.000 | 87.444 | 102.941 | 0.000 | 102.941 | 67.790 | 40.507 | 43.037 | 34.930 | 0.000 | 0.000 |
| • PE 0207434F (1): Link 16 Sup &Sus, (RDT&E) | 0.008 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| • PE 0207445F: Fighter TDL, (APAF) | 5.788 | 9.585 | 0.929 | 0.000 | 0.929 | 7.695 | 6.925 | 7.043 | 12.785 | 0.000 | 0.000 |
| • PE 0207446F (2): Bomber TDL, (APAF) | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.339 | 0.337 | 0.368 | 0.972 | 0.000 | 0.000 |
| • PE 0207448F (3): C2ISR TDL, (APAF) | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.959 | 0.912 | 0.927 | 1.729 | 0.000 | 0.000 |
| • PE 0207434F (4): Link 16 Sup & Sus, (O&M) | 131.597 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| • PE 0207445F (5): Fighter TDL, (O&M) | 0.208 | 0.198 | 0.219 | 0.000 | 0.219 | 0.221 | 0.257 | 0.258 | 0.268 | 0.000 | 0.000 |
| • PE 0401839F (6): Airlift TDL, (O&M) | 1.574 | 8.175 | 7.857 | 0.000 | 7.857 | 3.629 | 1.634 | 1.666 | 2.944 | 0.000 | 0.000 |
| • PE 0604281F (7): TDN Enterprise, (O&M) | 0.000 | 33.727 | 31.282 | 0.000 | 31.282 | 19.165 | 17.303 | 20.026 | 21.534 | 0.000 | 0.000 |
| • PE 0207434F (8): Link 16 Sup & Sus, (OPAF) | 16.079 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 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 0207445F: <i>FIGHTER TACTICAL DATA LINK</i> | | | | PROJECT 675043: <i>Fighter Tactical Data Link</i> | | | |
| 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 0604281F (9): <i>TDN Enterprise, (OPAF)</i> | 0.000 | 32.343 | 21.742 | 0.000 | 21.742 | 9.270 | 0.337 | 0.311 | 0.240 | 0.000 | 0.000 |
| D. Acquisition Strategy | | | | | | | | | | | |
| 653rd Electronics Systems Group (ELSG) provides for common development, integration and interoperability across all Air Force platforms and ensures that Tactical Data Links are procured and maintained as a joint, end-to-end, command and control system. Platform acquisition strategies vary by program, but the majority of development and integration is normally accomplished by the weapon system prime contractors | | | | | | | | | | | |
| 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: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development | | | | | R-1 ITEM NOMENCLATURE PE 0207445F: FIGHTER TACTICAL DATA LINK | | | | | PROJECT 675043: Fighter Tactical Data Link | | | | |
| Product Development (\$ 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 | |
| F-22A Advanced Tactical Data Link Development and Integration | Various/ Various | Lockheed Martin Fort Worth, TX | 33.574 | 49.768 | Jan 2010 | 61.415 | Oct 2010 | 0.000 | | 61.415 | Continuing | Continuing | Continuing | |
| MADL Enterprise | Various/ Various | Lockheed Martin Fort Worth, TX:Various | 10.061 | 12.458 | Dec 2009 | 18.136 | Oct 2010 | 0.000 | | 18.136 | 0.000 | 40.655 | 0.000 | |
| F-15 Suite 6 Upgrades | Various/ Various | Boeing St. Louis, MO:AFRL | 5.475 | 0.000 | | 0.000 | | 0.000 | | 0.000 | 0.000 | 5.475 | 0.000 | |
| Development and Integration of A-10 SADL/EPLRS and IDM Capability | Various/ Various | 642 AESS WPAFB, OH | 1.459 | 0.000 | | 0.000 | | 0.000 | | 0.000 | 0.000 | 1.459 | 0.000 | |
| Subtotal | | | 50.569 | 62.226 | | 79.551 | | 0.000 | | 79.551 | | | | |
| Remarks | | | | | | | | | | | | | | |
| *MIPR/AF Form 616 funding to Fighter platform program offices for scheduled contract awards and development efforts. | | | | | | | | | | | | | | |

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| Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force | | | | | | | | | | | DATE: February 2010 | | | |
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| 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 | |
| Common Fighter Data Link Support | Various/ Various | Various Various | 4.500 | 4.646 | Oct 2009 | 5.941 | Oct 2010 | 0.000 | | 5.941 | Continuing | Continuing | Continuing | |
| Subtotal | | | 4.500 | 4.646 | | 5.941 | | 0.000 | | 5.941 | | | | |
| Remarks | | | | | | | | | | | | | | |
| 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 | |
| Common Fighter Data Link Support | Various/ Various | Various Various | 0.000 | 0.000 | | 0.000 | | 0.000 | | 0.000 | 0.000 | 0.000 | 0.000 | |
| Subtotal | | | 0.000 | 0.000 | | 0.000 | | 0.000 | | 0.000 | 0.000 | 0.000 | 0.000 | |
| Remarks | | | | | | | | | | | | | | |
| Included in Management | | | | | | | | | | | | | | |
| | | | 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 | | | 55.069 | 66.872 | | 85.492 | | 0.000 | | 85.492 | | | | |

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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 0207445F: <i>FIGHTER TACTICAL DATA LINK</i> | | | PROJECT 675043: <i>Fighter Tactical Data Link</i> | | | |
| | Total Prior Years Cost | FY 2010 | FY 2011 Base | FY 2011 OCO | FY 2011 Total | Cost To Complete | Total Cost | Target Value of Contract | |
| 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

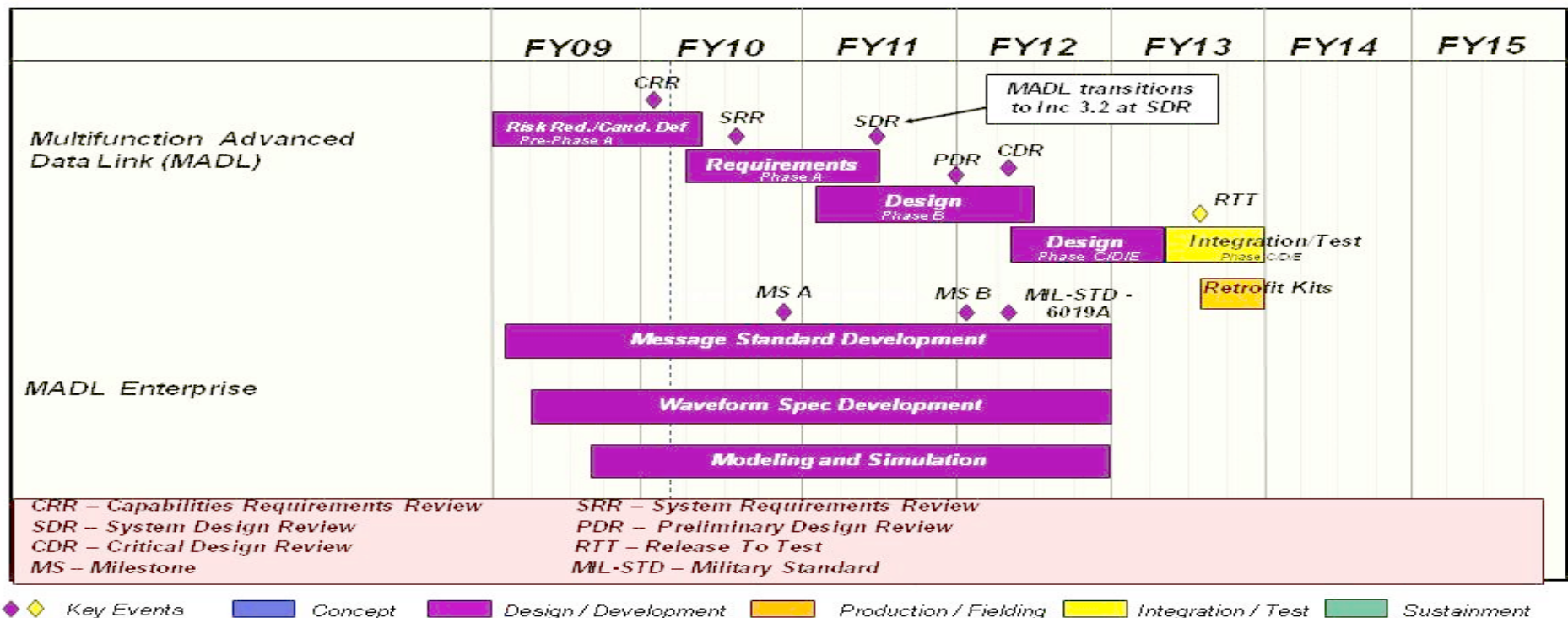
PE 0207445F: FIGHTER TACTICAL DATA
LINK

PROJECT

675043: Fighter Tactical Data Link



F-22 MADL/MADL Enterprise Schedule as of 30 Nov 09



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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

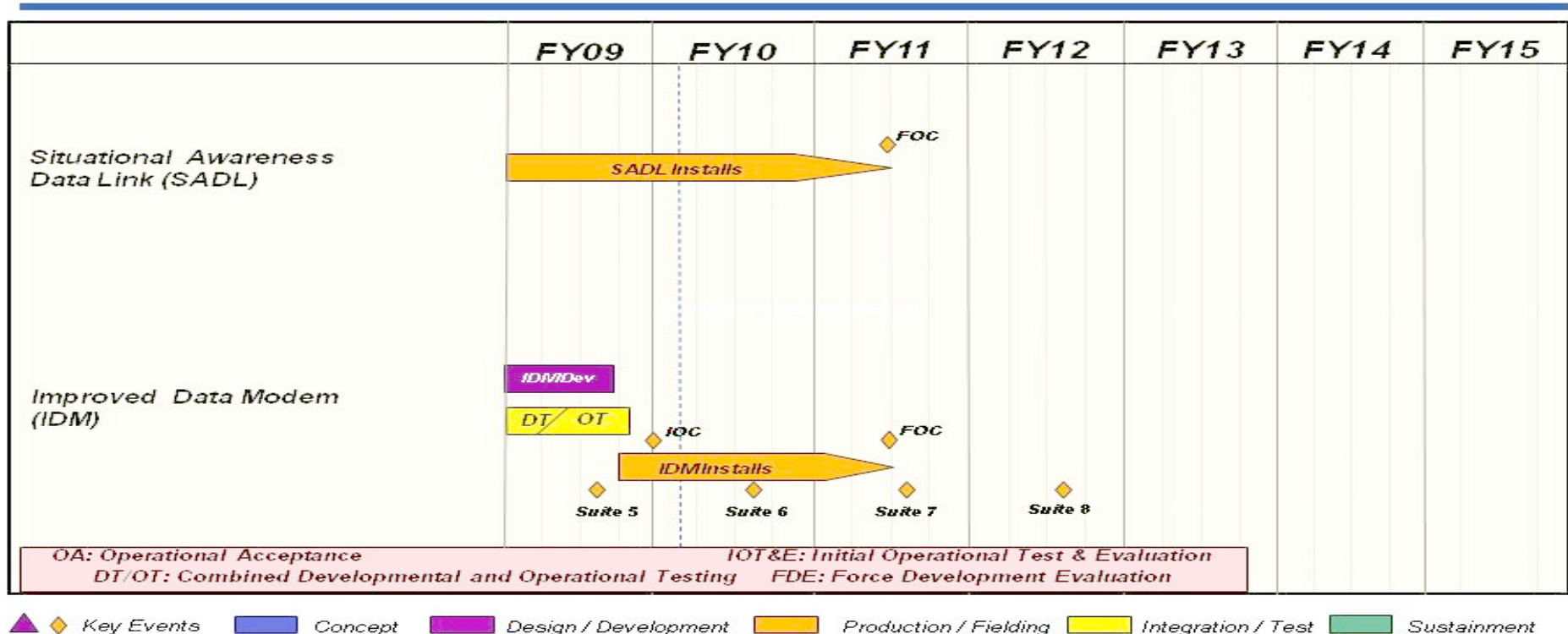
PE 0207445F: FIGHTER TACTICAL DATA
LINK

PROJECT

675043: Fighter Tactical Data Link



A-10 Data Link Schedule as of 30 Nov 09



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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

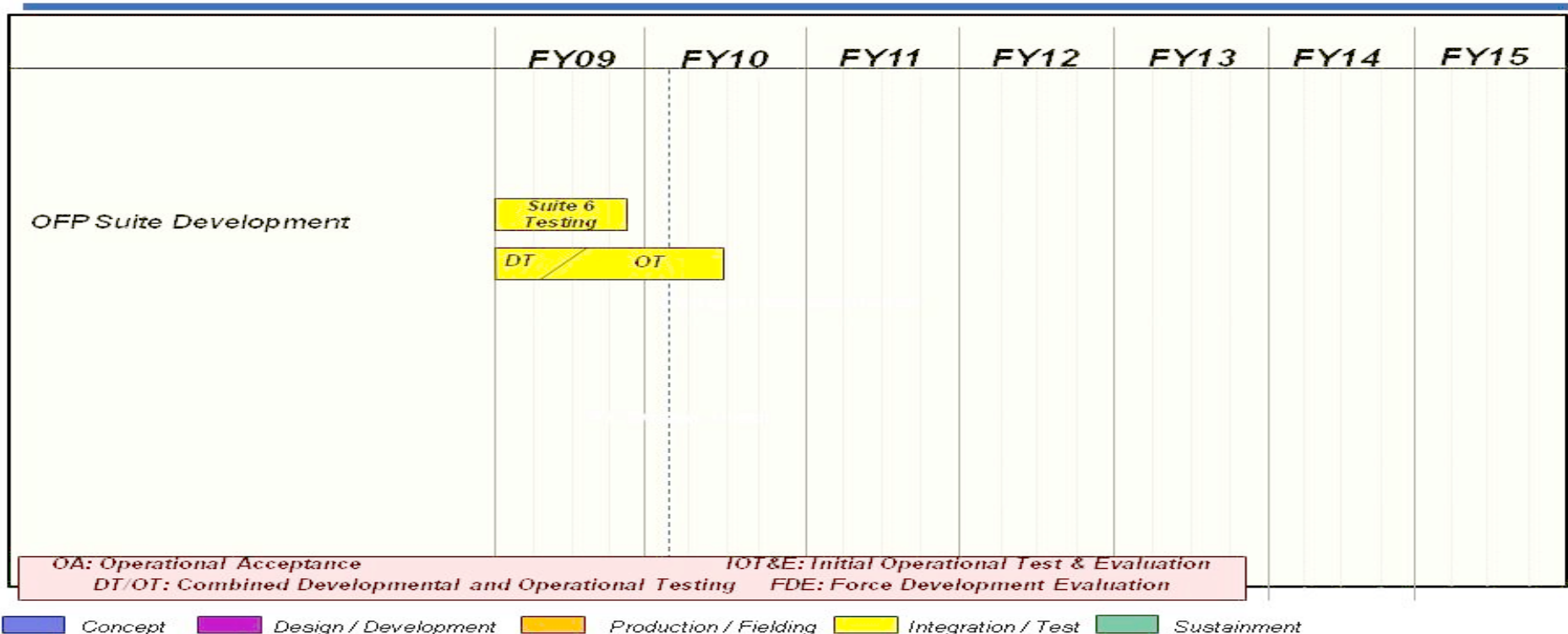
PE 0207445F: FIGHTER TACTICAL DATA
LINK

PROJECT

675043: Fighter Tactical Data Link



F-15 Data Link Schedule as of 30 Nov 09



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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 0207445F: <i>FIGHTER TACTICAL DATA LINK</i> | PROJECT 675043: <i>Fighter Tactical Data Link</i> | |

Schedule Details

| Event | Start | | End | |
|--|---------|------|---------|------|
| | Quarter | Year | Quarter | Year |
| F-22A MADL Risk Reduction and Candidate Definition Pre-Phase A | 1 | 2009 | 2 | 2010 |
| F-22A MADL Requirements Development Phase A | 2 | 2010 | 2 | 2011 |
| F-22A MADL Systems Requirements Review | 3 | 2010 | 3 | 2010 |
| F-22A MADL System Design | 1 | 2011 | 4 | 2011 |
| F-22A MADL System Design Review | 2 | 2011 | 2 | 2011 |
| F-22A MADL Preliminary Design Review | 4 | 2011 | 4 | 2011 |
| MADL Enterprise Message Standard Development | 1 | 2009 | 4 | 2011 |
| MADL Enterprise Waveform Spec Development | 2 | 2009 | 4 | 2011 |
| MADL Enterprise Modeling and Simulation | 3 | 2009 | 4 | 2011 |
| F-15 Suite 6 Integration and Testing | 1 | 2009 | 2 | 2010 |
| A-10 SADL Installs | 1 | 2009 | 2 | 2011 |
| A-10 IDM Development | 1 | 2009 | 3 | 2009 |
| A-10 IDM Developmental Testing/Operational Testing | 1 | 2009 | 4 | 2009 |
| A-10 IDM Installs | 4 | 2009 | 2 | 2011 |

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