

**OSD RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)**

Date: February 2007

APPROPRIATION/ BUDGET ACTIVITY  
RDT&E/ Defense Wide BA# 4

PE NUMBER AND TITLE

**0604828D8Z - Joint FIRES Integration and Interoperability Team**

| Cost (\$ in Millions)                           | FY 2006<br>Actual | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | FY 2012 | FY 2013 |
|---|-------------------|---------|---------|---------|---------|---------|---------|---------|
| Total Program Element (PE) Cost                 | 0.000             | 16.686  | 16.596  | 16.934  | 17.441  | 17.622  | 17.854  | 18.104  |
| P857 Joint Fires Integration & Interoperability | 0.000             | 16.686  | 16.596  | 16.934  | 17.441  | 17.622  | 17.854  | 18.104  |

**A. Mission Description and Budget Item Justification:** The FY 2005 National Defense Authorization Act (NDAA) directed the transfer of US Joint Forces Command (USJFCOM) RDT&E funding of joint warfare experimentation and training programs from Navy accounts to new Defense Wide RDT&E accounts beginning in FY 2007. Funding to support the Joint Fires Integration and Interoperability Program prior to FY 2007 was reflected in the Navy's RDT&E Program under PE 0603857N. The new funding alignment brings the Joint Fires Integration & Interoperability (JFIIT) Program into oversight by the Office of the Secretary of Defense (OSD)/Defense Research & Engineering (DR&E) as executed by the Advanced Systems & Concepts (AS&C) Office.

Joint Requirements Oversight Council Memo (JROCM) 183-4, dated 8 Oct 04, directs U.S. Joint Forces Command to "produce a Joint Fires Support Organization". The Joint Fires Integration and Interoperability Team (JFIIT) is the lead agent for USJFCOM to investigate, assess and recommend improvements for the integration, interoperability and operational effectiveness of Joint Fires and Combat Identification (CID). JROCM 241-05, dated 3 Nov 05, validated the JFIIT mission and acknowledged "contributions to joint fires through completed products, activities in progress, and planned activities".

The JFIIT mission is to improve the integration, interoperability, and operational effectiveness of Joint fires focusing at the tactical level while informing operational level related activities and process. JFIIT takes a holistic approach to improving joint fires by providing solutions that produce effective target acquisition, command and control, and interoperable firing systems, thereby reducing fratricide and collateral damage. In effect, JFIIT is an organization integrated with acquisition, training, doctrine development, technical assessment, and test & evaluation. This results in not only near-term tactical identification of issues and solutions, but informs and provides foundation for longer-viewed operational and tactical solutions as well. JFIIT supports the USJFCOM mission of joint concept development & experimentation, as well as integration and interoperability, as directed in the Secretary of Defense (SECDEF) Defense Planning Guidance. JFIIT involvement in identifying solutions in support of the irregular warfare force and process construct has increased in response to changes in Tactics, Techniques and Procedures (TTPs) evolved in the current effort to combat terrorism.

| <b><u>B. Program Change Summary</u></b>       | FY 2006 | FY 2007 | FY 2008 | FY 2009 |
|---|---------|---------|---------|---------|
| Previous President's Budget (FY 2007)         | 0.000   | 16.782  | 17.103  | 17.408  |
| Current BES/President's Budget (FY 2008/2009) | 0.000   | 16.686  | 16.596  | 16.934  |
| Total Adjustments                             | 0.000   | -0.096  | -0.507  | -0.474  |
| Congressional Program Reductions              |         | -0.096  |         |         |
| Congressional Rescissions                     |         |         |         |         |

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|                         |  |  |        |        |
|-------------------------|--|--|--------|--------|
| Congressional Increases |  |  |        |        |
| Reprogrammings          |  |  |        |        |
| SBIR/STTR Transfer      |  |  |        |        |
| Other                   |  |  | -0.507 | -0.474 |

**C. Other Program Funding Summary:** Not Applicable.**D. Acquisition Strategy:** Not Applicable.**E. Performance Metrics:**

| FY | Strategic Goals Supported | Existing Baseline | Planned Performance Improvement / Requirement Goal | Actual Performance Improvement | Planned Performance Metric / Methods of Measurement | Actual Performance Metric / Methods of Measurement |
|----|---------------------------|-------------------|--|--------------------------------|---|--|
| 07 |                           |                   |  |                                |   |  |

Comment: OSD and USJFCOM are developing performance criteria for JFIIT that will closely align this program with mission support priorities for integrated Joint Command & Control. As with the Joint Integration & Interoperability (JI&I) Program, JFIIT effectiveness ultimately hinges on delivering successful joint solutions to Combatant Commands by customer-specified delivery dates. The deliverables may include discrete improvements to training processes, doctrine, Tactics, Techniques & Procedures (TTPs), and/or technical system performance specifications and standards. OSD and USJFCOM will work in concert to approve the annual agenda of work and validate results. As with other joint programs executed by USJFCOM and overseen by OSD, provisions will be emplaced to handle emergent, high-priority requests from CoComs, Services, and Defense Agencies.

|   |                   |         |  |         |         |         |         |                        |                     |
|---|-------------------|---------|--|---------|---------|---------|---------|------------------------|---------------------|
| <b>OSD RDT&amp;E PROJECT JUSTIFICATION (R2a Exhibit)</b>  |                   |         |  |         |         |         |         |                        | Date: February 2007 |
| APPROPRIATION/ BUDGET ACTIVITY<br>RDT&E/ Defense Wide BA# 4   |                   |         | PE NUMBER AND TITLE<br><b>0604828D8Z - Joint FIRES Integration and Interoperability Team</b> |         |         |         |         | PROJECT<br><b>P857</b> |                     |
| Cost (\$ in Millions)   | FY 2006<br>Actual | FY 2007 | FY 2008  | FY 2009 | FY 2010 | FY 2011 | FY 2012 | FY 2013                |                     |
| P857      Joint Fires Integration & Interoperability  | 0.000             | 16.686  | 16.596   | 16.934  | 17.441  | 17.622  | 17.854  | 18.104                 |                     |
| <p><b><u>A. Mission Description and Project Justification:</u></b> The FY 2005 National Defense Authorization Act (NDAA) directed the transfer of US Joint Forces Command (USJFCOM) RDT&amp;E funding of joint warfare experimentation and training programs from Navy accounts to new Defense Wide RDT&amp;E accounts beginning in FY 2007. Funding to support the Joint Fires Integration and Interoperability Program prior to FY 2007 was reflected in the Navy's RDT&amp;E Program under PE 0603857N. The new funding alignment brings the Joint Fires Integration &amp; Interoperability (JFIIT) Program into oversight by the Office of the Secretary of Defense (OSD)/Defense Research &amp; Engineering (DR&amp;E) as executed by the Advanced Systems &amp; Concepts (AS&amp;C) Office.</p> <p>Joint Requirements Oversight Council Memo (JROCM) 183-4, dated 8 Oct 04, directs U.S. Joint Forces Command to "produce a Joint Fires Support Organization". The Joint Fires Integration and Interoperability Team (JFIIT) is the lead agent for USJFCOM to investigate, assess and recommend improvements for the integration, interoperability and operational effectiveness of Joint Fires and Combat Identification (CID). JROCM 241-05, dated 3 Nov 05, validated the JFIIT mission and acknowledged "contributions to joint fires through completed products, activities in progress, and planned activities".</p> <p>The JFIIT mission is to improve the integration, interoperability, and operational effectiveness of Joint fires focusing at the tactical level while informing operational level related activities and process. JFIIT takes a holistic approach to improving joint fires by providing solutions that produce effective target acquisition, command and control, and interoperable firing systems, thereby reducing fratricide and collateral damage. In effect, JFIIT is an organization integrated with acquisition, training, doctrine development, technical assessment, and test &amp; evaluation. This results in not only near-term tactical identification of issues and solutions, but informs and provides foundation for longer-viewed operational and tactical solutions as well. JFIIT supports the USJFCOM mission of joint concept development &amp; experimentation, as well as integration and interoperability, as directed in the Secretary of Defense (SECDEF) Defense Planning Guidance. JFIIT involvement in identifying solutions in support of the irregular warfare force and process construct has increased in response to changes in Tactics, Techniques and Procedures (TTPs) evolved in the current effort to combat terrorism.</p> |                   |         |  |         |         |         |         |                        |                     |
| <b><u>B. Accomplishments/Planned Program:</u></b>   |                   |         |  |         |         |         |         |                        |                     |
| <b>Accomplishment/Planned Program Title</b>   |                   |         |  | FY 2006 | FY 2007 | FY 2008 | FY 2009 |                        |                     |
| Joint Fires and Combat Identification (CID)   |                   |         |  | 0.000   | 16.686  | 16.596  | 16.934  |                        |                     |
| <p>As endorsed by JROCM 183-4, USJFCOM chartered JFIIT as the lead field agent for USJFCOM with the objective to investigate, assess and recommend improvements for the integration, interoperability and operational effectiveness of Joint Fires and Combat Identification (CID).</p> <p>JFIIT performs this function by conducting capabilities and training assessments and providing subject matter expertise to ensure joint context for fires integration at the tactical level. In coordination with the JFCOM Staff, JFIIT interfaces with the Services and Combatant Commanders (COCOMs) at the tactical level to address their highest priority joint fires issues and develops recommendations for resolution</p>   |                   |         |  |         |         |         |         |                        |                     |

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| APPROPRIATION/ BUDGET ACTIVITY<br>RDT&E/ Defense Wide BA# 4  | PE NUMBER AND TITLE<br><b>0604828D8Z - Joint FIRES Integration and Interoperability Team</b> | PROJECT<br><b>P857</b> |
| <p>and courses of action. JFIIT conducts assessments and evaluations of joint fires and combat identification (CID) capabilities to increase combat effectiveness and reduce the risk of fratricide and other friendly fire incidents. The program assesses the performance potential of Tactics, Techniques, and Procedures (TTP), doctrine, and weapons systems, and expedites solutions that meet warfighters' needs.</p> <p>The primary outcome of the JFIIT effort is to provide the warfighter with the ability to effectively execute command and control in the application of "fires", through the seamless integration of joint fires and the coherent application of interoperable and integrated combat identification.</p> <p>JFIIT's primary outputs and efficiencies are demonstrated by delivery of Doctrine-Organization-Training-Material-Leadership-Personnel-Facilities (DOTMLPF) Change Recommendations, Military Utility Assessment (MUA) reports, proposed TTP and doctrine which ensure the provision of: 1) Early identification of joint fires vulnerabilities; 2) Improvements in coordination of fires, command and control, and interoperability of firing systems resulting in increased effectiveness and efficiency; 3) Jointly trained forces; 4) Increased effectiveness and confidence in combat identification and 5) Reduced collateral damage and decreased number of fratricide incidents across the force.</p> <p>FY 2007 Planned Output: JFIIT will conduct joint fires and combat identification assessments and evaluations in conjunction with JFCOM exercises, experiments, and test and evaluation events primarily in the areas of joint ISR support to joint air-to-ground fires integration with maneuver. JFIIT is also chartered to develop techniques for promising combat identification enhancements and joint fires initiatives.</p> <ul style="list-style-type: none"> <li>- JFIIT will assist in the identification of solutions in support of irregular warfare issues identified during these evaluations. Specifically, JFIIT will provide analysis support for the SOCOM Atlantic Strike V exercise. This is the fifth in an ongoing series of Joint Terminal Attack Controller (JTAC) training exercises.</li> <li>- JFIIT will support the Joint National Training Capability Integrated Training Event conducted during PACOM exercise Terminal Fury 2007. JFIIT will conduct data collection and analysis, provide feedback to exercise participants, and submit DOTMLPF Change Recommendations as required.</li> <li>- JFIIT will also act as the analytical lead for the Coalition Combat Identification Advanced Concept Technology Demonstration (CCID ACTD) Extension exercise Bold Quest and will produce analytical reports as input to the CCID ACTD Military Utility Assessment intended to inform POM 10-15.</li> <li>- JFIIT planning and analytical support has been requested to support the Air Force Special Operations Command exercise Emerald Warrior 2007. JFIIT is programmed to provide real-time mission monitoring, feedback to participants, and if warranted, DOTMLPF Change Recommendations.</li> <li>- JFIIT will continue support to National Training Center (NTC) for pre-deployment mission rehearsal exercises and Leadership Training Program (LTP) training capabilities development.</li> <li>- JFIIT support has also been requested for evaluation of the Joint Fire Coordination Measure Joint Test and Evaluation (JFCM JT&amp;E) mini-test in conjunction with Talisman Saber 2007.</li> <li>- USJFCOM Joint War fighting Center has also requested JFIIT support as part of Talisman Saber 2007 objectives.</li> </ul> <p>FY 2008 Planned Output:</p> <ul style="list-style-type: none"> <li>- JFIIT is programmed to develop the pre-deployment mission rehearsal exercises support package as requested by the Services and COCOMs to vet joint fires issues identified through the JFCOM Joint Center for Operational Analysis (JCOA) Lessons Learned.</li> <li>- JFIIT will act as the lead planner and analytical lead for the biennial USAF Air Combat Command (ACC) Joint Expeditionary Force eXperiment (JEFX) 2008. This event identifies gaps and seams in the integration and interoperability of equipment in the joint environment. JFIIT will contribute to the JEFX report including DOTMLPF Change Recommendations and MUAs based on JFIIT capabilities</li> </ul> |  |                        |

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|---|--|------------------------|
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| <p>assessment. The joint community assesses the DOTMLPF changes and MUA to develop procurement and production decisions for acquisition of the appropriate joint interoperable solutions.</p> <ul style="list-style-type: none"> <li>- JFIIT will continue to serve as the analytical lead for the CCID ACTD Extension and will produce analytical reports as input to the CCID ACTD MUA intended to inform POM 10-15.</li> <li>- JFIIT will support the Joint National Training Capability (JNTC) certification and accreditation program and execution of joint fires related JNTC exercises. JFIIT will identify operational issues for the unit's pre-deployment rehearsals, just prior to their deployment to the theater of operations, incorporating the most current lessons learned for implementation in combat.</li> <li>- JFIIT will also continue capabilities and training assessments development to ensure other rotational units benefit from the latest lessons learned prior to deployment. By integrating this vital information into the FORSCOM National Training Center's LTP, information is amplified from staff level to the tactical level.</li> </ul> <p>FY 2009 Planned Output:</p> <ul style="list-style-type: none"> <li>- JFIIT will continue to refine and enhance support to pre-deployment mission rehearsal exercises as requested by the Services and COCOMs. Without identification of lessons learned and validation of corrective actions, the deploying units will not benefit from the subject matter expertise that JFIIT can provide in vetting these solutions at the tactical level of war. Evolving joint fires issues identified during the rotational units pre-deployment exercises form the basis to develop tactical level recommendations to address the gaps and seams.</li> <li>- JFIIT will act as lead planner and analytical lead for the 2009 Joint National Training Capability Integrated Training Event (ITE). JFIIT will contribute to an ITE exercise report that will include DOTMLPF Change Recommendations and Military Utility Assessment.</li> <li>- JFIIT will continue support for the Joint National Training Capability (JNTC) certification and accreditation program of joint fires related JNTC venues. JNTC Full Operational Capability (FOC) is scheduled for FY 2009 culminating this program for the services. JFIIT will assist in transitioning this program into service capabilities to enable tactical level joint training.</li> <li>- JFIIT will continue support for irregular warfare in the capability and training assessment of special operations exercises and events in preparation for deployment.</li> </ul> <p><b><u>C. Other Program Funding Summary:</u></b> Not Applicable.</p> <p><b><u>D. Acquisition Strategy:</u></b> Not Applicable.</p> <p><b><u>E. Major Performers</u></b> Not Applicable.</p> |  |                        |

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| OSD RDT&E COST ANALYSIS (R3)                                |                        |                                |  |              |                    |              |                    |              | Date: February 2007 |                        |            |                          |
|---|------------------------|--------------------------------|--|--------------|--------------------|--------------|--------------------|--------------|---------------------|------------------------|------------|--------------------------|
| APPROPRIATION/ BUDGET ACTIVITY<br>RDT&E/ Defense Wide BA# 4 |                        |                                | PE NUMBER AND TITLE<br><b>0604828D8Z - Joint FIRES Integration and Interoperability Team</b> |              |                    |              |                    |              |                     | PROJECT<br><b>P857</b> |            |                          |
| I. Product Development                                      | Contract Method & Type | Performing Activity & Location | Total PYs Cost   | FY 2007 Cost | FY 2007 Award Date | FY 2008 Cost | FY 2008 Award Date | FY 2009 Cost | FY 2009 Award Date  | Cost To Complete       | Total Cost | Target Value of Contract |
| Subtotal:   |                        |                                | 0  |              |                    |              |                    |              |                     |                        |            |                          |
|   |                        |                                |  |              |                    |              |                    |              |                     |                        |            |                          |
| II. Support Costs   | Contract Method & Type | Performing Activity & Location | Total PYs Cost   | FY 2007 Cost | FY 2007 Award Date | FY 2008 Cost | FY 2008 Award Date | FY 2009 Cost | FY 2009 Award Date  | Cost To Complete       | Total Cost | Target Value of Contract |
| Evaluation Other Costs                                      | MIPR                   | Various                        | 0  | 4468         | 1-4Q               | 4400         | 1-4Q               | 4500         | 1-4Q                | 0                      | 13368      | 0                        |
| Operations Costs/Research                                   | MIPR                   | JFIIT/Various                  | 0  | 1660         | 1-4Q               | 1700         | 1-4Q               | 1750         | 1-4Q                | 0                      | 5110       | 0                        |
| Subtotal:   |                        |                                | 0  | 6128         |                    | 6100         |                    | 6250         |                     | 0                      | 18478      | 0                        |
|   |                        |                                |  |              |                    |              |                    |              |                     |                        |            |                          |
| III. Test And Evaluation                                    | Contract Method & Type | Performing Activity & Location | Total PYs Cost   | FY 2007 Cost | FY 2007 Award Date | FY 2008 Cost | FY 2008 Award Date | FY 2009 Cost | FY 2009 Award Date  | Cost To Complete       | Total Cost | Target Value of Contract |
| Development Test and Evaluation                             | MIPR                   | JFIIT/Various                  | 0  | 738          | 1-4Q               | 700          | 1-4Q               | 750          |                     | 0                      | 2188       | 0                        |
| Operational Test and Evaluation                             | CPFF                   | SAIC, BAE, NG/Eglin AFB        | 0  | 9297         | 1-4Q               | 9396         | 1-4Q               | 9484         |                     | 0                      | 28177      | 0                        |
| Operational Test and Evaluation                             | CPAF                   | TAMS/Eglin AFB                 | 0  | 323          | 1-4Q               | 400          | 1-4Q               | 450          |                     | 0                      | 1173       | 0                        |
| Subtotal:   |                        |                                | 0  | 10358        |                    | 10496        |                    | 10684        |                     | 0                      | 31538      | 0                        |
|   |                        |                                |  |              |                    |              |                    |              |                     |                        |            |                          |
| IV. Management Services                                     | Contract Method & Type | Performing Activity & Location | Total PYs Cost   | FY 2007 Cost | FY 2007 Award Date | FY 2008 Cost | FY 2008 Award Date | FY 2009 Cost | FY 2009 Award Date  | Cost To Complete       | Total Cost | Target Value of Contract |
| Travel/Conferences  | MIPR                   | JFIIT/Various                  | 0  | 200          |                    | 0            |                    | 0            |                     | 0                      | 200        | 0                        |

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| OSD RDT&E COST ANALYSIS (R3)                                |  |       |  |       |  |       | Date: February 2007 |                        |       |   |
|---|--|-------|--|-------|--|-------|---------------------|------------------------|-------|---|
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| Subtotal:   | 0  | 200   |  | 0     |  | 0     |                     | 0                      | 200   | 0 |
|   |  |       |  |       |  |       |                     |                        |       |   |
| Project Total Cost:   | 0  | 16686 |  | 16596 |  | 16934 |                     | 0                      | 50216 | 0 |
|   |  |       |  |       |  |       |                     |                        |       |   |

| Schedule Profile (R4 Exhibit)                               |  |  |  |  |  |  |  |  |  |  |   |   |   |       |   |   |   |       |   | Date: February 2007 |   |       |   |   |   |                        |   |   |   |       |   |   |   |       |   |   |   |       |   |   |   |
|---|--|--|--|--|--|--|--|--|--|--|---|---|---|-------|---|---|---|-------|---|---------------------|---|-------|---|---|---|------------------------|---|---|---|-------|---|---|---|-------|---|---|---|-------|---|---|---|
| APPROPRIATION/ BUDGET ACTIVITY<br>RDT&E/ Defense Wide BA# 4 |  |  |  |  |  |  |  |  |  | PE NUMBER AND TITLE<br><b>0604828D8Z - Joint FIRES Integration and Interoperability Team</b> |   |   |   |       |   |   |   |       |   |                     |   |       |   |   |   | PROJECT<br><b>P857</b> |   |   |   |       |   |   |   |       |   |   |   |       |   |   |   |
| Event Name  |  |  |  |  |  |  |  |  |  | FY 06  |   |   |   | FY 07 |   |   |   | FY 08 |   |                     |   | FY 09 |   |   |   | FY 10                  |   |   |   | FY 11 |   |   |   | FY 12 |   |   |   | FY 13 |   |   |   |
|   |  |  |  |  |  |  |  |  |  | 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 | 1     | 2 | 3 | 4 |
| Operational Test, Planning, Publications                    |  |  |  |  |  |  |  |  |  |  |   |   |   |       |   |   |   |       |   |                     |   |       |   |   |   |                        |   |   |   |       |   |   |   |       |   |   |   |       |   |   |   |
|   |  |  |  |  |  |  |  |  |  |  |   |   |   |       |   |   |   |       |   |                     |   |       |   |   |   |                        |   |   |   |       |   |   |   |       |   |   |   |       |   |   |   |

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| Schedule Detail (R4a Exhibit)                               |                |  |                |                |                | Date: February 2007 |                        |                |
|---|----------------|--|----------------|----------------|----------------|---------------------|------------------------|----------------|
| APPROPRIATION/ BUDGET ACTIVITY<br>RDT&E/ Defense Wide BA# 4 |                | PE NUMBER AND TITLE<br><b>0604828D8Z - Joint FIRES Integration and Interoperability Team</b> |                |                |                |                     | PROJECT<br><b>P857</b> |                |
| <u>Schedule Detail</u>                                      | <u>FY 2006</u> | <u>FY 2007</u>   | <u>FY 2008</u> | <u>FY 2009</u> | <u>FY 2010</u> | <u>FY 2011</u>      | <u>FY 2012</u>         | <u>FY 2013</u> |
| Operational Test  |                | 2-4Q   | 2-4Q           | 2-4Q           |                |                     |                        |                |
| <u>Comment:</u>   |                |  |                |                |                |                     |                        |                |