

**UNCLASSIFIED**

PE NUMBER: 0901212F  
 PE TITLE: SERVICE-WIDE SUPPORT

|   |                              |
|---|------------------------------|
| <b>Exhibit R-2, RDT&amp;E Budget Item Justification</b> | DATE<br><b>February 2007</b> |
|---|------------------------------|

|  |  |
|--|--|
| <b>BUDGET ACTIVITY</b><br><b>07 Operational System Development</b> | <b>PE NUMBER AND TITLE</b><br><b>0901212F SERVICE-WIDE SUPPORT</b> |
|--|--|

| Cost (\$ in Millions)                        | FY 2006<br>Actual | FY 2007<br>Estimate | FY 2008<br>Estimate | FY 2009<br>Estimate | FY 2010<br>Estimate | FY 2011<br>Estimate | FY 2012<br>Estimate | FY 2013<br>Estimate | Cost to<br>Complete | Total |
|--|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-------|
| Total Program Element (PE) Cost              | 0.000             | 0.000               | 6.495               | 3.041               | 0.000               | 0.000               | 0.000               | 0.000               | 0.000               | 0.000 |
| 5256 Military Flight Operations Quality<br>A | 0.000             | 0.000               | 6.495               | 3.041               | 0.000               | 0.000               | 0.000               | 0.000               | 0.000               | 0.000 |

**(U) A. Mission Description and Budget Item Justification**

Following direction from the Office of the Secretary of Defense provided through PBD 705, Mishap Reduction Initiatives, 4 Dec 2004, and the OSD Military Flight Operations Quality Assurance (MFOQA) Program Implementation memo of 11 Oct 2005, the Air Force has initiated development of MFOQA processes for various aircraft across the mission spectrum.

MFOQA is the analysis and trending of aircraft system and flight performance data to proactively enhance combat readiness through improvements in operations, maintenance, training and safety functions. Analysis of recorded data identifies and quantifies both normal and hazardous flight environments and, where applicable, enables the monitoring of control measure effectiveness. Benefits are derived through a variety of analysis processes, including the operational trending of aggregate data and post-mission playback features for both aircrew flight operations training and maintenance diagnostics.

MFOQA provides tools for commanders to: establish a baseline for normal operations; identify, mitigate, and monitor operational risks while detecting precursors to aviation mishaps; and identify operational inefficiencies. MFOQA gives capabilities to multiple levels and functional areas to improve and enhance mission-effectiveness through awareness of abnormal trends, continuous knowledge of aircraft systems performance, and insight into the effectiveness of procedures, policy, and aircrew training on actual mission accomplishment.

MFOQA programs realize the following goals:

Mishap Reduction - Reduces the statistical rate of aviation mishaps by identifying risks, implementing effective control measures, and enabling continuous monitoring of risk mitigation.

Operational Efficiency - improves aircrew training effectiveness, reduces aircraft downtime, and modifies operations to reduce consumption and increase system component life cycles.

Operational Readiness - Enhances war-fighting capabilities by preserving resources available for operational requirements and improving mission performance.

Exhibit R-2, RDT&E Budget Item Justification

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BUDGET ACTIVITY

07 Operational System Development

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(U) B. Program Change Summary (\$ in Millions)

|   | <u>FY 2006</u> | <u>FY 2007</u> | <u>FY 2008</u> | <u>FY 2009</u> |
|---|----------------|----------------|----------------|----------------|
| (U) Previous President's Budget         |                |                | 6.425          | 3.000          |
| (U) Current PBR/President's Budget      | 0.000          |                | 6.425          | 3.000          |
| (U) Total Adjustments                   | 0.000          |                |                |                |
| (U) Congressional Program Reductions    |                |                |                |                |
| Congressional Rescissions               |                |                |                |                |
| Congressional Increases                 |                |                |                |                |
| Reprogrammings                          |                |                |                |                |
| SBIR/STTR Transfer                      |                |                |                |                |
| (U) <u>Significant Program Changes:</u> |                |                |                |                |

**Exhibit R-2a, RDT&E Project Justification**

DATE  
**February 2007**

|   |                   |                     |                     |   |                     |                     |                     |  |                     |       |  |
|---|-------------------|---------------------|---------------------|---|---------------------|---------------------|---------------------|--|---------------------|-------|--|
| BUDGET ACTIVITY<br><b>07 Operational System Development</b> |                   |                     |                     | PE NUMBER AND TITLE<br><b>0901212F SERVICE-WIDE SUPPORT</b> |                     |                     |                     | PROJECT NUMBER AND TITLE<br><b>5256 Military Flight Operations Quality A</b> |                     |       |  |
| Cost (\$ in Millions)                                       | FY 2006<br>Actual | FY 2007<br>Estimate | FY 2008<br>Estimate | FY 2009<br>Estimate   | FY 2010<br>Estimate | FY 2011<br>Estimate | FY 2012<br>Estimate | FY 2013<br>Estimate  | Cost to<br>Complete | Total |  |
| 5256 Military Flight Operations Quality A                   | 0.000             | 0.000               | 6.495               | 3.041   | 0.000               | 0.000               | 0.000               | 0.000  | 0.000               | 0.000 |  |
| Quantity of RDT&E Articles                                  | 0                 | 0                   | 0                   | 0   | 0                   | 0                   | 0                   | 0  |                     |       |  |

**(U) A. Mission Description and Budget Item Justification**

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Operational Readiness - Enhances war-fighting capabilities by preserving resources available for operational requirements and improving mission performance.

**(U) B. Accomplishments/Planned Program (\$ in Millions)**

|   | <u>FY 2006</u> | <u>FY 2007</u> | <u>FY 2008</u> | <u>FY 2009</u> |
|---|----------------|----------------|----------------|----------------|
| (U) Develop flight data collection modifications on strategic airlift aircraft, providing insight into world-wide transportation operations. These upgrades provide information generated inflight for routine analysis to identify deviations from expected procedures and parameters. |                |                | 6.495          | 3.041          |
| (U) Total Cost  | 0.000          | 0.000          | 6.495          | 3.041          |

**Exhibit R-2a, RDT&E Project Justification**

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|   |   |  |
|---|---|--|
| BUDGET ACTIVITY<br><b>07 Operational System Development</b> | PE NUMBER AND TITLE<br><b>0901212F SERVICE-WIDE SUPPORT</b> | PROJECT NUMBER AND TITLE<br><b>5256 Military Flight Operations Quality A</b> |
|---|---|--|

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

|                       | <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>  | <u>Cost to</u>  | <u>Total Cost</u> |
|-----------------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------------|
|                       | <u>Actual</u>  | <u>Estimate</u> | <u>Complete</u> |                   |
| (U) 91212F-3010 BP 10 |                | 0.627           | 7.483           | 10.692          | 4.024           |                 |                 |                 |                 |                   |
| (U) 41130F-3010 BP 11 |                |                 | 0.470           | 0.470           |                 |                 |                 |                 |                 |                   |
| (U) 84740F-3010 BP 11 |                | 2.803           | 0.613           |                 |                 |                 |                 |                 |                 |                   |
| (U) 91212F-3400       |                | 2.990           | 2.586           | 3.996           | 5.031           | 5.598           |                 |                 |                 |                   |

**(U) D. Acquisition Strategy**

The Lead Operating MAJCOMs (as defined by AFPD 10-9, Lead Operating Command Weapons System Management), in conjunction with the Air Force Safety Center and the Aeronautical System Center will determine the feasibility of each aircraft platform for MFOQA process implementation. Analysis software development and process implementation will occur on a staggered schedule, approximately 2 aircraft fleets per year.

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**Exhibit R-3, RDT&E Project Cost Analysis**

DATE  
**February 2007**

| BUDGET ACTIVITY   |                                   |   | PE NUMBER AND TITLE                  |                     |                           |                     |                           |                     |                           |                     | PROJECT NUMBER AND TITLE                         |                         |                   |                                 |
|---|-----------------------------------|---|--------------------------------------|---------------------|---------------------------|---------------------|---------------------------|---------------------|---------------------------|---------------------|--|-------------------------|-------------------|---------------------------------|
| <b>07 Operational System Development</b>  |                                   |   | <b>0901212F SERVICE-WIDE SUPPORT</b> |                     |                           |                     |                           |                     |                           |                     | <b>5256 Military Flight Operations Quality A</b> |                         |                   |                                 |
| (U) Cost Categories<br>(Tailor to WBS, or System/Item Requirements)<br>(\$ in Millions) | <u>Contract Method &amp; Type</u> | <u>Performing Activity &amp; Location</u> | <u>Total Prior to FY 2006 Cost</u>   | <u>FY 2006 Cost</u> | <u>FY 2006 Award Date</u> | <u>FY 2007 Cost</u> | <u>FY 2007 Award Date</u> | <u>FY 2008 Cost</u> | <u>FY 2008 Award Date</u> | <u>FY 2009 Cost</u> | <u>FY 2009 Award Date</u>                        | <u>Cost to Complete</u> | <u>Total Cost</u> | <u>Target Value of Contract</u> |
| (U) <u>Product Development</u>  |                                   |   |                                      |                     |                           |                     |                           |                     |                           |                     |  |                         |                   |                                 |
| IT Solutions (GSA)  | TM                                | Cherry Hill, NJ                           |                                      |                     |                           |                     |                           | 3.000               | Dec-08                    | 2.000               | Dec-09   | Continuing              | TBD               | TBD                             |
| Encore (Northrop Grumman)   | TM                                | Cherry Hill, NJ                           |                                      |                     |                           |                     |                           | 3.495               | Dec-08                    | 1.041               | Dec-09   | Continuing              | TBD               | TBD                             |
| Subtotal Product Development  |                                   |   | 0.000                                | 0.000               |                           | 0.000               |                           | 6.495               |                           | 3.041               |  | Continuing              | TBD               | TBD                             |
| Remarks:  |                                   |   |                                      |                     |                           |                     |                           |                     |                           |                     |  |                         |                   |                                 |
| (U) <u>Support</u>  |                                   |   |                                      |                     |                           |                     |                           |                     |                           |                     |  |                         | 0.000             | 0.000                           |
| Subtotal Support  |                                   |   | 0.000                                | 0.000               |                           | 0.000               |                           | 0.000               |                           | 0.000               |  | 0.000                   | 0.000             | 0.000                           |
| Remarks:  |                                   |   |                                      |                     |                           |                     |                           |                     |                           |                     |  |                         |                   |                                 |
| (U) <u>Test &amp; Evaluation</u>  |                                   |   |                                      |                     |                           |                     |                           |                     |                           |                     |  |                         | 0.000             | 0.000                           |
| Subtotal Test & Evaluation  |                                   |   | 0.000                                | 0.000               |                           | 0.000               |                           | 0.000               |                           | 0.000               |  | 0.000                   | 0.000             | 0.000                           |
| Remarks:  |                                   |   |                                      |                     |                           |                     |                           |                     |                           |                     |  |                         |                   |                                 |
| (U) <u>Management</u>   |                                   |   |                                      |                     |                           |                     |                           |                     |                           |                     |  |                         | 0.000             | 0.000                           |
| Subtotal Management   |                                   |   | 0.000                                | 0.000               |                           | 0.000               |                           | 0.000               |                           | 0.000               |  | 0.000                   | 0.000             | 0.000                           |
| Remarks:  |                                   |   |                                      |                     |                           |                     |                           |                     |                           |                     |  |                         |                   |                                 |
| (U) Total Cost  |                                   |   | 0.000                                | 0.000               |                           | 0.000               |                           | 6.495               |                           | 3.041               |  | Continuing              | TBD               | TBD                             |

Exhibit R-4, RDT&E Schedule Profile

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BUDGET ACTIVITY  
07 Operational System Development

PE NUMBER AND TITLE  
0901212F SERVICE-WIDE SUPPORT

PROJECT NUMBER AND TITLE  
5256 Military Flight Operations  
Quality A

## Military Flight Operations Quality Assurance (MFOQA)

|   | 2006 | 2007 | 2008       | 2009       | 2010 | 2011 | 2012 | 2013 |
|---|------|------|------------|------------|------|------|------|------|
| <b>Aircraft Data Collection Upgrades</b>            |      |      | ██████████ | ██████████ |      |      |      |      |
| <b>Software Development</b>                         |      |      | ██████████ | ██████████ |      |      |      |      |
| <b>Results Distribution &amp; Corrective Action</b> |      |      | ██████████ | ██████████ |      |      |      |      |

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**Exhibit R-4a, RDT&E Schedule Detail**

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BUDGET ACTIVITY

**07 Operational System Development**

PE NUMBER AND TITLE

**0901212F SERVICE-WIDE SUPPORT**

PROJECT NUMBER AND TITLE

**5256 Military Flight Operations  
Quality A**

**(U) Schedule Profile**

FY 2006

FY 2007

FY 2008

FY 2009

(U) Aircraft Data Collection Upgrades

1-4Q

1-4Q

(U) Aircraft Data Collection Upgrades

1-4Q

1-4Q

(U) Aircraft Fleet MFOQA Analysis Software Development

1-4Q

1-4Q

(U) T-6 IDARS Upgrade

1Q

(U) C-17 Data Recorder Upgrade

1Q

1Q