

Exhibit R-2, RDT&E Budget Item Justification	DATE February 2008
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BUDGET ACTIVITY 07 Operational System Development	PE NUMBER AND TITLE 0901212F SERVICE-WIDE SUPPORT
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Cost (\$ in Millions)	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	0.000	6.454	3.016	0.000	0.000	0.000	0.000	0.000	0.000
5256 Military Flight Operations Quality A	0.000	6.454	3.016	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 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, identifies mishap precursors and potential mitigation measures, 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.

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

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Previous President's Budget		6.495	3.041
(U) Current PBR/President's Budget	0.000	6.454	3.016
(U) Total Adjustments	0.000		
(U) Congressional Program Reductions			
Congressional Rescissions			
Congressional Increases			
Reprogrammings			
SBIR/STTR Transfer			
(U) <u>Significant Program Changes:</u>			

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Cost (\$ in Millions)	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
5256 Military Flight Operations Quality A	0.000	6.454	3.016	0.000	0.000	0.000	0.000	0.000	0.000
Quantity of RDT&E Articles	0	0	0	0	0	0	0		

(U) A. Mission Description and Budget Item Justification

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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.

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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 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Develop flight data collection modifications on aviation platforms, including but not limited to airlift such as the C-17, C-5 and C-130m trainers such as the T-5 and T-38, bombers such as the B-1 and B-2, fighters such as the F-15, F-16, F-22 and F-35, refuelers such as the KC-10 and KC-135, the CV-22, and Unmanned Aerial Systems such as the Predator and Global Hawk, providing insight into world-wide transportation operations. These upgrades provide information generated inflight for routine analysis to identify deviations from expected procedures and parameters.		6.454	3.016
(U) Total Cost	0.000	6.454	3.016

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Project 5256

Exhibit R-2a (PE 0901212F)

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Quality A

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

	<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>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</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	5.390	5.440		

(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

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(U) <u>Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total Prior to FY 2007 Cost</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>												
Boeing (C-17)	Unknown	Wright Patterson				5.995	Dec-08	3.016	Dec-09	Continuing	TBD	TBD
Hawker Beachcraft (T-6)	Unknown	Wright Patterson				0.459	Dec-08			Continuing	TBD	TBD
Subtotal Product Development			0.000	0.000		6.454		3.016		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
Remarks:												
(U) <u>Test & Evaluation</u>											0.000	0.000
Subtotal Test & Evaluation			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
Remarks:												
(U) Total Cost			0.000	0.000		6.454		3.016		Continuing	TBD	TBD

Exhibit R-4, RDT&E Schedule Profile

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PROJECT NUMBER AND TITLE
5256 Military Flight Operations
Quality A

Military Flight Operations Quality Assurance (MFOQA)

	2006	2007	2008	2009	2010	2011	2012	2013
Aircraft Data Collection Upgrades			██████████	██████████				
Software Development			██████████	██████████				
Results Distribution & Corrective Action			██████████	██████████				

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Exhibit R-4a, RDT&E Schedule Detail	DATE February 2008
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	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) <u>Schedule Profile</u>			
(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