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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 0901212F: SERVICE-WIDE SUPPORT							
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	3.648	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
675256: Military Flight Operations Quality A	3.648	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

A. Mission Description and Budget Item Justification

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.

UNCLASSIFIED

R-1 Line Item #241

Page 1 of 8

UNCLASSIFIED

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3600: Research, Development, Test & Evaluation, Air Force		PE 0901212F: SERVICE-WIDE SUPPORT			
BA 7: Operational Systems Development					
B. Program Change Summary (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	3.008	0.000	0.000	0.000	0.000
Current President's Budget	3.648	0.000	0.000	0.000	0.000
Total Adjustments	0.640	0.000	0.000	0.000	0.000
• 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	0.640	0.000	0.000	0.000	0.000

UNCLASSIFIED

R-1 Line Item #241

Page 2 of 8

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force								DATE: February 2010			
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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
675256: Military Flight Operations Quality A	3.648	0.000	0.000	0.000	0.000	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	0		
A. Mission Description and Budget Item Justification											
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.											
B. Accomplishments/Planned Program (\$ in Millions)											

UNCLASSIFIED

R-1 Line Item #241

Page 3 of 8

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force									DATE: February 2010		
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B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
MAJOR THRUST: Develop flight data collection modifications on aviation platforms. FY 2009 Accomplishments: In FY 2009: 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. 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.						3.648	0.000	0.000	0.000	0.000	
Accomplishments/Planned Programs Subtotals						3.648	0.000	0.000	0.000	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 0901212F: 3010 BP 10	10.692	4.024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
• PE 0401130F: 3010 BP 11	0.470	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
• PE 0804740F: 3010 BP 11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

UNCLASSIFIED

R-1 Line Item #241

Page 4 of 8

UNCLASSIFIED

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APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0901212F: SERVICE-WIDE SUPPORT				PROJECT 675256: Military Flight Operations Quality A			
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 0901212F (1): 3400	3.996	5.031	5.598	0.000	5.598	5.390	5.440	0.000	0.000	0.000	0.000
D. Acquisition Strategy											
The Lead Operating MAJCOMs (as defined by AFRPD 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.											
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.											

UNCLASSIFIED

R-1 Line Item #241

Page 5 of 8

UNCLASSIFIED

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 0901212F: SERVICE-WIDE SUPPORT				PROJECT 675256: Military Flight Operations Quality A					
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
Boeing (C-17)	TBD/TBD	TBD Wright Patterson	3.648	0.000		0.000		0.000		0.000	Continuing	Continuing	Continuing
Hawker Beachcraft (T-6)	TBD/TBD	TBD Wright Patterson	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	Continuing
Subtotal			3.648	0.000		0.000		0.000		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			3.648	0.000		0.000		0.000		0.000			
Remarks													
Total Prior Years Cost may include only FY 2009 data.													

UNCLASSIFIED

R-1 Line Item #241

Page 6 of 8

UNCLASSIFIED

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 0901212F: <i>SERVICE-WIDE SUPPORT</i>		PROJECT 675256: <i>Military Flight Operations Quality A</i>	

Military Flight Operations Quality Assurance (MFOQA)

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

1

UNCLASSIFIED

R-1 Line Item #241

Page 7 of 8

UNCLASSIFIED

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 0901212F: <i>SERVICE-WIDE SUPPORT</i>	PROJECT 675256: <i>Military Flight Operations Quality A</i>	

Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
Aircraft Data Collection Upgrades	1	2009	4	2009
Aircraft Fleet MFOQA Analysis Software Development	1	2009	4	2009
T-6 IDARS Upgrade	1	2009	3	2009
C-17 Data Recorder Upgrade	1	2009	1	2009

UNCLASSIFIED

R-1 Line Item #241

Page 8 of 8