

UNCLASSIFIED

PE NUMBER: 0207701F

PE TITLE: Full Combat Mission Training

Exhibit R-2, RDT&E Budget Item Justification

DATE

February 2006

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0207701F Full Combat Mission Training

Cost (\$ in Millions)	FY 2005 Actual	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	9.756	26.046	32.243	35.768	15.340	19.038	22.631	Continuing	TBD
4673 Distributed Mission Training (DMT)	0.000	19.310	24.412	29.138	9.240	12.844	16.399	Continuing	TBD
5012 Full Combat Mission Training	9.756	6.736	7.831	6.630	6.100	6.194	6.232	Continuing	TBD

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

Full Combat Mission Training supports Air Force Distributed Mission Operations (DMO). DMO is an operational readiness initiative enabling the USAF to exercise and train at the operational and strategic levels of war while facilitating unit-level training. Networked Live-Virtual-Constructive components form the integrated DMO battlespace by linking geographically distributed high fidelity combat and combat support training devices including C2 and ISR systems.

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

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Previous President's Budget	5.894	26.423	20.432
(U) Current PBR/President's Budget	9.756	26.046	32.243
(U) Total Adjustments	3.862	-0.377	
(U) Congressional Program Reductions			
Congressional Rescissions	-0.103	-0.377	
Congressional Increases	4.900		
Reprogrammings	-0.800		
SBIR/STTR Transfer	-0.135		

(U) **Significant Program Changes:**

FY 05 Funding:

- Increased by Congressional Add for ANG F-16 Block 30 MTCs
- Decreased by Congressional Rescissions, SBIR, And below threshold reprogramming

FY 06 Funding

- Decreased by Congressional Reduction

FY 07 Funding

- AF increase to fully fund F-22 integration and required Multi-Level Security efforts

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Exhibit R-2a, RDT&E Project Justification

DATE

February 2006

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0207701F Full Combat Mission Training

PROJECT NUMBER AND TITLE

4673 Distributed Mission Training (DMT)

Cost (\$ in Millions)	FY 2005 Actual	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total
4673 Distributed Mission Training (DMT)	0.000	19.310	24.412	29.138	9.240	12.844	16.399	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0		

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

Air Force Distributed Mission Training (DMT). DMT provides the research and development to facilitate the integration of fielded and newly acquired, Air Force owned, aircraft training devices into Distributed Mission Operations (DMO) networks. Enhances the quality of training for the systems added to the network. Enables aircrews to network with Live-Virtual-Constructive components to form the integrated DMO battlespace. Links geographically distributed, high-fidelity combat and combat support training devices including C2 and ISR systems. Allows the warfighters at home station to exercise and train at the operational and strategic levels of war as well as conduct networked unit-level training.

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

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Study, research and develop solutions to multi-service standards, test asset implementation and platform specific multi-level security issues	0.000	0.110	6.791
(U) Research and development to provide for the DMO integration of fielded and newly introduced, Air Force high-fidelity flight and mission trainers. Includes but is not limited to studies and development to provide for integration of Air Operation Center [AOC], A-10, B-1, B-2, B-52, Control and Reporting Center [CRC] F-22 F-35, E-8, EC-130, Joint Terminal Attack Controller [JTAC] and Joint Theater Air-Ground Simulation System [JTAGSS])		0.400	1.321
(U) Research and development to provide for the DMO integration of F-22 high-fidelity flight trainers.		18.800	16.300
(U) Total Cost	0.000	19.310	24.412

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

	<u>FY 2005</u> <u>Actual</u>	<u>FY 2006</u> <u>Estimate</u>	<u>FY 2007</u> <u>Estimate</u>	<u>FY 2008</u> <u>Estimate</u>	<u>FY 2009</u> <u>Estimate</u>	<u>FY 2010</u> <u>Estimate</u>	<u>FY 2011</u> <u>Estimate</u>	<u>Cost to</u> <u>Complete</u>	<u>Total Cost</u>
(U) PE 0207701, Full Combat Mission Training, Aircraft Procurement, AF	0.000	0.000	10.598	80.632	37.520	19.038	33.245	Continuing	TBD
(U) PE 0207701, Full Combat Mission Training, other Procurement, AF	0.000	0.000	0.000	8.305	0.000	4.631	4.615	Continuing	TBD

(U) **D. Acquisition Strategy**

Each platform joining the Distributed Mission Operations (DMO) environment selects its own acquisition strategy based on using command needs, business case

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Exhibit R-2a, RDT&E Project Justification		DATE February 2006
BUDGET ACTIVITY 05 System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0207701F Full Combat Mission Training	PROJECT NUMBER AND TITLE 4673 Distributed Mission Training (DMT)
<p>considerations and the magnitude of the training system changes required to provide DMO capability. Fielded and newly acquired, Air Force owned Flight and Mission Training Systems will be modified to ensure compatibility with the DMO environment. Additional DMO capable trainers will be acquired for those systems where current quantities are inadequate to meet training requirements</p>		
<p>Project 4673</p>		

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Exhibit R-3, RDT&E Project Cost Analysis

DATE

February 2006

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0207701F Full Combat Mission Training

PROJECT NUMBER AND TITLE

4673 Distributed Mission Training (DMT)

(U) Cost Categories (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total Prior to FY 2005 Cost</u>	<u>FY 2005 Cost</u>	<u>FY 2005 Award Date</u>	<u>FY 2006 Cost</u>	<u>FY 2006 Award Date</u>	<u>FY 2007 Cost</u>	<u>FY 2007 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
(U) <u>Product Development</u> Training System Product Group		Training Systems Product Group, AFMC, Wright Patterson AFB, OH		0.000		0.510		8.112		Continuing	TBD	
F-22 System Program Office		F-22 System Program Office, AFMC, Wright Patterson AFB, OH				18.800		16.300		Continuing	TBD	
Subtotal Product Development Remarks:			0.000	0.000		19.310		24.412		Continuing	TBD	0.000
(U) <u>Support</u> Subtotal Support Remarks:			0.000	0.000		0.000		0.000		0.000	0.000	0.000
(U) <u>Test & Evaluation</u> Subtotal Test & Evaluation Remarks:			0.000	0.000		0.000		0.000		0.000	0.000	0.000
(U) <u>Management</u> Subtotal Management Remarks:			0.000	0.000		0.000		0.000		0.000	0.000	0.000
(U) Total Cost			0.000	0.000		19.310		24.412		Continuing	TBD	0.000

Exhibit R-4, RDT&E Schedule Profile

DATE

February 2006

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0207701F Full Combat Mission Training

PROJECT NUMBER AND TITLE

4673 Distributed Mission Training (DMT)

Exhibit R-4: BPAC 4673 Distributed Mission Training (Distributed Mission Operations)

Fiscal Year	FY 04				FY 05				FY 06				FY 07				FY 08				FY 09			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Study, research and develop solutions to multi-service standards, test asset implementation and platform specific multi-level security issues																								
Research and development to provide for the DMO integration of fielded and newly introduced, Air Force high-fidelity flight and mission trainers. Includes but is not limited to studies and development to provide for integration of AOC, A-10, B-1, B-2, B-52, CRC, F-22, F-35, E-8, EC-130, JTAC and JTAGSS																								
Phase A F-22 DMO requirements definition/ systems																								
Phase B: F-22 DMO Development / Test/Retrofit																								



Studies/ Phase Initiated



Phase Scheduled



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Exhibit R-4a, RDT&E Schedule Detail

DATE

February 2006

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0207701F Full Combat Mission
Training

PROJECT NUMBER AND TITLE

4673 Distributed Mission Training
(DMT)(U) Schedule ProfileFY 2005FY 2006FY 2007

(U) Study, research and develop solutions to multi-service standards, test asset implementation and platform specific multi-level security issues (Study initiation)

2Q

(U) Research and development to provide for the DMO integration of fielded and newly introduced, Air Force high-fidelity flight and mission trainers. Includes but is not limited to studies and development to provide for integration of AOC, A-10, B-1, B-2, B-52, CRC F-22 F-35, E-8, EC-130, JTAC and JTAGSS (Study Initiation)

2Q

(U) Phase A: F-22 DMO requirements definition/ systems

2Q

2Q

(U) Phase B: F-22 DMO Development / Test/Retrofit

2Q

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Exhibit R-2a, RDT&E Project Justification								DATE February 2006	
BUDGET ACTIVITY 05 System Development and Demonstration (SDD)				PE NUMBER AND TITLE 0207701F Full Combat Mission Training			PROJECT NUMBER AND TITLE 5012 Full Combat Mission Training		
Cost (\$ in Millions)	FY 2005 Actual	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total
5012 Full Combat Mission Training	9.756	6.736	7.831	6.630	6.100	6.194	6.232	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0		
<p>(U) <u>A. Mission Description and Budget Item Justification</u></p> <p>Full Combat Mission Training (FCMT) supports Air Force Distributed Mission Operations (DMO). DMO is an operational readiness initiative enabling the USAF to exercise and train at the operational and strategic levels of war while facilitating unit-level training. FCMT provides research in areas benefiting the AF DMO environment as a whole. In addition FCMT provides Mission Essential Competency studies and contract administration for new systems that support the initial CAF DMO capability</p>									
(U) <u>B. Accomplishments/Planned Program (\$ in Millions)</u>						<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	
(U) Continue development, demonstration and insertion of multi-level security capability									
(U) Continue development, demonstration, studies and insertion of DMO related technologies and proficiency based continuation training strategies. Includes but not limited to common databases, improved image generation fidelity, enhanced Brief/Debrief capabilities, Mission Essential Competencies, multi-level security						0.328	1.530	2.536	
(U) RDT&E for the development of a F-16 DMO capable trainer for the Air National Guard (FY 05 Congressional Add)						4.900			
(U) Studies to assess and validate warfighter seasoning required/desired in continuation training and accreditation of portions of this experiencing process utilizing the Mission Essential Competencies (MECs) in the DMO environment						0.801	1.000	1.000	
(U) Studies to Develop objective performance enhancement and measurement tools, for use in the DMO environment, which will be used for certification of a team and/or a team of teams proficiency/currency						0.801	1.000	1.000	
(U) Identify training and rehearsal gaps in DMO architecture based on current weapons system and operational tactics, training, procedures (TTPs), especially those essential to operational Kill Chain						0.800	1.000	1.000	
(U) Continue Program office support						2.126	2.206	2.295	
(U) Total Cost						9.756	6.736	7.831	
(U) <u>C. Other Program Funding Summary (\$ in Millions)</u>									
	<u>FY 2005</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>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) PE 0207701, Full Combat Mission Training, O & M, AF	117.377	181.891	197.966	220.441	211.343	218.261	219.994	Continuing	TBD
(U) <u>D. Acquisition Strategy</u>									
Each platform joining the Distributed Mission Operations (DMO) environment selects its own acquisition strategy based on using command needs, business case									

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Exhibit R-2a, RDT&E Project Justification		DATE February 2006
BUDGET ACTIVITY 05 System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0207701F Full Combat Mission Training	PROJECT NUMBER AND TITLE 5012 Full Combat Mission Training
<p>considerations and the magnitude of the training system changes required to provide DMO capability. The pioneer systems in DMO including F-15C, AWACS, F-16 Block 40/50 and F-15E all required new training systems. In addition, the Operations and Integration capability had to be created. The Training Simulation Service (TSS) acquisition strategy was used to meet these requirements. In the TSS approach, the contractor owns and provides the simulator equipment, maintains simulator concurrency with weapons system, and has incentives to keep the equipment up to date with simulator and network technologies</p>		
Project 5012	R-1 Shopping List - Item No. 101-9 of 101-12	Exhibit R-2a (PE 0207701F)

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Exhibit R-3, RDT&E Project Cost Analysis

DATE

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BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0207701F Full Combat Mission Training

PROJECT NUMBER AND TITLE

5012 Full Combat Mission Training

(U) <u>Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract</u> <u>Method &</u> <u>Type</u>	<u>Performing</u> <u>Activity &</u> <u>Location</u>	<u>Total</u> <u>Prior to FY</u> <u>2005</u> <u>Cost</u>	<u>FY 2005</u> <u>Cost</u>	<u>FY 2005</u> <u>Award</u> <u>Date</u>	<u>FY 2006</u> <u>Cost</u>	<u>FY 2006</u> <u>Award</u> <u>Date</u>	<u>FY 2007</u> <u>Cost</u>	<u>FY 2007</u> <u>Award</u> <u>Date</u>	<u>Cost to</u> <u>Complete</u>	<u>Total Cost</u>	<u>Target Value</u> <u>of Contract</u>
(U) <u>Product Development</u> - ASC, Training Products Systems Group - AFRL Human Effectiveness Directorate, Warfighter Training Division		- Training Systems Product Group, AFMC, Wright Patterson AFB, OH - AFRL/HEA, Mesa, AZ		5.228		1.530		2.536		Continuing	TBD	
Subtotal Product Development Remarks:			0.000	5.228		1.530		2.536		Continuing	TBD	0.000
(U) <u>Support</u> - Air Force Research Lab Human Effectiveness Directorate		AFRL/HEA, Mesa, AZ 505 DWG, Kirtland AFB, NM		2.402		3.000		3.000		Continuing	TBD	
Subtotal Support Remarks:			0.000	2.402		3.000		3.000		Continuing	TBD	0.000
(U) <u>Test & Evaluation</u> Subtotal Test & Evaluation Remarks:			0.000	0.000		0.000		0.000		0.000	0.000	0.000
(U) <u>Management</u> Program Office Support		Training Systems Product Group, AFMC, Wright Patterson AFB, OH		2.126		2.206		2.295		Continuing	TBD	
Subtotal Management Remarks:			0.000	2.126		2.206		2.295		Continuing	TBD	0.000
(U) Subtotal Remarks:			0.000	0.000		0.000		0.000		0.000	0.000	0.000
(U) Total Cost			0.000	9.756		6.736		7.831		Continuing	TBD	0.000

Project 5012

R-1 Shopping List - Item No. 101-10 of 101-12

Exhibit R-3 (PE 0207701F)

Exhibit R-4, RDT&E Schedule Profile

DATE

February 2006

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0207701F Full Combat Mission
Training

PROJECT NUMBER AND TITLE

5012 Full Combat Mission Training

Exhibit R-4: BPAC 5012 Full Combat Mission Training (Distributed Mission Operations)

Fiscal Year	FY 04				FY 05				FY 06				FY 07				FY 08				FY 09			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
AWACS Tinker #2	▲																							
F-16: 2 Ship, Mt Home		▲																						
F-16: 4 Ship, Spangdahlem			▲																					
F-15C: 4 Ship, Kadena							▲																	
F-16: 4 Ship, Misawa							▲																	
AWACS, Kadena							▲																	
AWACS: Tinker #3								▲																
F-15C Lakenheath										▲														
F-15E Mt. Home												▲												
F-15E Seymour Johnson														▲										
F-15E Lakenheath																▲								
F-15E TBD																								



Start of Service



Scheduled Start of Service; Letter of Intent issued to Contractor



Scheduled Start of Service; Letter of Intent not yet issued to Contractor

Note: A number of factors including contract issues, facility availability, multiple level security and others preclude the development of a firm schedule for Start of Service of additional sites beyond FY 07.

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Exhibit R-4a, RDT&E Schedule Detail

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05 System Development and Demonstration (SDD)

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0207701F Full Combat Mission
Training

PROJECT NUMBER AND TITLE

5012 Full Combat Mission Training

(U) Schedule ProfileFY 2005FY 2006FY 2007

(U) F-15C Operations begin: Kadena

3Q

(U) F-16 4-ship operations begin: Misawa

3Q

(U) AWACS operations begin: Kadena

3Q

(U) AWACS Operations begin: Tinker #3

4Q

(U) F-15C 2-ship operations begin: Lakenheath

2Q

(U) F-15E 2-ship operations begin: Mt. Home

4Q

(U) F-15E 2-ship operations begin: Seymour Johnson

2Q

(U) F-15E 2-ship operations begin: Lakenheath

4Q

(U) F-15E 2-ship operations begin: TBD

4Q