

UNCLASSIFIED

PE NUMBER: 0207605F
 PE TITLE: Wargaming and Simulation Centers

Exhibit R-2, RDT&E Budget Item Justification	DATE February 2008
---------------------------------------------------------	------------------------------

BUDGET ACTIVITY 07 Operational System Development	PE NUMBER AND TITLE 0207605F Wargaming and Simulation Centers
--------------------------------------------------------------------	--------------------------------------------------------------------------------

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	6.270	6.421	3.870	7.138	7.240	7.381	7.530	Continuing	TBD
2888 Distributed Mission Operations Center (DMOC)	6.270	6.421	3.870	7.138	7.240	7.381	7.530	Continuing	TBD

(U) A. Mission Description and Budget Item Justification

The United States Air Force (USAF) Distributed Mission Operations Center (DMOC) is an Air Combat Command, Air Warfare Center, 505th Command and Control Wing organization. It provides Joint interoperability training and testing to geographically separated Live, Virtual, and Constructive (LVC) assets--real-world weapon systems, warfighter-in-the-loop (WITL), and computer-driven simulations. Responsibilities include: development and integration of DMO training and test events, networks, scenarios, and databases in support of service, joint, and coalition warfighters. DMOC is the lead integrator for AF DMO and virtual contributions to the Joint National Training Capability (JNTC).

Additionally, DMOC is the lead agency for VIRTUAL FLAG (VF) exercises, the DMO Multi-Level Security (MLS) testbed, and Cross-Domain Solution (CDS) testbed.

This program is categorized as Budget Activity (BA) 7 because it provides for development of technology in support of Distributed Mission Operations.

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

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Previous President's Budget	6.570	6.490	3.902
(U) Current PBR/President's Budget	6.270	6.421	3.870
(U) Total Adjustments	-0.300	-0.069	
(U) Congressional Program Reductions		-0.028	
Congressional Rescissions		-0.041	
Congressional Increases			
Reprogrammings	-0.115		
SBIR/STTR Transfer	-0.185		
(U) <u>Significant Program Changes:</u>			

Exhibit R-2a, RDT&E Project Justification

DATE
February 2008

BUDGET ACTIVITY 07 Operational System Development				PE NUMBER AND TITLE 0207605F Wargaming and Simulation Centers			PROJECT NUMBER AND TITLE 2888 Distributed Mission Operations Center (DMOC)		
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
2888 Distributed Mission Operations Center (DMOC)	6.270	6.421	3.870	7.138	7.240	7.381	7.530	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0		

(U) **A. Mission Description and Budget Item Justification**
 The United States Air Force (USAF) Distributed Mission Operations Center (DMOC) is an Air Combat Command, Air Warfare Center, 505th Command and Control Wing organization. It provides Joint interoperability training and testing to geographically separated Live, Virtual, and Constructive (LVC) assets--real-world weapon systems, warfighter-in-the-loop (WITL), and computer-driven simulations. Responsibilities include: development and integration of DMO training and test events, networks, scenarios, and databases in support of service, joint, and coalition warfighters. DMOC is the lead integrator for AF DMO and virtual contributions to the Joint National Training Capability (JNTC).

Additionally, DMOC is the lead agency for VIRTUAL FLAG (VF) exercises, the DMO Multi-Level Security (MLS) testbed, and Cross-Domain Solution (CDS) testbed.

This program is categorized as Budget Activity (BA) 7 because it provides for development of technology in support of Distributed Mission Operations.

(U) <u>B. Accomplishments/Planned Program (\$ in Millions)</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Continue to maintain core structure to support users conducting RDT&E, mission rehearsal, and concepts of operation development	4.636	4.105	2.711
(U) Continue to support requirements definition, test support, scenario development, analysis, systems engineering support, and Verification, Validation, and Accreditation (VV&A) of core systems	1.097	1.393	0.500
(U) Communications connectivity between DMOC and various other operational and modeling & simulation (M&S) facilities	0.212	0.349	0.200
(U) Program Management Office support	0.325	0.574	0.459
(U) Total Cost	6.270	6.421	3.870

(U) <u>C. Other Program Funding Summary (\$ in Millions)</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>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	
(U) Not applicable									

(U) **D. Acquisition Strategy**
 The Distributed Mission Operations Center supports AF DMO and the JNTC by awarding full and open contracts that manage the acquisition, development, testing, and integration of DMO standards, training, model and simulation, multi-level security testbed, and exercises on the DMO Networks (DMON).

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis

DATE

February 2008

BUDGET ACTIVITY				PE NUMBER AND TITLE					PROJECT NUMBER AND TITLE			
07 Operational System Development				0207605F Wargaming and Simulation Centers					2888 Distributed Mission Operations Center (DMOC)			
(U) Cost Categories (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	Contract Method & Type	Performing Activity & Location	Total Prior to FY 2007 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
(U) <u>Product Development</u> Mission Rehearsals/Concept of Operations (Brief/Debrief and Mission Replay tools, Rapid Scenario Generation, Next Generation Threat System Dev, DMO "Flag" events)	CPFF	Lockheed Martin / 705 Combat Training Squadron (CTS), Kirtland AFB, NM		4.636	Oct-06	4.105	Oct-06	2.711	Oct-06	Continuing	TBD	TBD
Verify, Validate, and Accredite Core Systems (Common Battlespace Architecture, DMO Standards, CDS)	CPFF	Lockheed Martin / 705 CTS, Kirtland AFB, NM		0.685	Oct-06	0.655	Oct-06	0.000	Oct-06	Continuing	TBD	TBD
Communications Connectivity (DMO Architecture, JNTC Warfighter Capability, LVC and IO Range Integration)	CPFF	Lockheed Martin / 705 CTS, Kirtland AFB, NM		0.212	Oct-06	0.349	Oct-06	0.200	Oct-06	Continuing	TBD	TBD
Subtotal Product Development Remarks:			0.000	5.533		5.109		2.911		Continuing	TBD	TBD
(U) <u>Support</u> Technical support for systems engineering and exercise operations	CPAF	Scientific Research / 705 CTS, Kirtland AFB, NM		0.412	Apr-05	0.738	Apr-05	0.500	Apr-05	Continuing	TBD	TBD
Subtotal Support Remarks:			0.000	0.412		0.738		0.500		Continuing	TBD	TBD
(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 Management Office Support	ITSP	705 CTS, Kirtland AFB, NM		0.325	Oct-06	0.574	Oct-07	0.459	Oct-08	Continuing	TBD	TBD
Subtotal Management Remarks:			0.000	0.325		0.574		0.459		Continuing	TBD	TBD
(U) Total Cost			0.000	6.270		6.421		3.870		Continuing	TBD	TBD

R-1 Line Item No. 151

Page-3 of 5

Project 2888

Exhibit R-3 (PE 0207605F)

Exhibit R-4, RDT&E Schedule Profile

DATE

February 2008

BUDGET ACTIVITY
07 Operational System Development

PE NUMBER AND TITLE
0207605F Wargaming and Simulation Centers

PROJECT NUMBER AND TITLE
2888 Distributed Mission Operations Center (DMOC)



Capabilities Schedule

U.S. AIR FORCE

KEY EVENTS	FY07				FY08				FY09				FY10				FY11				FY12				FY13				FY14										
	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							
Cross-Domain Solutions (CDS) Coalition DMO Spiral B-2 Spiral F-22 Spiral	▲					▲					▲					▲																							▼
DMOC Replay Tool GEOVIZ Spiral 1 GEOVIZ Spiral 2 GEOVIZ Spiral 3	▲						▲					▲					▲																						
Next Generation Threat System Dev Improved Behavior Modeling	▲							▲					▲					▲					▲					▲					▲						
Common Battlespace Architecture Prototype Development DIS/HLA/TENA Gateway Development Sim Certification Assessment Tool	▲				▲							▲					▲																	▲					
DMO Standards Development	▲																																	▲					
DMO "Flag" Events (Quarterly/Annual)	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼			
DMO Architecture OCONUS Expansion Distributed OCONUS Play (WPC) Distributed OCONUS Play (UK, Waddington)	▲		▼									▲																											
JNTC Warfighter Capability	▲																																	▲					
LVC Range Integration Datalink (SADL, TADIL-J) Comm Architecture	▲											▲					▲																	▲					

As of: 9 Jan 08

Integrity - Service - Excellence

UNCLASS

Exhibit R-4a, RDT&E Schedule Detail

DATE

February 2008

BUDGET ACTIVITY 07 Operational System Development	PE NUMBER AND TITLE 0207605F Wargaming and Simulation Centers	PROJECT NUMBER AND TITLE 2888 Distributed Mission Operations Center (DMOC)
-------------------------------------------------------------	-------------------------------------------------------------------------	--------------------------------------------------------------------------------------

(U) <u>Schedule Profile</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Cross-Domain Solutions (CDS)	2-4Q	1-4Q	1-4Q
(U) DMOC Replay Tool	1-4Q	1-4Q	1-4Q
(U) Next Generation Threat System Dev	1-4Q	1-4Q	1-2Q
(U) Common Battlespace Architecture	1-4Q	1-4Q	1-4Q
(U) DMO Standards Development	1-4Q	1-4Q	1-4Q
(U) DMO "Flag" Events	1-4Q	1-4Q	1-4Q
(U) DMO Architecture OCONUS Expansion	1-4Q	1-4Q	1-3Q
(U) JNTC Warfighter Capability	1-4Q	1-4Q	1-4Q
(U) LVC Range Integration	1-4Q	1-4Q	1-4Q