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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Air Force **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY

3600: *Research, Development, Test & Evaluation, Air Force*
BA 7: *Operational Systems Development*

R-1 ITEM NOMENCLATURE

PE 0207605F: *Wargaming and Simulation Centers*

COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	6.790	6.020	5.779	-	5.779	5.594	5.668	5.752	5.856	Continuing	Continuing
672888: <i>Distributed Mission Operations Center (DMOC)</i>	6.790	6.020	5.779	-	5.779	5.594	5.668	5.752	5.856	Continuing	Continuing

Note

The program funding includes reductions for Air Force efficiencies that are not intended to impact program content. The efficiencies reductions total \$.118M in FY12.

A. Mission Description and Budget Item Justification

The United States Air Force (USAF) Distributed Mission Operations Center (DMOC) is an Air Combat Command, USAF Warfare Center, 505th Command and Control Wing (505th CCW) organization. It provides joint interoperability training and testing to geographically separated Live, Virtual, and Constructive (LVC) assets--real-world weapon systems, operator-in-the-loop (OITL), and computer-driven simulations. Responsibilities include: development and integration of Distributed Mission Operations (DMO) training and test events, networks, scenarios, and databases in support of service, joint, and coalition warfighters. Activities also include studies and analysis to support both current program planning and execution and future program planning. DMOC is the lead integrator for Air Force DMO and virtual contributions to the Joint National Training Capability (JNTC). Additionally, DMOC is the lead agency for Virtual Flag (VF) exercises and the DMO Multi-Level Security (MLS)/Cross-Domain Solution (CDS) testbed. This program is in Budget Activity 7, Operational System Development because this budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

B. Program Change Summary (\$ in Millions)

	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	7.018	6.020	5.897	-	5.897
Current President's Budget	6.790	6.020	5.779	-	5.779
Total Adjustments	-0.228	-	-0.118	-	-0.118
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.199	-			
• Other Adjustments	-0.029	-	-0.118	-	-0.118

Change Summary Explanation

FY 2012: The program has been funded to latest cost estimate, less efficiencies. The reduction for efficiencies are not intended to impact program content. Amounts of the reductions are: \$.118M/FY12, \$.148M/FY13, \$.148M/FY14, \$.148M/FY15, \$.148M/FY16.

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force								DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0207605F: Wargaming and Simulation Centers				PROJECT 672888: Distributed Mission Operations Center (DMOC)			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
672888: Distributed Mission Operations Center (DMOC)	6.790	6.020	5.779	-	5.779	5.594	5.668	5.752	5.856	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
Note The program funding includes reductions for Air Force efficiencies that are not intended to impact program content. The efficiencies reductions total \$.118M in FY12											
A. Mission Description and Budget Item Justification The United States Air Force (USAF) Distributed Mission Operations Center (DMOC) is an Air Combat Command, USAF Warfare Center, 505th Command and Control Wing (505th CCW) organization. It provides joint interoperability training and testing to geographically separated Live, Virtual, and Constructive (LVC) assets--real-world weapon systems, operator-in-the-loop (OITL), and computer-driven simulations. Responsibilities include: development and integration of Distributed Mission Operations (DMO) training and test events, networks, scenarios, and databases in support of service, joint, and coalition warfighters. Activities also include studies and analysis to support both current program planning and execution and future program planning. DMOC is the lead integrator for Air Force DMO and virtual contributions to the Joint National Training Capability (JNTC). Additionally, DMOC is the lead agency for Virtual Flag (VF) exercises and the DMO Multi-Level Security (MLS)/Cross-Domain Solution (CDS) testbed. This program is in Budget Activity 7, Operational System Development because this budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.											
B. Accomplishments/Planned Programs (\$ in Millions)							FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: Mission Rehearsal							4.328	3.100	3.670	-	3.670
Description: Continue to maintain core structure to support users conducting RDT&E, mission rehearsal, and concepts of operation development											
FY 2010 Accomplishments: Developed Next Generation Threat System (NGTS) core architecture to improve system performance and create sustainable baseline. Develop Combat Air Force (CAF) DMO, Joint, and International (Modeling and Simulation) M&S standards. Develop Combat Survivor Evader Locator for integration into VF. Develop other capabilities to integrate systems into VF and monitor system performance.											
FY 2011 Plans: Will develop Red and Blue Air simulations and integrate ISR and Combat Air Support (CAS) simulators.											
FY 2012 Base Plans:											

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force				DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development		R-1 ITEM NOMENCLATURE PE 0207605F: Wargaming and Simulation Centers		PROJECT 672888: Distributed Mission Operations Center (DMOC)			
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Continue to develop Red and Blue Air simulations and integrate ISR and Combat Air Support (CAS) simulators. FY 2012 OCO Plans:							
Title: V,V & A Description: Continue to support requirements definition, test support, scenario development, analysis, systems engineering support, and Verification, Validation, and Accreditation (VV&A) of core systems FY 2010 Accomplishments: Developed Next Generation Threat System (NGTS) core architecture to improve system performance and create sustainable baseline. Develop CAF DMO, Joint, and International M&S standards. Develop Combat Survivor Evader Locator for integration into VF. Develop other capabilities to integrate systems into VF and monitor system performance. FY 2011 Plans: Will develop Red and Blue Air simulations and integrate ISR and CAS simulators. FY 2012 Base Plans: Continue to develop Red and Blue Air simulations and integrate ISR and Combat Air Support (CAS) simulators. FY 2012 OCO Plans:			0.676	1.215	1.177	-	1.177
Title: DMOC Ops Description: Communications connectivity between DMOC and various other operational and modeling & simulation (M&S) facilities FY 2010 Accomplishments: Developed Next Generation Threat System (NGTS) core architecture to improve system performance and create sustainable baseline. Develop CAF DMO, Joint, and International M&S standards. Develop Combat Survivor Evader Locator for integration into VF. Develop other capabilities to integrate systems into VF and monitor system performance. FY 2011 Plans: Will develop Red and Blue Air simulations and integrate ISR and CAS simulators. FY 2012 Base Plans:			1.264	1.178	0.416	-	0.416

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force							DATE: February 2011					
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>			R-1 ITEM NOMENCLATURE PE 0207605F: <i>Wargaming and Simulation Centers</i>			PROJECT 672888: <i>Distributed Mission Operations Center (DMOC)</i>						
B. Accomplishments/Planned Programs (\$ in Millions)							FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	
Continue to develop Red and Blue Air simulations and integrate ISR and Combat Air Support (CAS) simulators. FY 2012 OCO Plans:												
Title: PMO Support Description: Program Management Office (PMO) support FY 2010 Accomplishments: Provided PMO support in the development of Next Generation Threat System (NGTS) core architecture to improve system performance and create sustainable baseline. FY 2011 Plans: Will provide PMO support in the development of Red and Blue Air simulations and integrate ISR and CAS simulators. FY 2012 Base Plans: Will provide PMO support in the development of Red and Blue Air simulations and integrate ISR and CAS simulators. FY 2012 OCO Plans:							0.522	0.527	0.516	-	0.516	
Accomplishments/Planned Programs Subtotals							6.790	6.020	5.779	-	5.779	
C. Other Program Funding Summary (\$ in Millions)												
	<u>Line Item</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012 Base</u>	<u>FY 2012 OCO</u>	<u>FY 2012 Total</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
•	N/A:	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
D. Acquisition Strategy												
The Distributed Mission Operations Center supports AF DMO and the Joint National Training Capability (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 Air Force and Joint DMO networks.												
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.												

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Air Force											DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				PROJECT						
3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development				PE 0207605F: Wargaming and Simulation Centers				672888: Distributed Mission Operations Center (DMOC)						
Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	
Mission Rehearsals/Concept of Operations (Brief/Debrief and Mission Replay tools, Rapid Scenario Generation, Next Generation Threat System (NGTS) Dev, DMO "Flag" events)	C/CPFF	Lockheed Martin:705 CTS, Kirtland AFB, NM	4.328	3.100	Oct 2010	3.670	Oct 2011	-		3.670	Continuing	Continuing	TBD	
Verify, Validate, and Accreditt Core Systems (Common Battlespace Architecture, DMO Standards, MLS/CDS)	C/CPFF	Lockheed Martin:705 CTS, Kirtland AFB, NM	0.676	1.215	Oct 2010	1.177	Oct 2011	-		1.177	Continuing	Continuing	TBD	
Communications Connectivity (DMO Architecture, Joint National Training Capability (JNTC) Warfighter Capability, LVC and Information Operations (IO) Range Integration)	C/CPFF	Lockheed Martin:705 CTS, Kirtland AFB, NM	0.408	0.428	Oct 2010	0.416	Oct 2011	-		0.416	Continuing	Continuing	TBD	
Subtotal			5.412	4.743		5.263		-		5.263				
Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	
Technical support for systems engineering and exercise operations	C/CPAF	Scientific Research:705 CTS, Kirtland AFB, NM	0.428	-		-		-		-	Continuing	Continuing	TBD	
Tech support for systems engineering and exercise operations	C/CPFF	L-3 Comm Govt Svcs:705 CTS, Kirtland AFB, NM,	0.428	0.750	Apr 2011	-		-		-	Continuing	Continuing	TBD	
Subtotal			0.856	0.750		-		-		-				

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Air Force											DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>				R-1 ITEM NOMENCLATURE PE 0207605F: <i>Wargaming and Simulation Centers</i>				PROJECT 672888: <i>Distributed Mission Operations Center (DMOC)</i>					

Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Subtotal			-	-		-		-		-	0.000	0.000	0.000

Management Services (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Program Management Office Support	C/CPFF	705 CTS:Kirtland AFB, NM	0.522	0.527	Oct 2010	0.516	Oct 2011	-		0.516	Continuing	Continuing	TBD
Subtotal			0.522	0.527		0.516		-		0.516			

	Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	6.790	6.020		5.779		-		5.779			

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Air Force		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
3600: Research, Development, Test & Evaluation, Air Force	PE 0207605F: Wargaming and Simulation	672888: Distributed Mission Operations Center
BA 7: Operational Systems Development	Centers	(DMOC)

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Air Force			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0207605F: <i>Wargaming and Simulation Centers</i>	PROJECT 672888: <i>Distributed Mission Operations Center (DMOC)</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Multi-National Information Sharing (MNIS)	1	2010	4	2016
Multi-Level Security (MLS)/Cross-Domain Solutions (CDS)	1	2010	4	2016
DMOC Replay Tool	1	2010	4	2016
Next Generation Threat System Dev	1	2010	4	2016
Common Battlespace Architecture	1	2010	4	2016
DMO Standards Development	1	2010	4	2016
DMO "Flag" Events	1	2010	4	2016
DMO Architecture OCONUS Expansion	1	2010	4	2016
DMOC High Side Environment	1	2010	4	2016
IO Range Integration	1	2010	4	2016
LVC Range Integration	1	2010	4	2016

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