

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Air Force **Date:** February 2015

Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development</i>	R-1 Program Element (Number/Name) PE 0207697F / <i>Distributed Training and Exercises</i>
--	---

COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
Total Program Element	-	3.600	3.357	4.358	-	4.358	4.138	4.218	4.296	4.373	Continuing	Continuing
675190: <i>JFCOM Wargaming</i>	-	3.600	3.357	4.358	-	4.358	4.138	4.218	4.296	4.373	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Funding supports the CSAF Title 10 wargaming efforts to test concepts, capabilities, and plans using simulation and other techniques ? otherwise known as wargaming. Based on the Department and Air Force direction, there is a concerted effort in these periods of fiscal pressure to reinvigorate, institutionalize, and systematize wargaming across the Department. This effort requires additional funding to increase the level of effort to most effectively pursue an innovative strategy, avoid operational and technical surprise and make best use of limited resources. The Air Force is completing its current wargaming cycles and charting a new course to better integrate and synergize the wargaming efforts in support of the new Air Force Strategy, Planning, and Programming (SP3) process. Specifically taking the current two Title 10 wargames and creating two Concept of Operations wargames, one Materiel wargame, and experiments as needed to match the SP3 process and cycles. Also represent the Air Force at other services and Joint wargames as they ramp up across the department. These efforts will make the difference between wise and unwise investment trajectories and make our forces more successful in future conflicts.

The Wargame Information Environment (WIE) is a continually evolving system that provides an array of services to game players which enables the accomplishment of game objectives. The WIE is a deployable standalone Local Area Network (LAN) with servers and laptops that host applications to support virtual battlespace collaboration, decision making, three dimensional visualizations & mapping and services. Behind these applications are cutting edge technologies and database architectures from both commercial off the shelf and government developed software that assures relevance to the wargame. The modeling, simulation, and analysis applications allow participants, adjudicators, and control team members to effectively and efficiently collaborate, make decisions, present those decisions and all the wargame to executed but also documented. Allowing for findings to quickly surface during the wargame and be noted and allowing post-game analysis. These findings Inform portfolio rebalancing exercises, concept and strategy development, and very senior leader decision making. At the conclusion of the current wargaming cycle, the current version of the WIE will need major overall to match the new charter and SP3 process along with supporting greater number and more diverse wargames.

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.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Air Force **Date:** February 2015

Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development</i>	R-1 Program Element (Number/Name) PE 0207697F / <i>Distributed Training and Exercises</i>
--	---

B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	3.301	4.457	4.387	-	4.387
Current President's Budget	3.600	3.357	4.358	-	4.358
Total Adjustments	0.299	-1.100	-0.029	-	-0.029
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-1.100			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	0.400	-			
• SBIR/STTR Transfer	-0.101	-			
• Other Adjustments	-	-	-0.029	-	-0.029

Change Summary Explanation

FY15 Direct Congressional Reduction for "Unjustified Increase."

C. Accomplishments/Planned Programs (\$ in Millions)

	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: Develop/ Upgrade M&S Tools for WIE	1.478	1.442	1.918	-	1.918
Description: Develop air, space and cyber space wargaming specific functionality in existing modeling and simulation and analysis tools and integrate into the latest version of the WIE					
FY 2014 Accomplishments:					
- Developed air and space wargaming specific functionality among existing simulation and analysis tools (e.g., BMD I-Sim/STORM/JFAST)					
- Extended collaboration to include internally developed tools (e.g. ForceTracker (common operating picture & force management tool)/ Request for Forces Tool / Objectives & Observation Tool) to meet wargame requirements.					
FY 2015 Plans:					
- Incorporate the latest version and improve integration of the Air Force's latest version of Synthetic Theater of Operations Research Model (STORM). STORM is a theater campaign model used in pregame and postgame analysis to establish bookends.					

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Air Force **Date:** February 2015

Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development</i>	R-1 Program Element (Number/Name) PE 0207697F / <i>Distributed Training and Exercises</i>
--	---

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
---	---------	---------	--------------	-------------	---------------

- Develop user interface to Satellite Toolkit (STK) to allow users to develop their own visualizations versus asking for support from the tech staff. STK is COTS product from Analytical Graphics Inc. that requires customized software to interact in the WIE.

FY 2016 Base Plans:

- Expand the WIE from the current construct to support on CONOPs wargame to support all Air Force wargames. This will require reprogramming of some hard coded CONOPS specifics to into a broader more generic wargame support. Additional models and analytical tools used by other wargames will require the creation of custom interfaces to allow interaction within the WIE.
- Incorporate industry's latest technology with human interactions to include more touch and hopefully recognition of hand gestures to allow a quicker and more intuitive interaction with the WIE and its applications.

FY 2016 OCO Plans:

N/A

Title: CRRA Development

Description: Provides for capabilities, Requirements, and Risk Assessment (CRRA)

FY 2014 Accomplishments:

Developed Capabilities, Requirements, and Risk Assessment (CRRA)

FY 2015 Plans:

Develop Capabilities, Requirements, and Risk Assessment (CRRA)

FY 2016 Base Plans:

N/A

FY 2016 OCO Plans:

N/A

Title: JCD&E Tools

Description: Develop of scenarios and data for future synthetic environment that grounded in truth to support several wargame and mini-wargame.

FY 2014 Accomplishments:

	0.248	0.106	-	-	-
	1.542	1.457	2.058	-	2.058

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Air Force	Date: February 2015
--	----------------------------

Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development</i>	R-1 Program Element (Number/Name) PE 0207697F / <i>Distributed Training and Exercises</i>
--	---

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
N/A					
Accomplishments/Planned Programs Subtotals	3.600	3.357	4.358	-	4.358

D. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

E. Acquisition Strategy

In order to achieve an innovative strategy, avoid operational and technical surprise and make best use of limited resources the new vamped wargame approach will require an Evolutionary acquisition approach and continued senior-leadership engagement in setting the objectives and strategy for every wargame. Contract support will be required because that is where the wargame specialized expertise resides. The requirements are constantly evolving and cannot be accurately defined at the outset of the contract; therefore, a cost plus fixed fee (CPFF) contract will be used. There is currently an adequate accounting system and government monitoring in place. The Air Force is aware of the increased risk but Air Force will continue to monitor the performance and cost to ensure the contractor has efficient methods and effective cost controls

F. 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

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Air Force **Date:** February 2015

Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0207697F / <i>Distributed Training and Exercises</i>	Project (Number/Name) 675190 / <i>JFCOM Wargaming</i>
--	---	---

Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Various	C/CPFF	TBD : TBD,	-	3.600	Nov 2013	3.357	Mar 2015	4.358	Mar 2016	-		4.358	Continuing	Continuing	-
Subtotal			-	3.600		3.357		4.358		-		4.358	-	-	-

Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Subtotal			-	-		-		-		-		-	-	-	-

Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Subtotal			-	-		-		-		-		-	-	-	-

Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Subtotal			-	-		-		-		-		-	-	-	-

			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			-	3.600	3.357	4.358	-	4.358	-	-	-

Remarks

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Air Force		Date: February 2015
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0207697F / <i>Distributed Training and Exercises</i>	Project (Number/Name) 675190 / <i>JFCOM Wargaming</i>

	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	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

Tool Development	[REDACTED]																											
Develop and Integrate M&S Tools	[REDACTED]																											
Enhance ViewPoint	[REDACTED]																											
Improve GamePoint	[REDACTED]																											

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Air Force		Date: February 2015
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0207697F / <i>Distributed Training and Exercises</i>	Project (Number/Name) 675190 / <i>JFCOM Wargaming</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Tool Development	1	2014	4	2018
Develop and Integrate M&S Tools	1	2014	4	2018
Enhance ViewPoint	1	2014	4	2018
Improve GamePoint	1	2014	4	2018