

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)									DATE February 1999		
BUDGET ACTIVITY 7 - Operational System Development				PE NUMBER AND TITLE 0207605F Wargaming and Simulation Centers					PROJECT 2888		
COST (\$ In Thousands)		FY 1998 Actual	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
2888	Theater Air Command & Control Sim Facility (TACCSF)	0	5,272	5,192	5,508	6,056	6,337	6,468	6,604	TBD	Continuing
	Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0	0

*FY98 dollars (\$5,272M) were executed through PE0207601F, USAF Modeling and Simulation, but reported here for consistency.

(U) **A. Mission Description**
 Funding provided for the Air Force's premier warfighter-in-the-loop simulation facility operated at Kirtland AFB, NM by Det 4, 505th Command and Control Evaluation Group (505 CCEG). As of 1 Oct 97, the 505 CCEG and TACCSF fall under the authority of the Air and Space Command and Control Agency (ASC2A). TACCSF's mission is to provide advanced distributed simulation to the warfighter for improving theater air and space warfare systems and concepts of operation. TACCSF is used by the ASC2A and other customers who require high-fidelity battle management, command, control, communications, computer, and intelligence (BMC4I) simulation for establishing system requirements, assessing interoperability, integrating actual C4I and weapon system, and conducting joint test and evaluation. TACCSF performs the upgrade of a complex equipment system consisting of 23 Air Force and Army weapon system simulators (containing over 2 million lines of software code), 18 internal computer networks, 36 mainframe computers, and 62 tactical warfighter-in-the-loop simulator consoles. These systems interoperate with joint service simulators and live fielded equipment via wide-area networks using state-of-the-art voice and data link communications over multiple long-haul communication circuits. FY98 funding was executed through PE0207601F, USAF Modeling and Simulation.

* (U) FY 1998 (\$ in Thousands): Executed in PE 27601F

- (U) \$ 3,310 Continue to maintain core structure to support users conducting RDT&E, mission rehearsal, and concepts of operations development
- (U) \$ 1,020 Continue to support requirements definition, test support, scenario development, analysis, system engineering support, and Verification, Validation, & Accreditation (VV&A) of core system
- (U) \$ 673 Rehost AWACS and other systems from its ten year old equipment. The models should be rehosted to take advantage of object-oriented techniques allowing the sensor models to be imported into other simulations to save money and time. This design will also support tactical data link interfaces with operational systems
- (U) \$ 207 In support of approximately 175 Temporary Duty (TDY) travels, office supplies, and host base support
- (U) \$ 62 Defense Simulation Internet (DSI) provides flexibility, dial-up connectivity between TACCSF and various other M&S facilities.
- (U) \$ 5,272 Total

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<p>(U) <u>FY 1999 (\$ in Thousands):</u></p> <ul style="list-style-type: none"> - (U) \$ 3,790 Continue to maintain core structure to support users conducting RDT&E, mission rehearsal, and concepts of operation development - (U) \$ 1,134 Continue to support requirements definition, test support, scenario development, analysis, system engineering support, and VV&A of core system - (U) \$ 248 In support of approximately 175 TDY's, office supplies, and host base support - (U) \$ 100 DIS provides flexibility, dial-up connectivity between TACCSF and various other M&S facilities. - (U) \$ 5,272 Total <p>(U) <u>FY 2000 (\$ in Thousands):</u></p> <ul style="list-style-type: none"> - (U) \$ 3,843 Continue to maintain core structure to support users conducting RDT&E, mission rehearsal, and concepts of operation development. - (U) \$ 1,000 Continue to support requirements definition, test support, scenario development, analysis, system engineering support, and VV&A of core system. - (U) \$ 249 In support of approximately 175 TDY's, office supplies, and host base support - (U) \$ 100 DIS provides flexibility, dial-up connectivity between TACCSF and various other M&S facilities. - (U) \$ 5,192 Total <p>(U) <u>FY 2001 (\$ in Thousands):</u></p> <ul style="list-style-type: none"> - (U) \$ 4,092 Continue to maintain core structure to support users conducting RDT&E, mission rehearsal, and concepts of operation development. - (U) \$ 1,066 Continue to support requirements definition, test support, scenario development, analysis, system engineering support, and VV&A of core system. - (U) \$ 250 In support of approximately 175 TDY's, office supplies, and host base support - (U) \$ 100 DIS provides flexibility, dial-up connectivity between TACCSF and various other M&S facilities. - (U) \$ 5,508 Total <p>(U) B. Budget Activity Justification: This program is in budget activity 7 - Operation System Development, because it provides RDT&E funding for the continued development and upgrade of the Air Force's premier warfighter-in-the-loop simulation facility.</p>		
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(U) **C. Program Change Summary (\$ in Thousands)**

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Total Cost</u>
(U) FY 1999 President's Budget	0	5,287	5,287	5,613	Continuing
(U) Appropriated Value	5,140				
(U) Adjustments to Appropriated Value					
a. Cong Reductions		-15			
b. SBIR					
c. Omnibus or Other Above Threshold Reprogram					
d. Below Threshold Reprogramming	+132				
(U) Adjustments to Budget Years Since FY 1999 PB			-95	-105	
(U) Current Budget Submit/FY 2000 PB	5,272	5,272	5,192	5,508	Continuing

(U) Significant Program Changes: None.

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(U) **D. Other Program Funding Summary (\$ in Thousands)**
(N/A)

(U) **E. Acquisition Strategy:**
Provides funds for development, upgrade, and maintenance of virtual simulators. Simulators include Airborne Warning and Control Systems (AWACS), Joint Surveillance Attack Radar System (JSTARS), Advanced Airborne Sensor, Airborne Laser (ABL) TSQ-73 Fire Direction Center, PATRIOT and HAWK battalion and batteries and the F-15C to name a few.

(U) **F. Schedule Profile**

	<u>FY 1998</u>				<u>FY 1999</u>				<u>FY 2000</u>				<u>FY 2001</u>			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
(U) Maintain Core Structure	X			X	X			X	X			X	X			X
(U) Continue Technical Support	X			X	X			X	X			X	X			X
(U) Support DIS & HLA	X			X					X			X	X			X
(U) Unit Ops Exp	X			X	X			X	X			X	X			X
(U) DSI Service Fee	X			X	X			X	X			X	X			X
(U) Rehost AWACS & MCE					X			X								

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)										DATE February 1999	
BUDGET ACTIVITY 7 - Operational System Development					PE NUMBER AND TITLE 0207605F Wargaming and Simulation Centers					PROJECT 2888	
(U) A. <u>Project Cost Breakdown (\$ in Thousands)</u>											
					<u>*FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>			
(U) Cost Categories											
(U) a. Software Development											
					3,837	3,796	3,659	3,999			
(U) b. Contractor Support											
					1,055	1,055	1,080	1,029			
(U) c. Program Management Support											
					380	421	453	480			
(U) Total											
					5,272	5,272	5,192	5,508			
(U) B. <u>Budget Acquisition History and Planning Information (\$ in Thousands)</u>											
Performing Organizations:											
Contractor or Government Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Performing Activity EAC	Project Office EAC	Total Prior to FY 1998	Budget FY 1998	Budget FY 1999	Budget FY 2000	Budget FY 2001	Budget to Complete	Total Program
<u>Product Development Organizations</u>											
Det 4, 505 th CCEG		1 Jan 90	continuing	continuing	0	5,272	5,272	5,192	5,508	continuing	continuing
<u>Support and Management Organizations</u>											
None											
<u>Test and Evaluation Organizations</u>											
None											
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(U) B. <u>Budget Acquisition History and Planning Information Continued (\$ in Thousands)</u>										
Government Furnished Property: N/A										
<u>Item Description</u>	<u>Contract Method/Type or Funding Vehicle</u>	<u>Award or Obligation Date</u>	<u>Delivery Date</u>	<u>Total Prior to FY 1998</u>	<u>Budget FY 1998</u>	<u>Budget FY 1999</u>	<u>Budget FY 2000</u>	<u>Budget FY 2001</u>	<u>Budget to Complete</u>	<u>Total Program</u>
<u>Product Development Property</u>										
None										
<u>Support and Management Property</u>										
None										
<u>Test and Evaluation Property</u>										
None										
Subtotal Product Development				0	5,272	5,272	5,192	5,508	continuing	continuing
Subtotal Support and Management										
Subtotal Test and Evaluation										
Total Project				0	5,272	5,272	5,192	5,508	continuing	continuing
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