

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)

February 2003

BUDGET ACTIVITY 6 - Management support	PE NUMBER AND TITLE 0604256A - THREAT SIMULATOR DEVELOPMENT	PROJECT 976						
COST (In Thousands)	FY 2002 Actual	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate
976 ARMY THREAT SIM (ATS)	19896	18158	17751	18915	18173	15048	15333	15699

A. Mission Description and Budget Item Justification: This program supports the design, development, integration and fielding of realistic mobile threat simulators and realistic threat simulation products utilized in Army training, developmental and operational tests. Army Threat Simulator and Threat Simulation products are utilized to populate test battlefields for US Army Test and Evaluation Command (ATEC)-conducted operational tests, and to support Program Executive Office (PEO) required user testing in System Integration Laboratories and hardware/simulation in-the-loop facilities. Army threat simulator and threat simulation products developed or fielded under this program support Army wide requirements defined in the AMC chartered Threat Simulator and Simulation Program Plan (TSPP) that are identified as non-system specific threat product requirements. Each capability is pursued in concert and coordination with existing Army and tri-service capabilities to eliminate duplication of products and services, while providing the proper mix of resources needed to support Army testing and training. These battlefield simulators represent systems (e.g. missile systems; command, control and communications systems; electronic warfare systems; helicopters; etc.) that are used to portray a realistic threat environment during testing of US weapon systems. Simulator development is responsive to Office of the Secretary of Defense and General Accounting Office concerns that the Army conduct operational testing in a realistic threat environment. While this project originally funded simulators representing Soviet equipment, the changing world order has expanded the scope of this program to address rest of world threats. Actual threat equipment is acquired when appropriate in lieu of development. Total package fielding will still be required (i.e., instrumentation, operations and maintenance, manuals, new equipment training, etc.). Threat simulator development is accomplished under the auspices of the Project Manager for Instrumentation, Targets, and Threat Simulators (PM ITTS) and the Director, Operational Test and Evaluation, Threat Simulator Investment Working Group. These affiliations minimize any development duplication within the U.S. Army or Department of Defense (DoD). This project supports the Legacy to Objective transition path of the Transformation Campaign Plan (TCP).

<u>Accomplishments/Planned Program</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
Developed XMAPS threat system.	1743	0	0	0
Develop Intelligence and Electronic Warfare scenario generation system for test scenario planning and execution.	3055	3145	8074	7832
Develop product improvements for XM11S threat system.	2644	3674	4069	4859
Completed instrumentation and fielding of XM70A threat systems.	2400	0	0	0
Continue instrumentation and fielding of Threat Mines Simulator.	2098	1048	0	0
Completed hardware-in-the-loop simulations of infra-red threat surface-to-air missile systems.	1540	0	0	0
Develop Information Assurance Test Tool (IATT) Threat system.	1958	2557	2722	1598

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<u>Accomplishments/Planned Program (continued)</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
Developed Next Generation Anti-Tank Guided Missile (ATGM) hardware seeker system.	908	0	0	0
Developed Advanced Cognitive Reasoning Technology simulator.	1000	0	0	0
Develop Radio Frequency Surface to Air Missile Threat Simulator.	1000	2100	0	0
Developed and integrated critically required initial fielding components for the XM43A Anti-Aircraft Artillery system.	1550	0	0	0
Validate threat simulators/simulations to ensure they are available for operational test.	0	602	805	529
Develop a target acquisition and designation package for Unmanned Aerial Vehicle simulator.	0	1227	0	1797
Conduct Radar Surveillance and Target Acquisition (RSTA) Study.	0	727	0	0
Conduct Injection Jammer Proof of Concept Study.	0	978	0	0
Develop Automated Intelligence and Electronic Warfare Test System (AI-EWTS) multiple emitters.	0	0	2081	1103
Develop Threat Deception Techniques to leverage field testing data into modeling and simulation as signature models.	0	0	0	1197
Develop Multi-Mode Top Attack Threat Simulator.	0	2100	0	0
Totals	19896	18158	17751	18915

<u>B. Program Change Summary</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
Previous President's Budget (FY 2003)	18857	15251	18590	13004
Current Budget (FY 2004/2005 PB)	19896	18158	17751	18915
Total Adjustments	1039	2907	-839	5911
Congressional program reductions				
Congressional rescissions	-92	-803		
Congressional increases		4200		
Reprogrammings	1534	-104		
SBIR/STTR Transfer	-403	-386		
Adjustments to Budget Years			-839	5911

Change Summary Explanation: Funding - FY 2003: Congressional increases for Multi-Mode Top Attack Threat Simulator (+2100) and Radio Frequency

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Surface to Air Missile (+2100). FY 2005: Funds realigned to support Intelligence and Electronic Warfare scenario generation system (+5911).