

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

February 2007

BUDGET ACTIVITY		PE NUMBER AND TITLE								
5 - System Development and Demonstration		0604780A - COMBINED ARMS TACTICAL TRAINER (CATT)								
COST (In Thousands)	FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost	41139	38471	37035	29652	21069	23804	15929	15121	Continuing	Continuing
571 CLOSE CBT TACT TRAINER	5829	3163	1603	1691	1348	1372	1397	1422	Continuing	Continuing
577 SOLDIER - COMBINED ARMS TACTICAL TRAINER	2875	2511							Continuing	Continuing
582 SYNTHETIC ENVIR CORE	19744	19282	23745	26588	18348	21064	14532	13699	Continuing	Continuing
585 AVIATION COMBINED ARMS TACTICAL TRAINER	12691	13515	11687	1373	1373	1368				42007

A. Mission Description and Budget Item Justification: The Combined Arms Tactical Trainer (CATT) is a family of combined arms simulation systems designed to support the Army's simulation-based Combined Arms Training Strategy. CATT enables units, from crew to the battalion task force level, to conduct a wide variety of combat tasks on a realistic, interactive synthetic battlefield. CATT's combination of manned simulators and staff officer workstations enables units to train as a combined arms team in a cost effective manner. CATT reinforces the successes and corrects the shortcomings of the Simulator Network (SIMNET) and Aviation Network (AIRNET) Demonstration Programs executed by the Defense Advanced Research Projects Agency (DARPA). The initial CATT system is the Close Combat Tactical Trainer (CCTT), which provides the underlying baseline (architecture, terrain databases, After Action Review [AAR], Semi-Automated Forces [SAF], and models/algorithms) for future CATT expansions, pre-planned product improvements and system enhancements. Reconfigurable Vehicle Simulator (RVS) variants will support the level of readiness required by the user at CCTT fixed sites in support of convoy operations. Synthetic Environment (SE) Core provides for the expansion of the Synthetic Environment baseline to include enhanced interoperability and the products and infrastructure to support current and future combat operations and Mission Rehearsal for operations currently required by the contemporary Operating Environment (COE). The first synthetic environments to be expanded are the Aviation Combined Arms Tactical Trainer (AVCATT) and the CCTT for both Active and Reserve components. Soldier CATT is a dismount-centric collective virtual training system designed to train dismounted soldiers, leaders and units (platoon through battalion). Soldier-CATT provides light infantry, Stryker Brigade Combat Team (SBCT), Ranger, SOF and Land Warrior equipped Brigade Combat Team (BCT) commanders a highly tolerable, deployable, collective combined arms training and mission rehearsal system with an AAR capability. It provides the soldier/leader a virtual link into the Live, Virtual, and Constructive training environment and provides the core architecture that will enable dismounted infantry for Future Combat System (FCS) equipped Unit of Action units. By practicing skills in CATT, units are able to make more effective use of scarce resources and costly live fire and maneuver exercises as well as train tasks deemed too hazardous to conduct in the field. Fielded in both fixed site and mobile/transportable versions, CATT enables both Active and Reserve component units to prepare for real world contingency missions. By being able to process a wide array of terrain databases and modify the behavior of the computer generated opposing forces, CATT offers a virtually unlimited array of training options to support the Army's many regional contingency missions. The combination of tough field and live fire training and realistic simulation training in CATT is the catalyst to prepare soldiers and their leaders for the uncertainties they will face in an unpredictable world of current and future combat operations, especially in support of GWOT operations.

FY2008/FY2009 funding for CCTT will provide the U.S. Army with additional variants for Reconfigurable Vehicle Simulator (RVS) in support of convoy operations and reconnaissance. FY2008/FY2009 funds for SE Core will provide the U.S. Army with continued development of a series of interoperable software and hardware components that will enable an Army Common Virtual Environment to train with integrated virtual simulations. SE Core will provide standardized, rapid terrain generation process, a master

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terrain database facility, Objective OneSAF Integration and Common Virtual Components (CVCs). FY2008/FY2009 funding will develop refinements to the AVCATT system to include but not limited to: Armed Reconnaissance Helicopter capabilities and SE Core Inegration. Funding will also support interoperability with other combined arms simulators, life cycle baseline enhancements to the AVCATT infrastructure and technology obsolescence. These refinements will improve readiness by providing more realistic collective training in support of current and future combat operations, GWOT and the flexibility to support Army modularity.

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<u>B. Program Change Summary</u>	FY 2006	FY 2007	FY 2008	FY 2009
Previous President's Budget (FY 2007)	43344	39901	45486	32587
Current BES/President's Budget (FY 2008/2009)	41139	38471	37035	29652
Total Adjustments	-2205	-1430	-8451	-2935
Congressional Program Reductions		-3147		
Congressional Rescissions				
Congressional Increases		2000		
Reprogrammings	-1020	-283		
SBIR/STTR Transfer	-1185			
Adjustments to Budget Years			-8451	-2935

FY 2008/2009: Funds realigned (FY08:\$8,451/FY09:\$2,935) to higher priority requirements.

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BUDGET ACTIVITY 5 - System Development and Demonstration		PE NUMBER AND TITLE 0604780A - COMBINED ARMS TACTICAL TRAINER (CATT)							PROJECT 571	
COST (In Thousands)	FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total Cost
571 CLOSE CBT TACT TRAINER	5829	3163	1603	1691	1348	1372	1397	1422	Continuing	Continuing

A. Mission Description and Budget Item Justification: This program provides for System Development and Demonstration (SDD), Pre-Planned Product Improvements (P3I), and Reconfigurable Vehicle Simulator (RVS) variants for the Close Combat Tactical Trainer (CCTT), which will enhance readiness for both Active and Reserve component forces to support execution of current and future combat operations including the Global War on Terror (GWOT). The program develops a networked system of interactive computer driven simulators, emulators and semi-automated forces that replicate combat vehicles and weapon systems, combat support systems, combat service support systems, and command and control systems to create a fully integrated real-time collective task training environment. This trainer will allow soldiers to practice, repetitively, tactics, techniques and procedures that, if performed on real equipment, would be too hazardous, time-consuming and expensive. These trainers enhance realism and allow soldiers and units to learn tactical combat lessons on maneuver, command and control, convoy operations, and improved teamwork for increased survivability. The pre-planned product improvements enhance CCTT capabilities as a tactical trainer and maintain concurrency with the structural changes the current battle force is experiencing. These improvements will provide the interoperability with Aviation Combined Arms Tactical Trainer, Army Battle Command System (ABCS)[including Force XXI Battle Command Brigade and Below (FBCB2) and Army Tactical Command and Control System (ATCCS)], and other simulation systems needed to execute training for current and future combat operations and for GWOT.

FY2008/FY2009 funding for CCTT will provide the U.S. Army with additional variants for Reconfigurable Vehicle Simulator (RVS) in support of convoy operations and reconnaissance training.

<u>Accomplishments/Planned Program:</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
FY06: Developed and completed the base CCTT RVS module design with additional capabilities.	5612			
FY06-FY09: Supports government program management, engineering, technical contract, and continue operational evaluation support.	217	221	224	228
FY07-FY09: Continue development of RVS variants and design for obsolescence items.		2867	1379	1463
FY07: Small Business Innovative Research/Small Business Technology Transfer Programs.		75		
Total	5829	3163	1603	1691

<u>B. Other Program Funding Summary</u>	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Compl	Total Cost
OPA3, Appropriation NA0170 SIMNET/CCTT	82421	16852	67123	61091	40775	12187	6829	6979	Continuing	Continuing

Comment:

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C. Acquisition Strategy FY05 award was CPFF competitively awarded to LM STS for development of CCTT Reconfigurable Vehicle Simulator (RVS) with FY06 incremental funding for continued performance and incorporation of additional capabilities to CCTT RVS.

FY07 is a Small Business 8A Set Aside Award for development of RVS variants.

FY08/09 will be an Engineering Change Proposal (ECP) to a new competitively awarded CCTT RVS Production Contract.

ARMY RDT&E COST ANALYSIS (R3)

February 2007

BUDGET ACTIVITY			PE NUMBER AND TITLE									PROJECT		
5 - System Development and Demonstration			0604780A - COMBINED ARMS TACTICAL TRAINER (CATT)									571		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
CCTT SDD and Pre Planned Product Improvements (P3I)	Various	Various	245042										245042	245042
P3I and Development of RVS variants	C/CPFF	Lockheed Martin Corporation, Orlando, FL	4566	5612	1Q								10178	10178
Development of RVS Variants	SS/FP	DEI Services Corp., Winter Park, FL				2942	2Q						2942	2965
Continued Development of RVS Variants and Obsolescence Items	C/CPFF	TBS						1379	1-4Q	1463	1-4Q	4539	7381	7396
Subtotal:			249608	5612		2942		1379		1463		4539	265543	265581
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Engineering and Technical Support	MIPRs/T&M	Various activities	32062										32062	
Subtotal:			32062										32062	
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Subtotal:														
IV. Management Services	Contract Method &	Performing Activity & Location	Total PYs	FY 2006 Cost	FY 2006 Award	FY 2007 Cost	FY 2007 Award	FY 2008 Cost	FY 2008 Award	FY 2009 Cost	FY 2009 Award	Cost To Complet	Total Cost	Target Value of

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BUDGET ACTIVITY			PE NUMBER AND TITLE									PROJECT		
5 - System Development and Demonstration			0604780A - COMBINED ARMS TACTICAL TRAINER (CATT)									571		
	Type		Cost		Date		Date		Date		Date	e		Contract
Project Office Support	MIPR	PEO STRI/NAVAIR, Orlando, FL	15693	217	1-4Q	221	1-4Q	224	1-4Q	228	1-4Q	1000	17583	17583
Subtotal:			15693	217		221		224		228		1000	17583	17583
Project Total Cost:			297363	5829		3163		1603		1691		5539	315188	283164

Schedule Profile (R4 Exhibit)

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BUDGET ACTIVITY
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Event Name	FY 06				FY 07				FY 08				FY 09				FY 10				FY 11				FY 12				FY 13			
	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
P3I and Development of RVS Variants																																
Develop Reconfigurable Vehicle Simulator Variants and Obsolescence Items																																
Develop Additional Reconfigurable Vehicle Sim. Variants and Obsolescence Items																																

Schedule Detail (R4a Exhibit)

February 2007

BUDGET ACTIVITY 5 - System Development and Demonstration	PE NUMBER AND TITLE 0604780A - COMBINED ARMS TACTICAL TRAINER (CATT)	PROJECT 571
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<u>Schedule Detail</u>	<u>FY 2006</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>
P3I and Development of RVS Variants	1Q - 4Q	1Q - 2Q						
Develop Reconfigurable Vehicle Simulator Variants and Obsolescence Items		2Q - 4Q	1Q					
Develop Additional Reconfigurable Vehicle Sim. Variants and Obsolescence Items			1Q - 4Q					

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BUDGET ACTIVITY 5 - System Development and Demonstration		PE NUMBER AND TITLE 0604780A - COMBINED ARMS TACTICAL TRAINER (CATT)							PROJECT 582	
COST (In Thousands)	FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total Cost
582 SYNTHETIC ENVIR CORE	19744	19282	23745	26588	18348	21064	14532	13699	Continuing	Continuing

A. Mission Description and Budget Item Justification: This project supports the Synthetic Environment Core (SE Core) and is the Army's Common Virtual Environment (CVE) answer for linking virtual training simulations into an integrated and interoperable training system with fair fight capability that is sufficient for current and future combat operations, Mission Rehearsal, and Contemporary Operating Environment (COE) training. This CVE will link to the live and constructive environments for an integrated Live/Virtual/Constructive LVC capability to support Army Transformation and the Combined Arms Training Strategy. SE Core is a key element in the Army's Training Transformation Plan to link the Future Combat Systems (FCS) embedded multi-mode LVC training capability with Current and Stryker Forces and Joint Interagency Intergovernmental Multinational (JIIM) simulations.

Under SE Core, current and future virtual training devices will enable the Army to execute combined arms and joint training, mission planning and rehearsals at home station, en route and deployed locations critical to training for COE operations. SE Core consists of a series of interoperable software components that will be integrated into virtual simulations, enabling the Army's CVE and facilitating interoperability in a LVC Training Environment (TE). The components are Objective OneSAF (OOS) integration, Standard Rapid Terrain Database Generation process, master Terrain Database, open format, standard visual models, dynamic terrain, atmospheric effects, Chemical, Biological, Radiological, Nuclear and High Explosive (CBRNE) effects, common After Action Review (AAR), a long haul networking capability, Command, Control, Communications, Computers, Intelligence Surveillance and Reconnaissance (C4ISR) interfaces, training support packages and exercise management tools. The standard Terrain Database (TDB) generation process uses automated tools, processes and standard source data to create a Master Database (MDB). The MDB provides open format data that can be translated into correlated runtime databases to support the LVC TE and for mission planning/ rehearsal/execution in an operational environment. Once developed, SE Core's Common Virtual Components (CVCs) will reduce redundancy, increase realism and facilitate an integrated LVC TE.

FY2008/FY2009 funds for SE Core will provide common terrain databases from the Central Terrain Database Center and the establishment of one CONUS and one OCONUS Terrain Database Center. FY2008/FY2009 funds will also continue the integration of One Semi-Automated Forces (OneSAF) into the SE Core Architecture. OneSAF will replace the SAFs currently supporting CCTT and AVCATT and is the proposed SAF for Soldier CATT. Integration of OOS as the SAF for virtual simulations enables interoperability with the LVC TE. The SE Core Long Haul Network will continue with upgrades in integration and common visual models will continue development.

Accomplishments/Planned Program:	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
FY06: The Standard Terrain Database Generation Capability (STDGC) was developed. The architectural backbone for SE Core was established. SE Core successfully tested and demonstrated OneSAF integration into the CCTT and AVCATT. Terrain and visual entities were correlated and on the same terrain. Initial set of visual models were developed.	17674			
FY06-FY09: Provides program management, engineering, technical, contract, and test support for development of SE Core.	2070	2157	2683	2734
FY07-FY09: SE Core will provide common terrain databases from the Central Terrain Database Center and the establishment of CONUS and OCONUS Terrain Database Centers. Refinement of the STDGC will be made with the incorporation of advanced automated processing tools. Planned enhancements to OneSAF will continue to be integrated into the SE Core Architecture. Six Common Virtual		16582	21062	23854

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Components will be added - CBNRE, Net Ready capability, Atmospheric Effects, Dynamic Terrain, Exercise Management Tools, and Training Support Packages. Common Model development will continue.		
FY07: Small Business Innovative Research/Small Business Technology Transfer Programs		543
Total	19744	19282
		23745
		26588

<u>B. Other Program Funding Summary</u>	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Compl	Total Cost
OPA3, Appropriation NA0173 Aviation Combined Arms Tactical Trainer	53262	80231	67386	23264	10294	10521	10369	8094	Continuing	Continuing
OPA3, Appropriation NA0170 Close Combat Tactical Trainer (CCTT)	82421	16852	67123	61091	40775	12187	6829	6979	Continuing	Continuing

Comment:

C. Acquisition Strategy A competitive CPFF type contract for the development of SE Core Architecture & Integration (A&I) project was awarded in FY05. A follow-on A&I contract will be awarded in 1 QTR FY08. A competitive CPFF type contract for the development of SE Core Database Virtual Environment Development project was awarded in FY06.

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BUDGET ACTIVITY			PE NUMBER AND TITLE									PROJECT		
5 - System Development and Demonstration			0604780A - COMBINED ARMS TACTICAL TRAINER (CATT)									582		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Architecture and Integration	C/CPFF	Science Applications International Corporation, Orlando, FL	3953	8737	1Q	9004	1Q					Cont.	Cont.	Cont.
Architecture and Integration Follow-On	C/CPFF	Unknown						9919	1Q	8960	1Q		18879	
Master Database (MDB) Study	C/CPFF	Various	2011										2011	2011
Database Virtual Environment Development	C/CPFF	CAE, USA, Tampa, FL		8937	2Q	7301	1Q	11143	1Q	14894	1Q	Cont.	Cont.	Cont.
Subtotal:			5964	17674		16305		21062		23854		Cont.	Cont.	Cont.

Remarks: Raytheon Systems Co. has sold this part of their company to L-3Com.

II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Engineering Services & Technical Support	C/FFP/T&M	Morgan Research Corporation, Orlando, FL	172	367	1Q	923	1Q	943	1Q	963	1Q	Cont.	Cont.	Cont.
Subtotal:			172	367		923		943		963		Cont.	Cont.	Cont.

III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Test Support	MIPR	Test Community				125	3Q						125	
Subtotal:						125							125	

Remarks: Not Applicable

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BUDGET ACTIVITY 5 - System Development and Demonstration	PE NUMBER AND TITLE 0604780A - COMBINED ARMS TACTICAL TRAINER (CATT)	PROJECT 582
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IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Project Office Support	MIPR	PEO STRI/NAVAIR Orlando	1660	1703	1-4Q	1929	1-4Q	1740	1-4Q	1771	1-4Q	Cont.	Cont.	Cont.
Subtotal:			1660	1703		1929		1740		1771		Cont.	Cont.	Cont.

Project Total Cost:	7796	19744		19282		23745		26588		Cont.	Cont.	Cont.
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Schedule Profile (R4 Exhibit)

February 2007

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
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PROJECT
582

Event Name	FY 06				FY 07				FY 08				FY 09				FY 10				FY 11				FY 12				FY 13			
	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
(1) MDB & Facilities Study Complete																																
Architecture and Integration Development																																
Database Virtual Environment Development																																

Schedule Detail (R4a Exhibit)

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<u>Schedule Detail</u>	<u>FY 2006</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>
MDB & Facilities Study Complete	2Q							
Architecture and Integration Development	1Q - 4Q							
Database Virtual Environment Development	2Q - 4Q	1Q - 4Q						
Architecture and Integration Components & P3I	1Q - 4Q							
OneSAF Integration (KPP #1)	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 2Q				
Standard Terrain Process Capability Complete (KPP #2)		4Q						
Database Centers (KPP #2 Follow-On)		2Q - 4Q	1Q - 4Q					
Dynamic Terrain Complete (KPP#3)				2Q				
Atmospheric Effects Complete (KPP #4)				1Q				
Net Ready (KPP #5)				3Q				
C4ISR Complete (KPP #6)				4Q				

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BUDGET ACTIVITY 5 - System Development and Demonstration			PE NUMBER AND TITLE 0604780A - COMBINED ARMS TACTICAL TRAINER (CATT)						PROJECT 585	
COST (In Thousands)	FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total Cost
585 AVIATION COMBINED ARMS TACTICAL TRAINER	12691	13515	11687	1373	1373	1368				42007

A. Mission Description and Budget Item Justification: This project supports the Aviation Combined Arms Tactical Trainer (AVCATT) which is an Army aviation training system for both the Active and Reserve Component to provide mission rehearsal and training in support of the Global War on Terrorism (GWOT). AVCATT completed Initial Operational Test & Evaluation (IOT&E) on 1 August 2003 and received Full Rate Production Decision on 19 December 2003. A single suite of equipment consists of two (2) mobile trailers housing six (6) reconfigurable networked simulators that support the AH-64A/D, UH-60A/L, CH-47D, and OH-58D. In the future the Armed Reconnaissance Helicopter platform and an enhanced software engineering environment (SEE) will be added. Supporting roleplayer, semi-automated forces (SAF), and after action review (AAR) workstations are also provided as part of each suite. AVCATT is a fully mobile system, capable of utilizing shore and generator power and is transportable worldwide. AVCATT fully supports Army modularity. The AVCATT system will permit various aviation units to conduct collective task training on a real-time, computerized battlefield in a combined arms scenario by leveraging Synthetic Environment (SE) Core capabilities. Other required elements that are present on the modern, high intensity battlefield, such as the combat support and combat service support elements are an integral part of the simulation database. AVCATT is designed to provide realistic, high intensity collective and combined arms training to aviation units as well as the full spectrum of operations in support of current and future combat operations including GWOT. AVCATT supports the Aviation Transformation Plan and the Aviation Combined Arms Training Strategy. AVCATT also Supports Aviation Functional Area Assessment (FAA), providing collective, combined arms training. This system is designated a complementary program for the Future Combat System (FCS).

FY2008/FY2009 funding will develop refinements to the AVCATT system to include but not limited to: Armed Reconnaissance Helicopter capabilities and SE Core Ingegration. Funding will also support interoperability with other combined arms simulators, life cycle baseline enhancements to the AVCATT infrastructure and technology obsolescence.

<u>Accomplishments/Planned Program:</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
FY06: Intitiated the AVCATT software engineering environment (SEE) enhancement, initiated information technology classified operations capabilities, initiated completed implementation of version 1.0 Objective OneSAF, and completed Phase I system development of the new Image Generator for AVCATT suites.	12500			
FY07-FY09: Continues enhancement efforts on the SEE and classified operations capabilities. Initiates Phase II to integrate into AVCATT and SEE the first article development of the new Image Generator. Continue refinements to the system to include: Armed Reconnaissance Helicopter development, support to interoperability with other combined arms simulators through implementation of Synthetic Environment (SE) Core common products such as Objective One SAF, Common Virtual Components (CVC) and common data bases. In addition, provide improved interoperability and improved interaction between live and virtual systems.		10972	11518	1325
FY07 Congressional adds for AVCATT Gunner Chief Crew Station (GCCS) and Longbow Block III.		2000		
FY06-FY09: Provides government program management, engineering, technical, contract, and test support for AVCATT refinements.	191	162	169	48
Small Business Innovative Research (SBIR)/Small Business Tachnology Transfer Programs (STTR)		381		

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BUDGET ACTIVITY 5 - System Development and Demonstration	PE NUMBER AND TITLE 0604780A - COMBINED ARMS TACTICAL TRAINER (CATT)	PROJECT 585
Total	12691	13515
	11687	1373

<u>B. Other Program Funding Summary</u>	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Compl	Total Cost
OPA3, Appropriation NA0173 Aviation Combined Arms Tactical Trainer	53262	80231	67386	23264	10294	10521	10369	8094	Continuing	Continuing

Comment:

C. Acquisition Strategy System Development and Demonstration (SDD) competitive contract against performance specification.

ARMY RDT&E COST ANALYSIS (R3)

February 2007

BUDGET ACTIVITY			PE NUMBER AND TITLE									PROJECT		
5 - System Development and Demonstration			0604780A - COMBINED ARMS TACTICAL TRAINER (CATT)									585		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
AVCATT	C/CPAF/FPIF/FFP	L3 Communications Corporation, Arlington, Texas	3008	12500	2Q	13353	2Q	11518	2Q	1325	2Q	Cont.	Cont.	Cont.
Subtotal:			3008	12500		13353		11518		1325		Cont.	Cont.	Cont.
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Subtotal:														
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Subtotal:														
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Project Office Support		PEO STRI, Orlando, Florida	153	191	1-4Q	162	1-4Q	169	1-4Q	48	1-4Q	Cont.	Cont.	Cont.
Subtotal:			153	191		162		169		48		Cont.	Cont.	Cont.

ARMY RDT&E COST ANALYSIS (R3)

February 2007

BUDGET ACTIVITY 5 - System Development and Demonstration	PE NUMBER AND TITLE 0604780A - COMBINED ARMS TACTICAL TRAINER (CATT)							PROJECT 585		
Project Total Cost:	3161	12691		13515		11687	1373	Cont.	Cont.	Cont.

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Schedule Detail (R4a Exhibit)

February 2007

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
0604780A - COMBINED ARMS TACTICAL TRAINER (CATT)

PROJECT
585

<u>Schedule Detail</u>	<u>FY 2006</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>
Synthetic Environment Core (SE Core) Integration (includes OOS Integration)	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 2Q				
Mission Rehearsal Capability/Enhanced Image Generator (IG)	2Q - 4Q	1Q - 4Q	1Q - 4Q					
Required Interoperability With Other Combined Arms Simulators	1Q - 4Q							
Life Cycle Baseline Enhancements to the Infrastructure & Technology Obsolescence	1Q - 4Q							
Software Engineering Environment Enhancement (SEE)	3Q - 4Q	1Q - 4Q						
Classified Operations	1Q - 4Q	1Q - 4Q						
Armed Reconnaissance Helicopter Development		2Q - 4Q	1Q - 4Q	1Q - 2Q				
Gunner Chief Crew Station		2Q - 4Q	1Q - 2Q					
Longbow Block III		2Q - 4Q	1Q - 2Q					