

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)							February 2003				
BUDGET ACTIVITY 5 - System Development and Demonstration				PE NUMBER AND TITLE 0604715A - Non-System Training Devices - Eng Dev							
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	Cost to Complete	Total Cost
Total Program Element (PE) Cost		29010	56002	71616	62634	43472	59555	38904	38245	Continuing	Continuing
241	NSTD COMBINED ARMS	27630	54976	70024	60266	42144	58182	37518	36826	0	436465
573	STRICOM/NAWCTSD SUPPORT	1380	1026	1592	2368	1328	1373	1386	1419	Continuing	Continuing
<p><u>A. Mission Description and Budget Item Justification:</u>Program Element funds development of Non-System Training Devices to support force-on-force training at the Combat Training Centers (CTC), general military training and training on more than one item/system, as compared with system devices which are developed in support of a specific item/weapon system. Training devices and training simulations help to modernize the forces through force multipliers that improve combat effectiveness by providing realistic training. Training devices maximize the transfer of knowledge, skills, and experience from the training situation to a combat situation. Force-on-force training at the National Training Center (NTC), Ft. Irwin, CA; Joint Readiness Training Center (JRTC), Ft. Polk, LA, and Combat Maneuver Training Center (CMTC), Hohenfels, Germany; and battle staff training in Battle Command Training Program (BCTP) provide increased combat readiness through realistic collective training in low, mid, and high intensity scenarios. Project 241, Non-System Training Devices-Combined Arms, develops simulation training devices for Army -wide use, including the CTCs. Project 573 supports salaries and travel.</p> <p>In FY04/05, project 241 Non-System Training Devices program line will develop prototype training devices to support Combined Arms (Infantry, Armor, Aviation, Air Defense, Artillery, Engineer, Chemical, and Support troops) training and multi-system training within the Army. In FY04/05, project 573 STRICOM/NAWCTSD SUPT will provide for minimum PEO STRI core operations supporting development of training devices and simulations by PEO STRI project managers (PM TRADE, PM ITTS, PM CATT and PM WARSIM).</p> <p>These systems support the Interim, Legacy, Objective, and Legacy to Objective transition paths of the Transformation Campaign Plan (TCP).</p>											

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<u>B. Program Change Summary</u>	FY 2002	FY 2003	FY 2004	FY 2005
Previous President's Budget (FY 2003)	28682	43650	62476	54407
Current Budget (FY 2004/2005 PB)	29010	56002	71616	62634
Total Adjustments	328	12352	9140	8227
Congressional program reductions		-1051		
Congressional rescissions		-322		
Congressional increases		15250		
Reprogrammings	1047			
SBIR/STTR Transfer	-719	-1525		
Adjustments to Budget Years			9140	8227

FY04/05 funding increases support additional requirements in development of prototype training devices such as SATCOM Principles Transformation Trainer (SPTT), Advanced Morse Mission Trainer (AMMT), Homestation Instrumentation Training System (HITS), and Basic Electronics Maintenance Trainer (BEMT).

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BUDGET ACTIVITY 5 - System Development and Demonstration				PE NUMBER AND TITLE 0604715A - Non-System Training Devices - Eng Dev				PROJECT 241		
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	Cost to Complete	Total Cost
241 NSTD COMBINED ARMS	27630	54976	70024	60266	42144	58182	37518	36826	0	436465
<p><u>A. Mission Description and Budget Item Justification:</u> This project is used to develop prototype training devices to support Combined Arms (Infantry, Armor, Aviation, Air Defense, Artillery, Engineer, Chemical, and Support troops) training and multi-system training within the Army, to include the Reserve Components.</p> <p>Corps Battle Simulation (CBS) is the Army's command and staff training simulation at the corps/division level. Tactical Simulation System (TACSIM) is the tactical intelligence module and Combat Service Support/Tactical Simulation System (CSS/TSS) provides logistics functions in support of warfighter exercises. The One Tactical Engagement Simulation System (One TESS) provides for an advanced, joint, collective, combined arms, live training system using tactical weapon system supported by a family of Training Aids, Devices, Simulations and Simulators (TADSS). The National Training Center Objective Instrumentation System (NTC OIS) provides a completely digital based system for full tactical system connectivity and High Level Architecture (HLA) comp atibility. The NTC Range Data Management System (NTC RDMS) Frequency Conversion develops the architecture to resolve the frequency usage conflict at NTC. The Combat Maneuver Training Center (CMTC) RDMS replaces RDMS infrastructure and the Data Communications Interfaces (DCIs) to ensure CMTC can sustain training operations. The CMTC SINGARS Infrastructure correctly integrates Range Measurement and Control Subsystem into the CMTC-IS communications structure. The CMTC Observer Contoller Communications Systems (OCCS) provides a communication system that operates on non-tactical frequencies for the Hohenfels Training Area at CMTC. The New Generation Army Targetry Systems (NGATS) program is an evolutionary, blocked approach acquisition program that continues to provide the development and planning to address shortcomings in non-NGATS targetry as well as emerging weapon system targetry requirements and technology insertion. The FY04/05 program will continue supporting the Live Training Transformation strategy Common Training Instrumentation Architecture (CTIA) and CTIA -compliant reusable components to implement Objective Instrumentation Systems (OISs) for the Maneuver CTCs, Homestations, Military Operations Urbanized Terrain (MOUT), CMTC RDMS, CMTC SINGARS Infrastructure, Digital Multi-Purpose Range Complexes (DMPRCs), and the Homestation Instrumentation Training System (HITS) which provides digital communications in the battle field. In FY 04/05, this project funds development of limited enhancements to Corps Battle Simulation to ensure training relevance until the system is replaced with objective system. In addition, the FY04/05 program will provide funding for emerging concepts and studies for training material needs and Army initiatives. The SATCOM Principles Transformation Trainer (SPTT) program will develop a Defense Satellite Communication (SATCOM) Training Device to meet the U. S. Army Signal School requirements as well as the Objective Force communication training requirements. The Advanced Morse Mission Trainer (AMMT) program will develop a training system to meet U. S. Army Intelligence School Morse Mission Training requirements. The Basic Electronics Maintenance Trainer (BEMT) program will support the basic electronics training of missile electronics repair, test, measurements, and diagnostics for Redstone Arsenal and Ft. Gordon.</p> <p>These systems support the Legacy, Interim and Objective transition path of the Transformation Campaign Plan.</p>										

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BUDGET ACTIVITY		PE NUMBER AND TITLE			PROJECT	
5 - System Development and Demonstration		0604715A - Non-System Training Devices - Eng Dev			241	
<u>Accomplishments/Planned Program</u>		FY 2002	FY 2003	FY 2004	FY 2005	
Completed Virtual Emergency Response Training System (VERTS) development efforts for Camp Dawson.		2474	0	0	0	
Continue development of devices, simulators and simulations to support training at the Combat Training Centers (CTCs), to include establishment of CTIA version 1.0 baselines for Live Training Transformation (LTT) product line to include NTC OIS, initiate development of renovation to the Range Data Measuring System and complete engineering development of Army Tactical Command and Control Systems (ATCCS) modules required for ABCS integration at NTC.		18643	42502	51901	21040	
Continue development of limited enhancements to CBS.		5369	3795	6609	4559	
Continue funding for emerging engineering manufacturing and development programs and studies for training material needs and Army initiatives.		0	580	0	0	
Continue NGATS program development and planning to address emerging weapon system targetry requirements to include: Digital Multi-Purpose Range Complex (DMPRC) acquisition contract effort; develop and test prototype Lookback/Shootback Targetry that senses opposing force and initiates appropriate response. Block I will correct shortcomings, in non-NGATS target systems' reliability, availability, maintainability, supportability, interoperability, deployability. Block II and future Blocks will address emerging weapon systems targetry requirements and technology insertion.		970	1031	1870	2142	
Develop limited enhancements to CSS/TSS.		0	0	785	480	
Initiated development of One Tactical Engagement Simulation System One TESS.		174	7068	3908	21011	
Develop limited enhancements and integration of TACSIM.		0	0	1520	1561	
Initiate development of HITS.		0	0	2757	0	
Initiate Front End Analysis of SPTT.		0	0	50	0	
Initiate development of prototype SPTT Training Device.		0	0	0	5860	
Initiate development of prototype AMMT.		0	0	150	3613	
Evaluate BEMT computerized instructional devices with the capability for computer based instruction and hands-on practical exercise training.		0	0	474	0	
Totals		27630	54976	70024	60266	

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BUDGET ACTIVITY 5 - System Development and Demonstration					PE NUMBER AND TITLE 0604715A - Non-System Training Devices - Eng Dev				PROJECT 241	
<u>B. Other Program Funding Summary</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Compl</u>	<u>Total Cost</u>
OPA3, Appropriation NA0100 Training Devices, Non-System	118965	156434	165254	220612	152338	164005	178507	189803	Continuing	Continuing
OPA3, Appropriation MA6601 CTC Support	8806	53018	36827	87097	108100	82458	95651	86797	Continuing	Continuing
<p>In FY 2002, IEWTPT transferred to PE 0604742 Proj 361. In FY 2002, WARSIM/WIM transferred to PE 0604742 Proj 362.</p> <p><u>C. Acquisition Strategy:</u>Competitive development efforts based on performance specifications.</p>										

ARMY RDT&E COST ANALYSIS(R-3)									February 2003			
BUDGET ACTIVITY 5 - System Development and Demonstration					PE NUMBER AND TITLE 0604715A - Non-System Training Devices - Eng Dev					PROJECT 241		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . CBS Development	C/FFP	JPL, Cal Tech, Pasadena, CA	31143	3200	1-4Q	5849	1Q	3739	1Q	Continue	43931	Continue
b . TACSIM Enhancement Development	C/FFP	TBD	0	0		1220	1-2Q	1224	1Q	Continue	2444	Continue
c . CSS/TSS Upgrade Development	TBD	TBD	0	0		485	1-2Q	328	1Q	Continue	813	Continue
d . ABCS Integration	C/CPFF	ARL, Univ Texas, TX	11306	0		0		0		0	11306	11306
e . NGATS	T & M	AMCOM, Redstone Arsenal, AL	3416	677	1Q	1215	1Q	1392	1Q	Continue	6700	Continue
f . NTC-OIS	CPAF	Lockheed Martin Corp, Orlando, FL	6493	13130	2Q	45479	2Q	17299	2Q	Continue	82401	Continue
g . CTIA	C/FFP	Lockheed Martin Inc., Orlando, FL	18125	10016	2Q	4225	2Q	4200	2Q	Continue	36566	Continue
h . One TESS	TBD	TBD	0	6348	2Q	3158	2Q	20161	1Q	Continue	29667	Continue
i . CMTC OCCS, RDMS & Sincgars Infrastrucure	FFP	TBD	65	3119	2Q	1465	1Q	0		0	4649	7788
j . NTC RDMS	FFP	SAIC, San Diego, CA	3812	0		0		0		0	3812	3812

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BUDGET ACTIVITY 5 - System Development and Demonstration					PE NUMBER AND TITLE 0604715A - Non-System Training Devices - Eng Dev					PROJECT 241		
I. Product Development (continued)	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
k . VERTS	FFP	SAIC, San Diego, CA	2474	0		0		0		0	2474	2541
l . HITS	TBD	TBD	0	0		2482	2Q	0		0	2482	0
m . SPTT	TBD	TBD	0	0		0		5474	1Q	0	5474	0
n . AMMT	TBD	TBD	0	0		0		3227	1Q	0	3227	0
o . BEMT	SS/FFP	Nida Corp., Melbourne, FL	0	0		349	3Q	0		0	349	0
p . CTIA, NTC Fiber Optic	FFP	SAIC, San Diego, CA	0	15000	3-4Q	0		0		0	15000	0
Subtotal:			76834	51490		65927		57044		Continue	251295	Continue

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BUDGET ACTIVITY 5 - System Development and Demonstration					PE NUMBER AND TITLE 0604715A - Non-System Training Devices - Eng Dev					PROJECT 241		
II. Support Cost	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . CBS Engineering & Technical Support	Various	Multiple	515	305	1Q	375	1Q	420		Continue	1615	Continue
b . TACSIM Engineering & Technical Support	Various	Multiple	0	0		55	1Q	80	1Q	Continue	135	Continue
c . CSS/TSS Engineering & Technical Support	TBD	TBD	0	0		95	1Q	42	1Q	Continue	137	Continue
d . NTC-OIS	Various	Multiple	6843	1026	1-4Q	1224	1-4Q	1109	1-4Q	Continue	10202	Continue
e . ABCS Integration	C/FFP	Madison Res Corp, Orlando, FL	4064	0		0		0		0	4064	4512
f . NGATS	T&M	AMCOM, Redstone Arsenal, AL	1280	354	1Q	655	1Q	750	1Q	Continue	3039	Continue
g . CTIA	MIPR	Various	3025	937	1-4Q	775	1-4Q	800	1-4Q	Continue	5537	Continue
h . Concept Exploration	Multiple	Various	908	580	1-3Q	0		0		Continue	1488	Continue
i . OneTESS	Multiple	Various	0	720	1-4Q	750	1-4Q	850	1-4Q	Continue	Continue	0
j . CMTC OCCS, RDMS and Sincgars Infrastructure	Multiple	Various	0	300	1-4Q	325	1-4Q	0		0	625	625

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II. Support Cost (continued)	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
k . HITS	Multiple	Various	0	0		275	1-4Q	0		0	275	0
Subtotal:			16635	4222		4529		4051		Continue	Continue	Continue
III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . CBS Test Support	Various	Multiple	59	75	1Q	135	1Q	130	1Q	Continue	399	Continue
b . TACSIM Accreditation Testing	Various	Multiple	0	0		80	1-3Q	85	1-3Q	Continue	165	Continue
c . CSS/TSS VV&A	TBD	TBD	0	0		60	2Q	45	2Q	Continue	105	Continue
Subtotal:			59	75		275		260		Continue	669	Continue

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IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . CBS Program Management	Various	PEO STRI/NAVAIR, Orlando, FL	313	215	1Q	250	1Q	270	1Q	Continue	1048	Continue
b . SPTT Program Management	MIPR	PEO STRI/NAVAIR, Orlando, FL	0	0		50		386	1Q	0	436	0
c . TACSIM Program Management	Various	PEO STRI/NAVAIR, Orlando, FL	0	0		165	1Q	172	1Q	Continue	337	Continue
d . CSS/TSS Program Management	Various	PEO STRI/NAVAIR, Orlando, FL	0	0		145	1Q	65	1Q	Continue	210	Continue
e . AMMT Program Management	MIPR	PEO STRI/NAVAIR, Orlando, FL	0	0		150	1Q	386	1Q	0	536	0
f . BEMT program Management	MIPR	PEO STRI/NAVAIR, Orlando, FL	0	0		125	1Q	0		0	125	0
Subtotal:			313	215		885		1279		Continue	2692	Continue
Project Total Cost:			93841	56002		71616		62634		Continue	Continue	Continue

Schedule Profile Detail (R-4a Exhibit)							February 2003	
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<u>Schedule Detail</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
CBS Contract Award	1Q	1Q	1Q	1Q	1Q			
NTC OIS MS B		2Q						
NTC OIS Block 1 Review				1Q				
ABCS Integration Completion	4Q							
NGATS Contract Award	2Q	1Q	1Q	1Q				
CTIA MS B	2Q							
CTIA Development Contract Award		2Q	2Q	2Q				
CMTC OCCS, RDMS & SINCGARS Cont Awd		1Q	1Q	1Q				
One TESS Contract Award		2Q	2Q	1Q				
BEMT Equipment Delivery			3Q					
SPTT and AMMT Contract Award				1Q				
Deliver SPTT and AMMT Development Suites					2Q			
TACSIM Enhancement Development Contract Award			2Q	1Q				
CSS/TSS Upgrade Development Contract Award			2Q	1Q				
HITS Contract Award			2Q					
VERTS Contract Award	3Q							

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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	Cost to Complete	Total Cost
573 STRICOM/NAWCTSD SUPPORT	1380	1026	1592	2368	1328	1373	1386	1419	Continuing	Continuing
<p><u>A. Mission Description and Budget Item Justification:</u> In support of Non-System Training Devices (NSTD), this project funds the US Army Program Executive Officer Simulation, Training and Instrumentation (PEO STRI) core operations supporting development of training devices and simulations by PEO STRI project managers (PM TRADE, PM ITTS, PM CATT and PM WARSIM). FYs 02-09 project funds labor in support of command operations.</p>										
<u>Accomplishments/Planned Program</u>							<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
PEO STRI labor in support of project managers PM TRADE, PM ITTS and PM CATT and PM WARSIM.							1380	1026	1592	2368
Totals							1380	1026	1592	2368
<p><u>B. Other Program Funding Summary:</u> Not applicable for this item.</p>										
<p><u>C. Acquisition Strategy:</u> Not Applicable.</p>										