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

February 2003

BUDGET ACTIVITY	PE NUMBER AND TITLE
5 - System Development and Demonstration	**0604742A - CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT**

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	64279	43813	16994	1155	1193	1180	1226	1252	Continuing	131092
361 INTELLIGENCE SIMULATION SYSTEMS	4144	7152	2274	1155	1193	1180	1226	1252	Continuing	19576
362 WARFIGHTER SIMULATION	60135	36661	14720	0	0	0	0	0	0	111516

A. Mission Description and Budget Item Justification: This program element funds the development of constructive and wargame simulations used to realistically train commanders and their battlestaffs on today's complex battlefield conditions. Project 361 funds the development of systems to train Army military intelligence analysts. In FY04/05, the funding continues and completes the initial operational capability development and test of the Intelligence Electronic Warfare Tactical Proficiency Trainer (IEWTPT), which will provide Battle Command training by creating a realistic intelligence information environment that is exploited and reported by Military Intelligence (MI) soldiers to battle commanders and staff. Project 362, Warfighters' Simulation (WARSIM) develops the Army's premier wargame simulation for training leaders and battlestaffs at Brigade, Division, Corps, and echelons above Corps. It also developed the Land component for the Joint Simulation System (JSIMS). WARSIM will provide functionality not currently available (digital operations, stability and support operations, information ops), link to unit organizational Command, Control, Communications, Computers and Integration (C4I) equipment, improve exercise generation and after-action reporting, and significantly reduce the number of role players required to support training exercises, thus reducing operational costs.

This system supports the Objective path of the Transformation Campaign Plan (TCP). These projects transferred in FY02 from PE 604715A, Projects 241 and 396.

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CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT

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

February 2003

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
0604742A - CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT

B. Program Change Summary	FY 2002	FY 2003	FY 2004	FY 2005
Previous President's Budget (FY 2003)	65613	53294	31297	10691
Current Budget (FY 2004/2005 PB)	64279	43813	16994	1155
Total Adjustments	-1334	-9481	-14303	-9536
Congressional program reductions	-9	-8108		
Congressional rescissions	-321	-252		
Congressional increases				
Reprogrammings	590			
SBIR/STTR Transfer	-1594	-1121		
Adjustments to Budget Years			-14303	-9536

This Program Element was established and the program funding transferred from PE 0604715A, Projects 241 and 396 in FY02.

FY04/05: WARSIM funding after FY04 was realigned to higher Army priority objectives. The FY04 funding continues Army battlestaff training system development to provide effective, Title 10 compliant, training to improve readiness.

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CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT

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Exhibit R-2
Budget Item Justification

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

February 2003

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
5 - System Development and Demonstration	0604742A - CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT	361

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
361 INTELLIGENCE SIMULATION SYSTEMS	4144	7152	2274	1155	1193	1180	1226	1252	Continuing	19576

A. Mission Description and Budget Item Justification: This project funds the development of systems to realistically train Army military intelligence analysts. The FY04/05 funding continues, completes development and tests the initial operational capability of the Intelligence Electronic Warfare Tactical Proficiency Trainer (IEWTPT). IEWTPT will provide Battle Command training by creating a realistic intelligence information environment that is exploited and reported by Military Intelligence (MI) soldiers to battle commanders and staff.

This system supports the Objective transition path of the Transformation Campaign Plan (TCP).

Accomplishments/Planned Program	FY 2002	FY 2003	FY 2004	FY 2005
Continued development of IEWTPT.	3198	5943	600	508
Continues IEWTPT Program Management support	487	667	512	302
Continues IEWTPT Test planning and execution.	261	318	922	200
Continues IEWTPT Systems engineering, documentation, and Security accreditation and certification.IEWTPT Engineering Change Proposals.	198	224	240	145
Totals	4144	7152	2274	1155

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INTELLIGENCE SIMULATION SYSTEMS

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

February 2003

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
5 - System Development and Demonstration	**0604742A - CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT**	**361**

B. Other Program Funding Summary	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
OPA3, Appropriation NA0100, Training Devices, Nonsystem	118965	156434	165254	220612	152338	164005	178507	189803	Continuing	Continuing

C. Acquisition Strategy: Competitive development based on performance specifications.

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INTELLIGENCE SIMULATION SYSTEMS

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Exhibit R-2A
Budget Item Justification

ARMY RDT&E COST ANALYSIS(R-3)

February 2003

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
0604742A - CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT

PROJECT
361

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 . IEWTPT System Dev & Demo	CPIF	Gen Dynamics Decision Systems, Orlando, FL	6983	5943	1-3Q	777	1-3Q	652	1Q	Continue	14355	Continue
Subtotal:			6983	5943		777		652		Continue	14355	Continue

Remarks: This program transferred from PE 604715A, Project D241 in FY02.

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 . IEWTPT Engineering & Technical Support	Multiple	Various	587	580	1-4Q	227	1-4Q	157	1-4Q	Continue	1551	Continue
Subtotal:			587	580		227		157		Continue	1551	Continue

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INTELLIGENCE SIMULATION SYSTEMS

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Exhibit R-3
Cost Analysis

ARMY RDT&E COST ANALYSIS(R-3)

February 2003

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
0604742A - CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT

PROJECT
361

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 . IEWTPT Development Test	Various	Multiple	90	75	1Q	130	1Q	35	1Q	Continue	330	Continue
b . IEWTPT Operational Test	MIPR	ATEC	87	125	2Q	792	3Q	165	2Q	0	1169	0
c . Test Engineering Support	MIPR	NAVAIR Orlando (was NAWC-TSD)	84	118	1Q	0		0		0	202	0
Subtotal:			261	318		922		200		Continue	1701	Continue

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 . IEWTPT Program Management	Various	Multiple	413	311	1Q	348	1Q	146	1Q	Continue	1218	Continue
Subtotal:			413	311		348		146		Continue	1218	Continue
Project Total Cost:			8244	7152		2274		1155		Continue	18825	Continue

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INTELLIGENCE SIMULATION SYSTEMS

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Exhibit R-3
Cost Analysis

Schedule Profile Detail (R-4a Exhibit)

February 2003

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
5 - System Development and Demonstration	**0604742A - CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT**	**361**

Schedule Detail	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
IEWTPT CONTRACT AWARD	1Q	1-3Q	1Q	1Q	1Q	1Q		
IEWTPT Operational Test			3Q					
IEWTPT Milestone C			4Q					
IEWTPT Material Release				1Q				

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INTELLIGENCE SIMULATION SYSTEMS

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Exhibit R-4a
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ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit) | February 2003

BUDGET ACTIVITY **5 - System Development and Demonstration**	PE NUMBER AND TITLE **0604742A - CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT**	PROJECT **362**

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
362 WARFIGHTER SIMULATION	60135	36661	14720	0	0	0	0	0	0	111516

A. Mission Description and Budget Item Justification: This Project funds the development of Warfighter Simulation (WARSIM), the Army's premier wargaming simulation for training leaders and battlestaffs at Division, Corps, and echelons above Corps. WARSIM will interoperate with OneSAF and other simulations, so that a warfighter training exercise can represent in simulation all Army echelons. It also developed the Land component for the Joint Simulation System (JSIMS) and the Joint Tactical Intelligence Model for JSIMS Version 1. WARSIM will provide functionality not currently available (digital operations, stability and support operations, information ops), link to unit organic C4I equipment, improve exercise generation and after-action reporting. The FY04 funding continues the development of the Army training system, integration and system evaluation.

This system supports the Objective transition path of the Transformation Campaign Plan (TCP).

Accomplishments/Planned Program	FY 2002	FY 2003	FY 2004	FY 2005
Completed the software development and integration of WARSIM to provide Joint training capability for JSIMS Version 1.0 and support of JSIMS user demonstration. Includes prime contract closeout activities.	15493	10855	0	0
Completes software development and integration of Joint Tactical Intelligence Model (JTIM) within JSIMS.	6823	5382	0	0
Verify and Validate software models	378	823	535	0
Develop and integrate JSIMS Common Component Work Station (CCWS) and system Technical Control improvements.	6152	1560	0	0
Continue the software development, integration and test of functionality to provide Army warfighter training capability.	31289	13554	8765	0
Develope user interface enhancements for Army training applications.	0	2450	2710	0
Develope and evaluate system performance and conduct system test events	0	2037	2710	0
Totals	60135	36661	14720	0

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)	February 2003

BUDGET ACTIVITY **5 - System Development and Demonstration**	PE NUMBER AND TITLE **0604742A - CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT**	PROJECT **362**

B. Other Program Funding Summary: Not applicable for this item.

C. Acquisition Strategy: Competitive development based on performance specifications.

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
5 - System Development and Demonstration	**0604742A - CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT**	**362**

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 . JSIMS Land Component Systems Development	C/CPAF	Lockheed Martin Info Sys, Orlando FL	35668	8920	1-3Q	0		0		0	44588	0
b . JTIM Systems Development	C/CPAF	Veridian Sys Solutions, Orlando FL	6723	5696	1-3Q	0		0		0	12419	0
c . JSIMS CCWS and Tech Control	C/CPAF	Lockheed Martin Info Sys, Orlando	7338	1256	1Q	0		0		0	8594	0
d . WARSIM Development of Army Training System	C/CPAF	Lcokheed Martin Info Sys, Orlando FL	0	9320	2-3Q	7443	1-3Q	0		0	16763	0
Subtotal:			49729	25192		7443		0		0	82364	0

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WARFIGHTER SIMULATION

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Cost Analysis

ARMY RDT&E COST ANALYSIS(R-3)

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BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
5 - System Development and Demonstration	**0604742A - CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT**	**362**

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 . Engineering & Tech Spt	Multiple	Various	2394	2714	1-4Q	820	1-4Q	0		0	5928	0
Subtotal:			2394	2714		820		0		0	5928	0

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 . Verification, Validation and Accreditation	Multiple	Various	928	991	1-3Q	480	1-3Q	0		0	2399	Continue
b . WARSIM System Evaluation and Test	Multiple	Various	2606	3472	1-2Q	2342	1-3Q	0		0	8420	Continue
Subtotal:			3534	4463		2822		0		0	10819	Continue

Remarks: System evaluation and test includes WARSIM developmental and operational testing and support to JSIMS operational test and includes both government and contractor costs.

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WARFIGHTER SIMULATION

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ARMY RDT&E COST ANALYSIS(R-3)

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BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
0604742A - CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT

PROJECT
362

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 . Program Management	Multiple	Various	4308	4048	1Q	3470	1-4Q	0		0	11826	0
b . Cost Analysis Support	T&M	Northrup Grumman-TASC, Orlando FL	170	244	2-3Q	165	2-3Q	0		0	579	0
Subtotal:			4478	4292		3635		0		0	12405	0
Project Total Cost:			60135	36661		14720		0		0	111516	Continue

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WARFIGHTER SIMULATION

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Schedule Profile Detail (R-4a Exhibit)

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BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
5 - System Development and Demonstration	**0604742A - CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT**	**362**

Schedule Detail	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Award WARSIM System Development Contract	1-4Q	1-3Q	1-3Q					
Award JTIM System Development Contract	1-3Q	1-4Q						
JSIMS Version 1.0 Release		1Q						
Closeout JTIM Contract		4Q						
WARSIM /JSIM joint functional assessment	3Q							

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WARFIGHTER SIMULATION

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Budget Item Justification