ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

February 2006

BUDGET ACTIVITY

5 - System Development and Demonstration

PE NUMBER AND TITLE

0604742A - CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT

	-									
	COST (In Thousands)	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
	Total Program Element (PE) Cost	41052	39993	40006	31892	27148	23447	24236	Continuing	Continuing
361	INTELLIGENCE SIMULATION SYSTEMS	1154	5824	7160	6114	5603	4134	4721	Continuing	Continuing
362	Jnt Land Component Constructive Trng Capability	39898	34169	32846	25778	21545	19313	19515	Continuing	Continuing

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 battle staffs on today's complex battlefield conditions. Project D361 funds the development of the Intelligence Electronic Warfare Tactical Proficiency Trainer (IEWTPT) that provides Warfighting Commanders at all echelons the ability to train with Intelligence, Surveillance, and Reconnaissance (ISR) products based on realistic ISR assets, people (including the maneuver commander, G-2, G-3, collection manager, analyst/operator) and processes. IEWTPT provides embedded training capability for Future Combat Systems (FCS) ISR systems. IEWTPT will interface/stimulate ISR systems including Tactical Unmanned Aerial Vehicle (TUAV), Joint Surveillance Target Attack Radar System-Common Ground Station (JSTARS-CGS), Aerial Common Sensor (ACS), Tactical Exploitation System/Distributed Tactical Exploitation System (TES/DTES), Guardrail, Counter Intelligence/Human Intelligence Management Systems (CHIMS), Prophet and Distributed Common Ground Station-Army (DCGS-A).

IEWTPT is the only Army Simulation System supporting ISR training from the Warfighter to the Military ISR Analyst/System Operator. Project 362, Joint Land Component Constructive Training Capability (JLCCTC), develops the Army's premier wargame simulation for training leaders and Battle Staffs at Brigade, Division, Corps, and echelons above Corps. JLCCTC will provide functionality not currently available (digital, stability, support and information operations), link to unit organizational Command, Control, Communications, Computers and Integration (C4I) equipment, improve exercise generation and after-action reporting. WARSIM will interoperate with One Semi Automated Forces(OneSAF) and other simulations as an integral part of an Army simulation toolkit, so that a warfighter training exercise can represent in simulation all Army echelons and interproperability among all of those syste

FY07 funding continues product improvements with annual spiral releases of the IEWTPT and continues development of Joint Land Component Constructive Training Capability.

Item No. 101 Page 1 of 14

February 2006 **ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)** BUDGET ACTIVITY PE NUMBER AND TITLE 5 - System Development and Demonstration 0604742A - CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT FY 2006 FY 2007 FY 2005 **B. Program Change Summary** Previous President's Budget (FY 2006) 41153 40572 38818 Current BES/President's Budget (FY 2007) 41052 39993 40006 -579 Total Adjustments -101 1188 Congressional Program Reductions -176 Congressional Rescissions -403 Congressional Increases Reprogrammings -101 SBIR/STTR Transfer Adjustments to Budget Years 1188

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

February 2006

5 - System Development and Demonstration

BUDGET ACTIVITY

PE NUMBER AND TITLE

0604742A - CONSTRUCTIVE SIMULATION SYSTEMS

PROJECT 361

DEVELOPMENT

	COST (In Thousands)	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
36	51 INTELLIGENCE SIMULATION SYSTEMS	1154	5824	7160	6114	5603	4134	4721	Continuing	Continuing

A. Mission Description and Budget Item Justification: Intelligence Electronic Warfare Tactical Proficiency Trainer (IEWTPT) provides Warfighting Commanders at all echelons the ability to train with Intelligence, Surveillance, and Reconnaissance (ISR) products based on realistic ISR assets, people (including the maneuver commander, G-2, G-3, collection manager, analyst/operator) and processes. IEWTPT provides training capability for Future Combat Systems (FCS) ISR systems. IEWTPT interoperates with the Army's constructive simulation training systems and actual operator level field equipment identified as Target Signature Arrays. IEWTPT will interface/stimulate ISR systems including Tactical Unmanned Aerial Vehicle (TUAV), Joint Surveillance Target Attack Radar System-Common Ground Station (JSTARS-CGS), Aerial Common Sensor (ACS), Tactical Exploitation System/Distributed Tactical Exploitation System (TES/DTES), Guardrail, Counter Intelligence/Human Intelligence Management Systems (CHIMS), Prophet and Distributed Common Ground Station-Army (DCGS-A). IEWTPT is the only Army Simulation System supporting ISR training from the Warfighter to the Military ISR Analyst/System Operator.

The FY07 funding continues product improvements with annual spiral releases in the 4th Quarter of each year of the IEWTPT.

Accomplishments/Planned Program	FY 2005	FY 2006	FY 2007
FY05-FY07: Continues IEWTPT development, systems engineering support, documentation, security accreditation, and improvements with interoperability testing with system Target Signature Arrays (TSA) and constructive simulations.	966	5385	6308
FY05-FY07: Continues IEWTPT Program Management support	188	439	419
FY06-FY07: Continues IEWTPT Test planning and execution.	0	0	433
Total	1154	5824	7160

B. Other Program Funding Summary	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
OPA3, Appropriation NA0100, Training Devices,	295044	204559	243147	194149	222284	188287	185792	CONT	CONT
Nonsystem									

<u>C. Acquisition Strategy</u> Competitive development based on performance specifications.

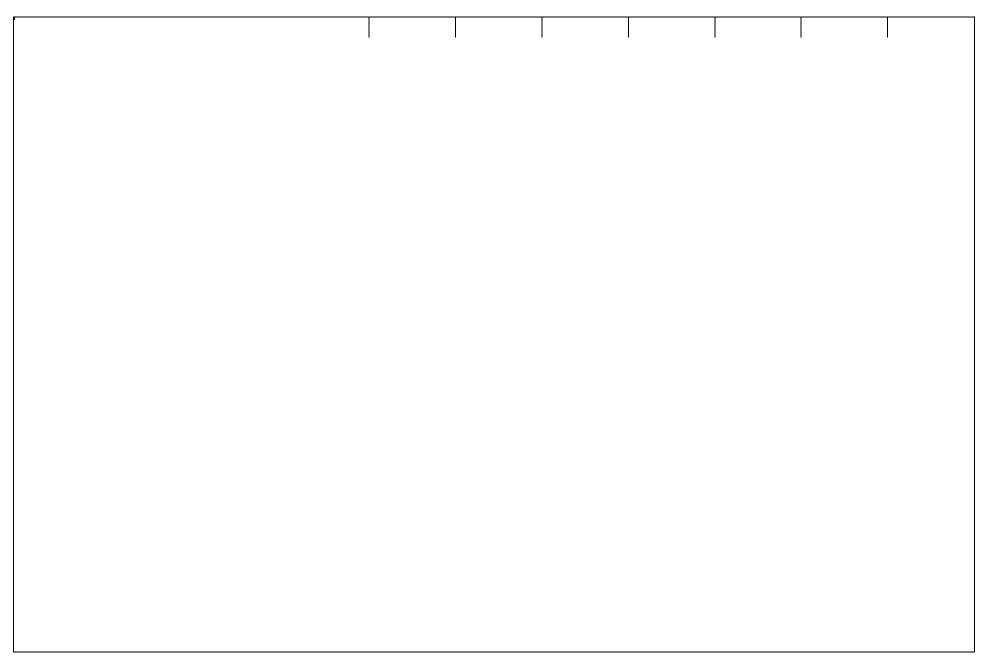
ARMY RDT&	&E COST	Γ ANALYSIS	(R3)							Februar	y 2006	
BUDGET ACTIVITY 5 - System Development a	and Demons	stration	PE NUMBE 0604742 DEVEL	A - CON	STRUC'	FIVE SI	MULAT	ION SY	STEMS	PROJECT 361		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
IEWTPT System Dev & Demo	CPIF	Gen Dynamics C4 Systems, Orlando, FL	13790	636	1-3Q	4978	1-3Q	5907	1-3Q	Continue	Continue	Continue
IEWTPT System Dev & Demo	multiple	various	0	330	1-4Q	407	1-4Q	401	1-4Q	Continue	Continue	Continue
Subto	tal:		13790	966		5385		6308		Continue	Continue	Continue
II. Support Costs IEWTPT Engineering & Technical Support	Contract Method & Type Multiple	Performing Activity & Location Various	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Support Subto			1943	0		0		0		0	1943	1943
III. Test And Evaluation	Contract Method &	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
IEWTPT TEMP Support	Type Various	Multiple	319	0	Date	0	Date	0	Date	0	319	319
1E vi II I TEMI Bupport	-	•		-				0		Ŭ		
IEWTPT Operational Test Event Support	Various	Multiple	359	0		0		U		0	359	359
IEWTPT Operational Test Event Support Test Engineer Support	Various various	Multiple Multiple	359 324	0		0		433	1-3Q	Continue	359 Continue	
Support	various			Ü		Ů		Ü	1-3Q	Ů		359 Continue
Support Test Engineer Support	various		324	0		0		433	1-3Q	Continue	Continue	359

0604742A (361) INTELLIGENCE SIMULATION SYSTEMS Item No. 101 Page 4 of 14 525

Exhibit R-3 ARMY RDT&E COST ANALYSIS

5 - System Development and Demonstration O604742A - CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT	ARMY RDT	&E COS	ST ANALY	SIS (R3)							Februar	y 2006	
IEWTPT Program Management Various Multiple 860 188 1-4Q 439 1-4Q 419 1-4Q Continue Continue Constitution Subtotal: 860 188 439 419 Continue Continu	BUDGET ACTIVITY 5 - System Development	and Demon	stration	0604742A	- CON	STRUCT	IVE SI	MULATIO	ON SYS	STEMS			CT
Subtotal: 860 188 439 419 Continue Continue Con		Type				Date		Date		Date			Contrac
	IEWTPT Program Management	Various	Multiple	860	188	1-4Q	439	1-4Q	419	1-4Q	Continue	Continue	Continu
Project Total Cost: 17595 1154 5824 7160 Continue Continu	Subto	otal:		860	188		439		419		Continue	Continue	Continu
	Project Total	Cost:		17595	1154		5824		7160		Continue	Continue	Continu
								·					

Schedule Profile (R4 Exhibit)													February 2	200	06	
BUDGET ACTIVITY 5 - System Development and Demonstration		060474	12A	AND TITLE - CONST PMENT		UCTIVE S	SIN	IULATIO	N S	SYS	STEN	1S			ROJEСТ 61	
Event Name		FY 05 2 3 4	4 1	FY 06 2 3 4	.]	FY 07 1 2 3 4	. 1	FY 08 1 2 3 4	1		Y 09	4	FY 10 1 2 3	4	FY 1 1 2 3	11 3 4
TCC Development /Integration/Improvements	000 000 000 000		2000000								, ,					
(1) Milestone C	1															
MR/IOC Ft. Huachuca																
Security Accreditation & Test Event-Dec/Jan annually																
Technology Refresh																
Annual Spiral Release																
					l		1		1				I	J		



Schedule Detail (R4a Exhibit)						Fe	ebruary 200	6
BUDGET ACTIVITY 5 - System Development and Demonstration	0604	MBER AND TI 742A - CON ELOPMEN	NSTRUCTI	VE SIMUL	ATION SY	STEMS	PR 36	ОЈЕСТ 1
Schedule Detail		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
IEWTPT CONTRACT AWARD		1-3Q	1-3Q	1-3Q	1-3Q	1-3Q	1-3Q	1-3Q
IEWTPT Milestone C		1Q						
IEWTPT Annual spiral releases		4Q	4Q	4Q	4Q	4Q	4Q	4Q
IEWTPT Material Release		1Q						

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

February 2006

5 - System Development and Demonstration

BUDGET ACTIVITY

PE NUMBER AND TITLE

PROJECT 362

0604742A - CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT

		EV. 2007	EV. 2006	EV. 2005	EX. 2000	EX. 2000	EX. 2010	EV. 2011	a	T 1 C
		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	Cost to	Total Cost
COST (I	n Thousands)	Estimate	Complete							
362 Jnt Land Com Capability	ponent Constructive Trng	39898	34169	32846	25778	21545	19313	19515	Continuing	Continuing

A. Mission Description and Budget Item Justification: This Project funds the development of the Joint Land Component Constructive Training Capability (JLCCTC), the Army's premier wargaming simulations for training leaders and Battle Staffs from Battalion through echelons above Corps. The JLCCTC initially includes a set of interoperable current systems and integrates WARSIM and OneSAF in an evolutionary manner. JLCCTC will provide functionality not currently available, (digital operations, stability operations and support operations and information Ops) link to organic Battle Commands equipment, improve exercise generation and after-action reporting.

The FY 07 funding continues the development of the Army training system, integration and system evaluation. The JLCCTC leverages the best pieces of current system to meet current training needs and evolves to meet the training needs of the future force.

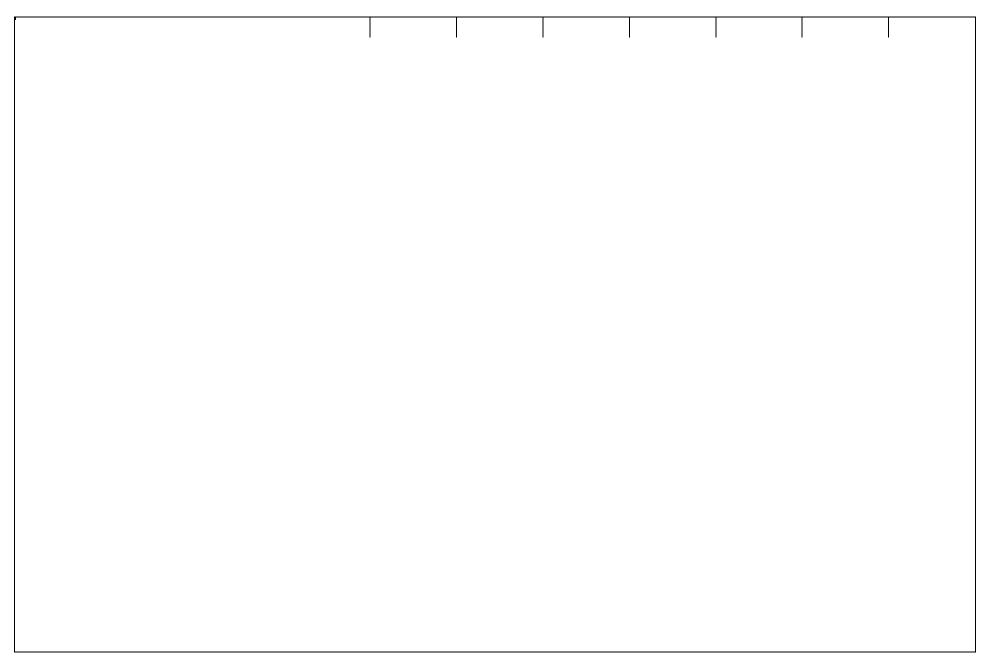
Accomplishments/Planned Program	FY 2005	FY 2006	FY 2007
FY05-FY07: Verify and Validate JLCCTC software models	3200	2773	2578
FY05-FY-07: Continue integration of WARSIM and JLCCTC components for interoperability.	23898	20304	19670
FY05-FY07: Develop and integrate user interface enhancements for Army training applications.	8000	6932	6574
FY05-FY07: Develop and evaluate system performance and conduct system test events.	4800	4160	4024
Total	39898	34169	32846

<u>C. Acquisition Strategy</u> Competitive development based on performance specifications.

ARMY RDT&	&E COST	Γ ANALYSIS	(R3)							Februar	y 2006	
BUDGET ACTIVITY 5 - System Development a	and Demons	tration	PE NUMBE 0604742 DEVEL	A - CON	STRUC'	TIVE SI	MULAT	ION SY	STEMS		PROJEC 362	CT
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Targe Value o Contrac
WARSIM Development of Army Training System	C/CPAF	Lockheed Martin Info Systems, Orlando, FL	18462	23712	1-3Q	19620	1-3Q	16997	1-3Q	Continue	Continue	Continue
Integration of JCCTC	Multiple	Various	1281	7099	1Q	7049	1Q	7005	1Q	Continue	Continue	Continu
Subto	tal:		19743	30811		26669		24002		Continue	Continue	Continue
II. Support Costs Engineering & Tech Spt	Contract Method & Type Multiple	Performing Activity & Location Various	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete Continue	Total Cost	Targe Value o Contrac
Engineering & Took Sut		Various	5164	115		420		472		Continue	Continuo	
Subto		various	5164	445	1 12	420	1 12	473	1 12	Continue	Continue	Continue
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Targe Value o Contrac
Verification, Validation and Accreditation	Multiple	Various	3409	2724	1-3Q	1951	1-3Q	3040	1-3Q	Continue	Continue	Continue
WARSIM System Evaluation and Test	Multiple	Various	7229	2207	1-3Q	1828	1-3Q	1968	1-3Q	Continue	Continue	Continue
Subto	tal:		10638	4931		3779		5008		Continue	Continue	Continu
IV. Management Services	Contract Method &	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award	FY 2006 Cost	FY 2006 Award	FY 2007 Cost	FY 2007 Award	Cost To	Total Cost	Targe Value o

	anu Deillui	nstration	0604742 <i>E</i> DEVELO		STRUC	TIVE SI	MULAT	TION SYS	STEMS		9RОЈЕО 362	CT
Program Management	Multiple	Various	9493	3711	1-2Q	3301	1-2Q	3363	1-2Q	Continue	Continue	Continue
Cost Analysis Support	T&M	Northrup Grumman- TASC, Orlando FL	414	0		0		0		0	414	493
Subt	total:		9907	3711		3301		3363		Continue	Continue	Continue
Project Total	Cost:		45452	39898		34169		32846		Continue	Continue	Continu

Schedule Profile (R4 Exhibit)									February 2006											
BUDGET ACTIVITY 5 - System Development and Demonstration			PE NUMBER AND TITLE 0604742A - CONSTRUCTIVE SIMULATION SYDEVELOPMENT										PROJECT 362							
Event Name	<u> </u>	FY 05 2 3 4		FY 06 1 2 3 4			FY 07 1 2 3 4			FY 08 1 2 3 4		1 1	FY 09 1 2 3 4		FY 10 1 2 3 4		4	FY 11 1 2 3		
1) ACTF V2				-	<u>- </u>	<u> </u>					<u> </u>	101			· •		- -	-	<u>- -</u>	101
2) WARSIM integrated into JLCCTC Version 3					2															
3) Milestone C, (4) JLCCTC V3, (5) OneSAF integration nto JLCCTC Version 4, (6) JLCCTC V4, (7) JLCCTC V5, 8) JLCCTC V6, (9) JLCCTC V7, (10) JLCCTC V8						MS C			6			7		,	8		g			10



Schedule Detail (R4a Exhibit)	February 2006												
BUDGET ACTIVITY 5 - System Development and Demonstration	06047	MBER AND TI 7 42A - CON ELOPMEN	NSTRUCTI	VE SIMUL	PROJECT 362								
Schedule Detail		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011 1-3Q					
Award WARSIM System Development Contract		1-3Q	1-3Q	1-3Q	1-3Q	1-3Q	1-3Q						