

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

February 2007

BUDGET ACTIVITY		PE NUMBER AND TITLE								
5 - System Development and Demonstration		0604742A - CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT								
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	38576	39563	31962	26379	17070	17430	21970	21601	Continuing	Continuing
361 INTELLIGENCE SIMULATION SYSTEMS	5620	7081	4141	2827	535	547	557	573	Continuing	Continuing
362 Jnt Land Component Constructive Trng Capability	32956	32482	27821	23552	16535	16883	21413	21028	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), 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 can also be represented in a Joint environment. JLCCTC pulls together current constructive simulation systems and future constructive simulations and uses a comprehensive strategy to ensure interoperability among all of those systems. This strategy will allow JLCCTC to meet current and future user needs. JLCCTC leverages the best pieces of current systems to meet current training needs and evolves to meet the training needs of the future.

FY08/09 funding continues product improvements with annual spiral releases of the IEWTPT and continues development of Joint Land Component Constructive Training Capability.

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BUDGET ACTIVITY	PE NUMBER AND TITLE			
5 - System Development and Demonstration	0604742A - CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT			
<u>B. Program Change Summary</u>	FY 2006	FY 2007	FY 2008	FY 2009
Previous President's Budget (FY 2007)	39993	40006	31892	27148
Current BES/President's Budget (FY 2008/2009)	38576	39563	31962	26379
Total Adjustments	-1417	-443	70	-769
Congressional Program Reductions		-151		
Congressional Rescissions				
Congressional Increases				
Reprogrammings	-422	-292		
SBIR/STTR Transfer	-995			
Adjustments to Budget Years			70	-769
FY 2006: DA Withhold Reprogrammed (\$422); SBIR/STTR Transfer (\$995). FY 2007: Section 8106 Economic Assumptions (\$151); Funds reprogrammed (\$292) to a higher priority. FY 2008: Funding increase of \$70 is for the JLCCTC program. FY 2009: Funds realigned (\$769) to higher priority requirements.				

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

February 2007

BUDGET ACTIVITY 5 - System Development and Demonstration	PE NUMBER AND TITLE 0604742A - CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT							PROJECT 361		
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
361 INTELLIGENCE SIMULATION SYSTEMS	5620	7081	4141	2827	535	547	557	573	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), 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 FY08/09 funding continues product improvements with annual spiral releases in the 4th Quarter of each year of the IEWTPT.

<u>Accomplishments/Planned Program:</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
FY06-Developed Service Oriented Architecture (SOA); developed initial Human Intelligence (HUMINT) capability; developed initial Signals Intelligence capability (SIGINT)	5620			
FY07-Maturing the Human intelligence (HUMINT) capability; developing additional Signals Intelligence (SIGINT) capability based on Top Secret/Special Compartmented Information (SCI) threat types.		6895		
FY08/09-Continue development of Human intelligence (HUMINT) capability; continue development of additional limited Signals Intelligence (SIGINT) capability.			4141	2827
SBIR/STTR Reduction		186		
Total	5620	7081	4141	2827

<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 NA0100, Training Devices, Nonsystem	221118	319475	201843	238232	192802	190921	203423	211347	Continuing	Continuing

Comment:

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

February 2007

BUDGET ACTIVITY

5 - System Development and Demonstration

PE NUMBER AND TITLE

**0604742A - CONSTRUCTIVE SIMULATION SYSTEMS
DEVELOPMENT**

PROJECT

361

C. Acquisition Strategy Competitive development based on performance specifications.

ARMY RDT&E COST ANALYSIS (R3)

February 2007

BUDGET ACTIVITY			PE NUMBER AND TITLE									PROJECT		
5 - System Development and Demonstration			0604742A - CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT									361		
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
IEWTPT System Dev & Demo	CPIF	Gen Dynamics C4 Systems, Orlando, FL	14426	4774	1-3Q	5724	1-3Q	2727	1-3Q	1645	1-3Q	Cont.	Cont.	Cont.
IEWTPT System Dev & Demo	multiple	various	330	407	1-4Q	283	1-4Q	292	1-4Q	301	1-4Q	Cont.	Cont.	Cont.
Subtotal:			14756	5181		6007		3019		1946		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
IEWTPT Engineering & Technical Support	Multiple	Various	1943										1943	1943
Subtotal:			1943										1943	1943
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
IEWTPT TEMP Support	Various	Multiple	319										319	319
IEWTPT Operational Test Event Support	Various	Multiple	359										359	359
Test Engineer Support	various	Multiple	324			355	1-3Q	750	1-3Q	500	1-3Q	Cont.	Cont.	Cont.
Subtotal:			1002			355		750		500		Cont.	Cont.	Cont.
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

ARMY RDT&E COST ANALYSIS (R3)

February 2007

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
**0604742A - CONSTRUCTIVE SIMULATION SYSTEMS
 DEVELOPMENT**

PROJECT
361

	Type		Cost		Date		Date		Date		Date	e		Contract
IEWTPT Program Management	Various	Multiple	1048	439	1-4Q	719	1-4Q	372	1-4Q	381	1-4Q	Cont.	Cont.	Cont.
Subtotal:			1048	439		719		372		381		Cont.	Cont.	Cont.

Project Total Cost:														
			18749	5620		7081		4141		2827		Cont.	Cont.	Cont.

Schedule Detail (R4a Exhibit)

February 2007

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
**0604742A - CONSTRUCTIVE SIMULATION SYSTEMS
 DEVELOPMENT**

PROJECT
361

<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>
TCC Development /Integration/Improvements	1Q - 4Q							
Security Accreditation & Test Event-Dec/Jan annually	1Q - 4Q							
Field - Ft. Bragg, NC	4Q							
Field - Ft. Lewis and Schofield, HI		3Q - 4Q	1Q					
Technology Refresh				2Q - 4Q	1Q - 4Q	1Q		
Annual Spiral Release	1Q - 4Q							

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

February 2007

BUDGET ACTIVITY 5 - System Development and Demonstration		PE NUMBER AND TITLE 0604742A - CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT						PROJECT 362		
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
362 Jnt Land Component Constructive Trng Capability	32956	32482	27821	23552	16535	16883	21413	21028	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 operations), link to organic Battle Commands equipment, and improve exercise generation and after-action reporting.

The FY 08/09 funding continues the development of the Army training system, integration and system evaluation. The JLCCTC leverages the best pieces of current systems to meet current training needs and evolves to meet the training needs of the future force.

Accomplishments/Planned Program:	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
FY06-FY09: Verify and validate JLCCTC software models	2636	2552	2243	1888
FY06-FY09: Continue integration of JLCCTC components for interoperability	19774	19141	16822	14156
FY06-FY09: Develop and integrate user interface enhancements for Army training applications	6591	6141	5392	4677
FY06-FY09: Develop and evaluate system performance and conduct system test events	3955	3828	3364	2831
FY07: SBIR/STTR		820		
Total	32956	32482	27821	23552

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

C. Acquisition Strategy Competitive development based on performance specifications.

ARMY RDT&E COST ANALYSIS (R3)

February 2007

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 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
WARSIM Development of Army Training System	C/CPAF	Lockheed Martin Info Systems, Orlando, FL	42174	15768	1-3Q	14700	1-3Q	12000	1-3Q	11000	1-3Q	Cont.	Cont.	Cont.
Integration of JCCTC	Multiple	Various	8380	9192	1Q	12504	1-2Q	9997	1-2Q	7073	1-2Q	Cont.	Cont.	Cont.
Subtotal:			50554	24960		27204		21997		18073		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
Engineering & Tech Spt	Multiple	Various	5609	420	1-4Q	40	1-3Q	430	1-3Q	430	1-3Q	Cont.	Cont.	Cont.
Subtotal:			5609	420		40		430		430		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
Verification, Validation and Accreditation	Multiple	Various	6133	1951	1-3Q	250	1-3Q	550	1-3Q	500	1-3Q	Cont.	Cont.	Cont.
System Evaluation and Test	Multiple	Various	9436	1748	1-3Q	500	1-3Q	500	1-3Q	475	1-3Q	Cont.	Cont.	Cont.
Subtotal:			15569	3699		750		1050		975		Cont.	Cont.	Cont.
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
Program Management	Multiple	Various	13204	3877	1-2Q	4488	1-2Q	4344		4074		Cont.	Cont.	Cont.

ARMY RDT&E COST ANALYSIS (R3)

February 2007

BUDGET ACTIVITY 5 - System Development and Demonstration			PE NUMBER AND TITLE 0604742A - CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT								PROJECT 362		
Cost Analysis Support	T&M	Northrup Grumman-TASC, Orlando FL	414								414	493	
Subtotal:			13618	3877		4488		4344		4074	Cont.	Cont.	Cont.
Project Total Cost:			85350	32956		32482		27821		23552	Cont.	Cont.	Cont.

Schedule Profile (R4 Exhibit)

February 2007

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
0604742A - CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT

PROJECT
362

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) WARSIM integrated into JLCCTC Version 3			▲ 1																													
(2) Milestone C, (3) JLCCTC V3, (4) OneSAF integration into JLCCTC Version 4, (5) JLCCTC V4, (6) JLCCTC V5, (7) JLCCTC V6, (8) JLCCTC V7, (9) JLCCTC V8																																

Schedule Detail (R4a Exhibit)

February 2007

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
0604742A - CONSTRUCTIVE SIMULATION SYSTEMS
DEVELOPMENT

PROJECT
362

<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>
WARSIM integrated into JLCCTC Version 3	3Q							
Milestone C		1Q						
JLCCTC V3	4Q							
OneSAF integration into JLCCTC Version 4		3Q						
JLCCTC V4		3Q						
JLCCTC V5			3Q					
JLCCTC V6				3Q				
JLCCTC V7					3Q			
JLCCTC V8						3Q		
Award WARSIM System Development Contract	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 3Q			