

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

February 2008

BUDGET ACTIVITY		PE NUMBER AND TITLE							
5 - System Development and Demonstration		0604742A - CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT							
COST (In Thousands)	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	38849	31645	26244	16996	17355	21871	21515	Continuing	Continuing
361 INTELLIGENCE SIMULATION SYSTEMS (MIP)	6947	4114	2814	538	550	560	576	Continuing	Continuing
362 Jnt Land Component Constructive Trng Capability	31902	27531	23430	16458	16805	21311	20939	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.

FY09 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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February 2008

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
0604742A - CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT

<u>B. Program Change Summary</u>	FY 2007	FY 2008	FY 2009
Previous President's Budget (FY 2008/2009)	39563	31962	26379
Current BES/President's Budget (FY 2009)	38849	31645	26244
Total Adjustments	-714	-317	-135
Congressional Program Reductions		-317	
Congressional Rescissions			
Congressional Increases			
Reprogrammings	292		
SBIR/STTR Transfer	-1006		
Adjustments to Budget Years			-135

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

February 2008

BUDGET ACTIVITY 5 - System Development and Demonstration	PE NUMBER AND TITLE 0604742A - CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT						PROJECT 361		
COST (In Thousands)	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 (MIP)	6947	4114	2814	538	550	560	576	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 products based on realistic assets, people (including the maneuver commander, G-2, G-3, collection manager, analyst/operator) and processes. IEWTPT Technical Control Cell (TCC) and HUMINT Control Cell (HCC) provides the enhancements to simulated battlefields required to stimulate ISR systems in their go to war equipment. 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 FY09 funding continues product improvements with annual spiral releases in the 4th Quarter of each year. Improvements in the Human Intelligence (HUMINT) and Signals Intelligence (SIGINT) will coincide with tactical fielded Intelligence, Surveillance and Reconnaissance systems.

<u>Accomplishments/Planned Program:</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
FY 2007 - Started the Human Intelligence (HUMINT) capability; developing Signals Intelligence (SIGINT) capability based on Top Secret/Special Compartmented Information (SCI) threat types and started the Service Oriented Architecture (SOA) efforts.	6947		
FY 2008 - SOA will be completed by 2008, however, upgrades required as new functionality is added. Continue HUMINT and SIGINT capabilities development.		4114	
FY 2009 - Continue HUMINT and SIGINT capabilities development.			2814
Total	6947	4114	2814

<u>B. Other Program Funding Summary</u>	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Compl	Total Cost
OPA3, Appropriation NA0100, Training Devices, Nonsystem	340895	335957	218614	191173	189427	201573	209438		1687077

Comment:

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

February 2008

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 2008

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 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	19200	5320	1-3Q	2835	1-3Q	1456	1-3Q	Cont.	Cont.	Cont.
IEWTPT System Dev & Demo	multiple	various	737					225	1-4Q	Cont.	Cont.	Cont.
Subtotal:			19937	5320		2835		1681		Cont.	Cont.	Cont.
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	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	228	1-4Q	259	1-4Q	207	1-4Q	Cont.	Cont.	Cont.
Subtotal:			1943	228		259		207		Cont.	Cont.	Cont.
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	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					253	1-3Q	Cont.	Cont.	Cont.
Test Engineer Support	various	Multiple	324	989	1-3Q	470	1-3Q	270	1-3Q	Cont.	Cont.	Cont.
Subtotal:			1002	989		470		523		Cont.	Cont.	Cont.
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	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 2008

BUDGET ACTIVITY
5 - System Development and Demonstration

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

PROJECT
361

	Type				Date		Date		Date			Contract
IEWTPT Program Management	Various	Multiple	1487	410	1-4Q	550	1-4Q	403	1-4Q	Cont.	Cont.	Cont.
Subtotal:			1487	410		550		403		Cont.	Cont.	Cont.

Remarks: 632

Project Total Cost:

24369

6947

4114

2814

Cont.

Cont.

Cont.

Schedule Profile (R4 Exhibit)

February 2008

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
0604742A - CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT

PROJECT
361

Event Name	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																
TCC Development /Integration/Improvements	[Redacted]																																											
TCC/HCC Development Integration																																												
Security Accreditation & Test Event-Dec/Jan annually																																												
Annual Spiral Release																																												

Schedule Detail (R4a Exhibit)

February 2008

BUDGET ACTIVITY
5 - System Development and Demonstration

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

PROJECT
361

<u>Schedule Detail</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	1Q - 4Q	1Q - 4Q				
TCC/HCC Development Integration	1Q - 4Q	1Q - 4Q	1Q - 4Q				
Security Accreditation & Test Event-Dec/Jan annually	1Q - 4Q	1Q - 4Q	1Q - 4Q				
Annual Spiral Release	1Q - 4Q	1Q - 4Q	1Q - 4Q				

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

February 2008

BUDGET ACTIVITY 5 - System Development and Demonstration		PE NUMBER AND TITLE 0604742A - CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT						PROJECT 362	
COST (In Thousands)	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	31902	27531	23430	16458	16805	21311	20939	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. JLCCTC pulls together current constructive simulation systems and future constructive simulations and uses a comprehensive strategy to ensure interoperability among all of those systems. JLCCTC will provide functionality not currently available (digital operations, stability and support operations and information operations), link to organic Battle Commands equipment, and improve exercise generation and after-action reporting.

The FY09 funding continues the development of the Army training system, integration and system evaluation. The JLCCTC leverages the best capabilities of current systems to meet current training needs and evolves to meet the training needs of the future force.

<u>Accomplishments/Planned Program:</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
FY07-FY09: Verify and validate JLCCTC software models	2552	2243	1888
FY07-FY09: Continue integration of JLCCTC components for interoperability	19381	15850	14034
FY07-FY09: Develop and integrate user interface enhancements for Army training applications	6141	5392	4677
FY07-FY09: Develop and evaluate system performance and conduct system test events	3828	3364	2831
Small Business Innovative Research/Small Business Technology Transfer Programs.		682	
Total	31902	27531	23430

<u>B. Other Program Funding Summary</u>	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Compl	Total Cost
CBCSE is the Procurement funds for JLCCTC	29391	26636	16474	17621	17472	17974	18372	Continuing	Continuing

Comment:

C. Acquisition Strategy Competitive development based on performance specifications.

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

February 2008

BUDGET ACTIVITY

5 - System Development and Demonstration

PE NUMBER AND TITLE

**0604742A - CONSTRUCTIVE SIMULATION SYSTEMS
DEVELOPMENT**

PROJECT

362

ARMY RDT&E COST ANALYSIS (R3)

February 2008

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 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	57942	14700	1-3Q	12000	1-3Q	10878	1-3Q	Cont.	Cont.	Cont.
Integration of JLCCTC	Multiple	Various	17572	9424	1-2Q	7207	1-2Q	5323	1-2Q	Cont.	Cont.	Cont.
Development of logistics model	T&M	Tapestry, San Diego, CA	8192	2500	1-4Q	2500	1-2Q	1750	1-2Q	Cont.	Cont.	Cont.
Subtotal:			83706	26624		21707		17951		Cont.	Cont.	Cont.
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	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	6029	40	1-3Q	430	1-3Q	430	1-3Q	Cont.	Cont.	Cont.
Subtotal:			6029	40		430		430		Cont.	Cont.	Cont.
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	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	8084	250	1-3Q	550	1-3Q	500	1-3Q	Cont.	Cont.	Cont.
System Evaluation and Test	Multiple	Various	11184	500	1-3Q	500	1-3Q	475	1-3Q	Cont.	Cont.	Cont.
Subtotal:			19268	750		1050		975		Cont.	Cont.	Cont.
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2007 Cost	FY 2007 Award	FY 2008 Cost	FY 2008 Award	FY 2009 Cost	FY 2009 Award	Cost To Complete	Total Cost	Target Value of

ARMY RDT&E COST ANALYSIS (R3)

February 2008

BUDGET ACTIVITY 5 - System Development and Demonstration			PE NUMBER AND TITLE 0604742A - CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT						PROJECT 362			
	Type				Date		Date		Date			Contract
Program Management	Multiple	Various	17081	4488	1-4Q	3662	1-4Q	4074	1-4Q	Cont.	Cont.	Cont.
Cost Analysis Support	T&M	Northrup Grumman- TASC, Orlando FL	414								414	493
SBIR/STTR						682					682	
Subtotal:			17495	4488		4344		4074		Cont.	Cont.	Cont.
Project Total Cost:			126498	31902		27531		23430		Cont.	Cont.	Cont.

Schedule Profile (R4 Exhibit)

February 2008

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
0604742A - CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT

PROJECT
362

Event Name	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) Milestone C, (2) JLCCTC V4, (3) OneSAF integration into JLCCTC Version 5, (4) JLCCTC V5, (5) JLCCTC V6 partial, (6) JLCCTC V6 partial	▲ MS C		▲		▲	▲				▲				▲														

Schedule Detail (R4a Exhibit)

February 2008

BUDGET ACTIVITY 5 - System Development and Demonstration	PE NUMBER AND TITLE 0604742A - CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT	PROJECT 362
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<u>Schedule Detail</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>
Milestone C	1Q						
JLCCTC V4	3Q						
OneSAF integration into JLCCTC Version 5		3Q					
JLCCTC V5		3Q					
JLCCTC V6 partial			3Q				
JLCCTC V6 partial				3Q			