

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

June 2001

BUDGET ACTIVITY

5 - ENG MANUFACTURING DEV

PE NUMBER AND TITLE

0604760A - DISTRIBUTIVE INTERACTIVE SIMULATION

COST (In Thousands)	FY 2000 Actual	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost	7999	20501	26058	0	0	0	0	0	0	0
C73 SYNTHETIC THEATER OF WAR	1333	1106	1837	0	0	0	0	0	0	0
C74 DEVEL SIMULATION TECH	0	3313	7384	0	0	0	0	0	0	0
C77 INTERACTIVE SIMULATION	4168	1041	2239	0	0	0	0	0	0	0
C78 COMPUTER GENERATED FORCES	2498	15041	14598	0	0	0	0	0	0	0

A. Mission Description and Budget Item Justification:

PLEASE NOTE: This administration has not addressed FY2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

Advanced Simulation Technologies (AST) is a synthetic environment within which humans may interact through a systematic connection of different subcomponent simulations, simulators and/or instrumented live task forces. These components may be located together or distributed at geographically dispersed locations, yet can interoperate using various simulation hardware linked through use of standard communication architecture. This program element supports the Army's Advanced Simulation Program to enable operational readiness and support the development of concepts and systems for Force XXI and the Army After Next through the application of new simulation technology and techniques. This engineering development and application of simulation technology will provide the tools to electronically link all subcomponents together in a manner that is transparent to the user. The synthetic environment is used to verify the scenarios, tactics/techniques and procedures, train testers on new hardware/software and conduct trial test runs before costly live field tests. The tools developed are available for reuse by developers and users of simulations throughout the Army. Project C73, Synthetic Theater of War, STOW-A, provides innovative applications of legacy systems (live, virtual and constructive, Command, Control, Communications, Computers and Integration (C4I) Surveillance and Reconnaissance) to meet the urgent requirements of the domains (e.g. training shortfalls) until availability of the next generation systems. STOW-A provides direct support to the Training, Exercises and Military Operations (TEMO) domain and the Advanced Concepts Requirements (ACR) domain. TEMO support derives from the demonstrated, low cost training capabilities that are provided by the toolkit. ACR support derives from the demonstrated capability of the kit to support battle lab and Army Warfighting Experiments (AWE) exercises and the development of Tactics, Techniques and Procedures to support digital operations. Project C74, Developmental Simulation Technology, provides simulator equipment upgrades, network upgrades, software upgrades, and resolves interoperability issues in support of the Army's Core DIS Facilities (CDFs) at Fort Knox, Fort Benning, Fort Rucker and the Operational Support Facility in Orlando, Florida. Project C77, Interactive Simulation, focuses on engineering development of advanced simulation technology and tools to provide a reusable synthetic environment. This program will benefit the Army and DOD by providing standards for interoperability and software. The project also develops and enhances reconfigurable simulators which are used as Advanced Concepts Research Tools (ACRT) that will allow the battlelabs to accomplish their mission in support of the ACR, Research, Development and Acquisition (RDA), and TEMO domains. Project C78 develops and upgrades computer generated forces software systems that support experimentation, concept evaluation, materiel development and training. The One Semi-Automated Forces (OneSAF) program will combine and improve the functionality and behaviors of several current semi-automated forces to provide a single SAF for Army use in simulations.

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The FY02, STOW-A, C73 Project line will continue the development of the software to link entity-based simulations and simulators to live tactical command and control systems and incorporate live simulations through the instrumented operating systems at the Combat Training Centers (CTCs). The FY02, Developmental Simulation Technology, C74 Project line continues the development of an integration of full fidelity Advanced Research Concept Tools and starts the development and management of the Simulation to C4I interoperability (SIMCI) effort between the models and simulations and tactical C4I Systems. FY02, Interactive Simulation, C77 Project line supports the development of the Environmental Data Base (EDB) for rapid extraction of terrain and environmental data at the user level. The FY02, Computer Generated Forces, C78 Project line will continue development of the functionality to provide OneSAF with terrain, editing and data collection tools, and infrastructure as well as continue the development of life cycle applications and infrastructure enhancements for OneSAF version 1.0. This program line supports the Interim, Objective and Legacy to Objective transition paths of the Transformation Campaign Plan (TCP).

<u>B. Program Change Summary</u>	FY 2000	FY 2001	FY 2002	FY 2003
Previous President's Budget (FY2001 PB)	7605	20689	30858	0
Appropriated Value	7657	20689	0	
Adjustments to Appropriated Value	0	0	0	
a. Congressional General Reductions	0	0	0	
b. SBIR / STTR	-184	0	0	
c. Omnibus or Other Above Threshold Reductions (Inflation)	-28	0	0	
d. Below Threshold Reprogramming	578	0	0	
e. Rescissions	-24	-188	0	
Adjustments to Budget Years Since FY2001 PB	0	0	-4800	
Current Budget Submit (FY 2002/2003 PB)	7999	20501	26058	0

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Funds realigned in FY02 (-\$4800) to higher priority requirements.

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BUDGET ACTIVITY 5 - ENG MANUFACTURING DEV				PE NUMBER AND TITLE 0604760A - DISTRIBUTIVE INTERACTIVE SIMULATION				PROJECT C73		
COST (In Thousands)	FY 2000 Actual	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
C73 SYNTHETIC THEATER OF WAR	1333	1106	1837	0	0	0	0	0	0	0

A. Mission Description and Budget Item Justification: This program supports development and integration activities for the STOW-A Digital Sustainment Training (DST) software baseline that includes integration of fielded simulations and simulators with C4ISR systems. The development and integration to be accomplished will result in the capability to provide a seamless synthetic environment which will support digital training, test and mission rehearsal requirements. Specific efforts will include integration of a ground maneuver simulation into the Fire Support Simulation Tools (FSST) architecture and enhancement of the extant intelligence capability of FSST. Additionally better representation and fidelity of other battlefield operating systems functionality will be gained. Development focuses on leveraging existing and emerging technology in a manner that produces substantial and continual improvements in combat readiness through the use of full spectrum, high fidelity, distributed simulation capability to support a large scale user-based exercise/experiment for JOINT VENTURE training and analytical needs. The Digital Battlefield Sustainment Trainer (DBST) program is a DCSOPS directed, strategic agility program designed to meet the Operational Needs and other critical initiatives from the field. It will do this through the application of available legacy and emerging technologies. This project develops innovative applications of legacy systems (live, virtual, constructive, C4ISR) to meet urgent needs across the domains (e.g., training shortfalls) until the next-generation systems are available. STOW-ADST (DBST) will contribute to providing the required digital training capability to the field, helping to overcome unique digital training challenges that currently exist in the U.S. Army at the brigade level. This project supports the Legacy to Objective transition path of the Transformation Campaign Plan (TCP).

FY 2000 Accomplishments

- 455 Continued to develop the software required to link entity-based simulations and simulators to live tactical command and control systems in support of periodic releases of Army Battle Command Systems (ABCS) software. Supported Joint Venture and Joint Contingency Force Simulation - Simulation Integration.
 - 300 Developed linkages between C4I to live simulations.
 - 578 Management Support.
- Total 1333

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**0604760A - DISTRIBUTIVE INTERACTIVE
SIMULATION**

PROJECT

C73**FY 2001 Planned Program**

- 344 Develop the software to link entity-based simulations and simulators, particularly to support Joint Venture and Division Capstone Exercise.
- 292 Incorporate Warfighter Simulation (WARSIM) software as the primary model and early applications of High Level Architecture(HLA).
- 277 Continue development of improved C4I fidelity.
- 162 Verification and validation of software integration.
- 31 Small Business Innovative Research (SBIR)/Small Business Technology Transfer Program (STTR).

Total 1106

FY 2002 Planned Program

- 758 Continue to develop the software to link entity-based simulations and simulators to live tactical command and control systems
- 511 Incorporate live simulations through the instrumented operating systems at the CTCs.
- 409 Continue development and integrations of HLA protocols.
- 159 Verification and validation of software integration.

Total 1837

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<u>B. Other Program Funding Summary</u>	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Compl	Total Cost
OPA3, KA6000, Reconfig Simulators MDEP TBIS	80	22	0	0	0	0	0	0	0	0
OMA, TBIS, 121014	849	764	1070	0	0	0	0	0	0	0

OPA funds in FY00 and FY01 support fielding of hardware/software procured in prior years.

C. Acquisition Strategy: Development is accomplished through delivery orders to competitively selected contractors based on performance specifications.

<u>D. Schedule Profile</u>	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
Award Engr & Integration Contract	2Q	1Q	1Q	0	0	0	0	0
Annual SW Version Release	3Q	3Q	3Q	0	0	0	0	0

FY00 Milestones Completed.

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I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . CCTT TSIU Interface	C/CPIF	Coleman Research, Huntsville, AL	2073	226	2Q	519	2Q	0	0	0	0	Continue
b . STOW-A/DBST Software Development	Various	Multiple	6081	100	1Q	209	1Q	0	0	0	0	Continue
c . Architecture Development	C/CPIF	DSCS/AMB, Columbus OH	100	129	1Q	125	1Q	0	0	0	0	Continue
Subtotal:			8254	455		853		0		0	0	Continue

Remarks: Each award is Delivery Order against CPIF contract.

II. Support Cost	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Engr & Subject Matter Expertise	Various	Multiple	1324	145	1Q	320	1Q	0	0	0	0	Continue
Subtotal:			1324	145		320		0		0	0	Continue

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III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . DBST Integration, evaluation and test	C/CPFF	TBD	789	162	4Q	150	1Q	0	0	0	0	0
Subtotal:			789	162		150		0		0	0	0

Remarks: Required for evaluation of annual version release.

IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Program Management	Various	Multiple	2127	344	1Q	514	1Q	0	0	0	0	Continue
Subtotal:			2127	344		514		0		0	0	Continue

Project Total Cost:			12494	1106		1837		0		0	0	Continue
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BUDGET ACTIVITY 5 - ENG MANUFACTURING DEV				PE NUMBER AND TITLE 0604760A - DISTRIBUTIVE INTERACTIVE SIMULATION				PROJECT C74		
COST (In Thousands)	FY 2000 Actual	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
C74 DEVEL SIMULATION TECH	0	3313	7384	0	0	0	0	0	0	0

A. Mission Description and Budget Item Justification: Project C74 - Developmental Simulation Technology: This project supports the Core Distributed Interactive Simulation (DIS) Facilities (CDF) at Fort Knox, KY, Fort Rucker, AL, and the Operational Support Facility in Orlando, FL. The project provides a virtual combined arms battlefield with the warfighter-in-the-loop to evaluate weapon system concepts, tactics, doctrine and test plans. Development supports related simulations and simulator efforts, including the Advanced Concepts Research Tools (ACRT) and the C4I Interoperability.

FY02 continues integration of full fidelity Advanced Concepts Research Tools. Starts the development and management of the Simulation-to-C4I interoperability (SIMCI) effort between the models and simulations and tactical C4I Systems. Provides Army level synchronization of SIMCI-related initiatives (development, configuration management, certification, and distribution). Provides recommendations on DA level policy to improve interoperability between M&S and tactical C4I systems.

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

NOTE: ACRT transferred from C77 to C74 in FY01.

FY 2000 Accomplishments

Project not funded in FY 2000. Refer to C77.

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SIMULATION**

PROJECT

C74

FY 2001 Planned Program

- 3214 Integrate additional full fidelity and Desktop Advanced Concepts Research Tools (ACRT). Continue development support of the Core Distributed Interactive Simulation Facilities and related simulations and simulator tools.
- 99 Small Business Innovative Research (SBIR)/Small Business Technology Transfer Program (STTR).

Total 3313

FY 2002 Planned Program

- 4593 Continue development and integration of full fidelity Advanced Concepts Research Tools.
- 2791 Develop and manage the Simulation-to-C4I interoperability (SIMCI) initiatives between the models and simulations (M&S) and tactical C4I Systems. Conduct studies to align the Army's operational, systems, and technical architectures to define and enable interoperable solutions between the modeling and simulation community and the C4I community. Award contract to develop a Modeling & Simulation data model to align the Army's integrated core data model.

Total 7384

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<u>B. Other Program Funding Summary</u>	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Compl	Total Cost
OPA3, KA6000, Reconfigurable Simulators	2398	2309	365	0	0	0	0	0	0	0
OMA, 121014, C4I Simulation Interoperability/Army Modeling Simulation Support Facility	2836	2750	2071	0	0	0	0	0	0	0

Facility

C. Acquisition Strategy: Competitive development leading to competitive procurement against performance specifications

<u>D. Schedule Profile</u>	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
Integration, Installation Desktop Aviation systems		2Q		0	0	0	0	0
Integration, Installation Dismounted Infantry systems		1Q		0	0	0	0	0
ACRT Contract Award		2Q	1Q	0	0	0	0	0
C4I Interoperability Contract Award			1Q	0	0	0	0	0
Integration, Installation Ground systems		2Q		0	0	0	0	0

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I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . ACRT Modify Integrate Existing Simulators	C/CPAF	TBD	0	2914	2Q	4267	1Q	0	0	0	0	Continue
b . C4I Interoperability	C/CPAF	TBD	0	0		2640	1Q	0	0	0	0	Continue
Subtotal:			0	2914		6907		0		0	0	Continue

Remarks: Each award is Delivery Order (DO) against CPAF.

II. Support Cost	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Subtotal:			0	0		0		0		0	0	0

Remarks: Not Applicable

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III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Subtotal:			0	0		0		0		0	0	0

Remarks: Not Applicable

IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Program Management	Multiple	Various	0	399	1Q	477	1Q	0	0	0	0	0
Subtotal:			0	399		477		0		0	0	0

Remarks: Not Applicable.

Project Total Cost:			0	3313		7384		0		0	0	Continue
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BUDGET ACTIVITY 5 - ENG MANUFACTURING DEV				PE NUMBER AND TITLE 0604760A - DISTRIBUTIVE INTERACTIVE SIMULATION				PROJECT C77		
COST (In Thousands)	FY 2000 Actual	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
C77 INTERACTIVE SIMULATION	4168	1041	2239	0	0	0	0	0	0	0

A. Mission Description and Budget Item Justification: Project C77 - Interactive Simulation: This project focuses on engineering development of techniques and Distributed Simulation technology [e.g. Higher Level Architecture (HLA)] of wide area simulation networking in support of modeling and simulation, doctrinal development, training, and operations, utilizing live, virtual and constructive simulations. Development also supports related simulations and simulator efforts, including the Advanced Concepts Research Tools (ACRT).

In FY02 the project supports the development of the Environmental Data Base (EDB) for rapid extraction of terrain and environmental data at the user level.

This project supports Interim and Objective transition paths of the Transformation Campaign Plan (TCP).
(NOTE: ACRT was transferred from C77 to C74 in FY01)

FY 2000 Accomplishments

- 3105 Completed contract modification to integrate additional full fidelity and desktop Advanced Concepts Research Tools (ACRT) at TRADOC's Battlelabs.
- 391 Developed and managed the Advanced Simulation Program to achieve Army-wide modeling and simulation infrastructure objectives.
- 672 Continued development of High Level Architecture technology and tools to support Simulation Object Modeling, Federation Object Model development and federation exercise management, data collection and after action review, and HLA compliance tools.

Total 4168

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SIMULATION**

PROJECT

C77

FY 2001 Planned Program

- 390 Continue development and management of the Advanced Simulation Program to achieve Army-wide modeling and simulation infrastructure objectives.
- 633 Continue development of High Level Architecture technology and tools to support Simulation Object Modeling, Federation Object Model development and federation exercise management, data collection and after action review, and HLA compliance tools.
- 18 Small Business Innovative Research (SBIR)/Small Business Technology Transfer Program (STTR).

Total 1041

FY 2002 Planned Program

- 2239 Develop Environmental Data Base (EDB) to support rapid extraction of terrain and environmental data at user level.

Total 2239

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<u>B. Other Program Funding Summary</u>	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Compl	Total Cost
OPA3, KA6000, Reconfigurable Simulators	2398	2309	365	0	0	0	0	0	0	0
OMA, 121014, TBIS	3985	4002	4702	0	0	0	0	0	0	0

C. Acquisition Strategy: Competitive development leading to competitive procurement against performance specifications.

<u>D. Schedule Profile</u>	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
Advanced Distributed Simulation Technology II Delivery Order Contract Awarded	3Q			0	0	0	0	0
SNE Tools Development Award			1Q	0	0	0	0	0
HLA Tool Development		1Q		0	0	0	0	0

FY00 Milestone completed.

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I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . ACRT Development and Integration	C/CPAF	Various	5766	0		0		0	0	0	0	0
b . HLA Tool Development	Multiple	Various	4483	473	1Q	0		0	0	0	0	0
c . SNE Tools Development	TBD	TBD	0	0		1240	1Q	0	0	0	0	Continue
Subtotal:			10249	473		1240		0		0	0	Continue

Remarks: Battlelab Reconfigurable Simulator Program replaced by ACRT.

II. Support Cost	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Subtotal:			0	0		0		0		0	0	0

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SIMULATION

PROJECT
C77

III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Subtotal:			0	0		0		0		0	0	0

IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . HLA Tools program mgt	Multiple	Various	419	160	1Q	0		0	0	0	0	0
b . ASP PM Management	Multiple	Various	391	408	1Q	0		0	0	0	0	0
c . SNE Tools	Multiple	Various	0	0		999	1Q	0	0	0	0	Continue
Subtotal:			810	568		999		0		0	0	Continue

Project Total Cost:			11059	1041		2239		0		0	0	Continue
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COST (In Thousands)	FY 2000 Actual	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
C78 COMPUTER GENERATED FORCES	2498	15041	14598	0	0	0	0	0	0	0

A. Mission Description and Budget Item Justification: This project develops software systems to realistically represent activities of units and forces in simulation. This representation is used to support concept evaluation, experimentation, materiel acquisition and training communities. Initiatives include the systems engineering and design for improvements to the architecture and interoperability of Army SAFs, and the evolution to an Army universal computer generated forces system, OneSAF. This evolutionary approach includes development of OneSAF Testbed (OTB) to iteratively upgrade existing SAF capability, while concurrently developing OneSAF. This will provide the various Army domains with an interim SAF to utilize until development of OneSAF is complete. OneSAF is a next generation SAF that will represent a full range of operations, systems and control processes for support of training research, development and acquisition simulation applications including human-in-the-loop. OneSAF is uniquely postured to support the constructive training challenges presented by transformation. Current initiatives include the Joint Virtual Battlefield (JVB), with OTB at the core, which allows tactics and doctrine development for the Future Combat System (FCS) from concept (today) through fielding (2010 and beyond).

The FY02 program will continue development of the functionality to provide OneSAF with terrain, editing and data collection tools, and infrastructure as well as continue the development of life cycle applications and infrastructure enhancements for OneSAF version 1.0.

This project supports the Interim and Objective transition paths of the Transformation Campaign Plan (TCP).

FY 2000 Accomplishments

- 1373 Completed management planning and acquisition efforts for award of the OneSAF system development Task Order contracts.
 - 626 Completed development of OTB software Builds B and C and released OneSAF Testbed (OTB) Version 1.0A (Beta Test) for initial use and evaluation.
 - 499 Initiated development of OTB build D.
- Total 2498

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**0604760A - DISTRIBUTIVE INTERACTIVE
SIMULATION**

PROJECT

C78

FY 2001 Planned Program

- 13661 Develop software functionality to provide OneSAF with terrain, editing and data collection tools and infrastructure.
- 951 Verification and validation of newly developed and integrated software.
- 429 Small Business Innovative Research (SBIR)/Small Business Technology Transfer Program (STTR).

Total 15041

FY 2002 Planned Program

- 10120 Continue development of functionality to provide OneSAF with terrain, editing and data collection tools and infrastructure.
- 2050 Continue development of life cycle applications and infrastructure enhancements for OneSAF Version 1.0.
- 1369 Develop functionality to represent behaviors, physical models, and communication models for OneSAF.
- 1059 Verification & Validation of newly developed and integrated software.

Total 14598

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BUDGET ACTIVITY 5 - ENG MANUFACTURING DEV	PE NUMBER AND TITLE 0604760A - DISTRIBUTIVE INTERACTIVE SIMULATION	PROJECT C78
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<u>B. Other Program Funding Summary</u>	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Compl	Total Cost
OMA, 121014	500	497	1561	0	0	0	0	0	0	0

C. Acquisition Strategy: Development based on performance specifications via multiple Task Orders on competitively selected contracts.

<u>D. Schedule Profile</u>	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
Release OneSAF Testbed (OTB) Version 1.0		1Q		0	0	0	0	0
Release OTB Version 2.0			1Q	0	0	0	0	0
Award OneSAF Development Task Orders for individual components to meet block requirement	1Q	1Q	1Q	0	0	0	0	0
OneSAF IOC				0	0	0	0	0

FY00 Milestones Completed.

ARMY RDT&E COST ANALYSIS(R-3)

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BUDGET ACTIVITY
5 - ENG MANUFACTURING DEV

PE NUMBER AND TITLE
0604760A - DISTRIBUTIVE INTERACTIVE
SIMULATION

PROJECT
C78

I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Architecture Dev & System Integration	CPFF	Various/TBD	0	6250	2-3Q	6500	1-2Q	0	0	0	0	0
b . Integrated Environment Dev	CPFF	Advanced Systems Technology, Inc., Orlando FL	0	2003	2Q	1000	1-2Q	0	0	0	0	Continue
c . Synthetic Environment Dev	CPFF	Science Applications International Corp, Orlando, FL	0	1196	1-2Q	1000	1Q	0	0	0	0	Continue
d . Knowledge Acquisition/Knowledge Engineering	CPFF	Aegis Technologies Group, Huntsville, AL	0	1156	2-3Q	869	1-2Q	0	0	0	0	0
e . OneSAF System Development	C/CPFF	Various/TBD	758	1248	1-2Q	1050	1-2Q	0	0	0	0	Continue
f . OneSAF Testbed	C/CPAF	Lockheed-Martin Inc., Orlando, FL	7012	0		0		0	0	0	0	0
g . Model Development	C/CPFF	Various/TBD	0	0		500	1Q	0	0	0	0	Continue
Subtotal:			7770	11853		10919		0		0	0	Continue

Remarks: New Competitive Contract for OneSAF Development. Each award is DO against CPFF contract.

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BUDGET ACTIVITY 5 - ENG MANUFACTURING DEV	PE NUMBER AND TITLE 0604760A - DISTRIBUTIVE INTERACTIVE SIMULATION	PROJECT C78
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II. Support Cost	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . System Analysis	Various	Multiple	745	470	1Q	685	1Q	0	0	0	0	Continue
b . Domain Analysis	Various	Multiple	0	915	1-3Q	915	1-3Q	0	0	0	0	Continue
c . Architecture Engr & Tech Spt	C/CPFF	MITRE FFRDC	652	238	1Q	250	1Q	0	0	0	0	Continue
Subtotal:			1397	1623		1850		0		0	0	Continue

III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . OTB Verification & Validation	Various	Multiple	478	0		0		0	0	0	0	0
b . OneSAF integration, evaluation and test	C/CPAF	TBD	0	207	1-2Q	400	1-2Q	0	0	0	0	Continue
c . OneSAF Verification, Validation & Accreditation	Various	Multiple	0	166	1-2Q	659	1-2Q	0	0	0	0	Continue
Subtotal:			478	373		1059		0		0	0	Continue

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IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Program management	Various	Multiple	1022	1192	1Q	770	1Q	0	0	0	0	Continue
Subtotal:			1022	1192		770		0		0	0	Continue

Project Total Cost:			10667	15041		14598		0		0	0	Continue
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