

UNCLASSIFIED
FY 2007 RDT&E,D BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2

DATE: FEBRUARY 2006

BUDGET ACTIVITY: 06

PROGRAM ELEMENT: 0603757D8Z

PROGRAM ELEMENT TITLE: JOINT TRAINING TRANSFORMATION (T2)

PROJECT NUMBER:

PROJECT TITLE:

GENERAL COMMENTS: Funding for Joint Training Transformation (T2) moved from Navy Program Elements (PE) 0603727N and 0804758N and transferred to Defense Wide PE 0603757D8Z starting in FY 2007, as directed in the National Defense Authorization Act for FY 2005. These programs are not new starts.

COST: (Dollars in Thousands)

Project Number & Title	FY 2005 Actual	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate
Total PE			72,897	64,433	55,793	53,780	54,815
JOINT NATIONAL TRAINING CAPABILITY (JNTC) Project Code P758							
	0	0	34,906	31,741	26,371	27,003	28,148
JOINT TRAINING CAPABILITY ANALYSIS OF ALTERNATIVES (TCAOA) Project Code P759							
	0	0	10,700	11,000	8,600	5,600	5,077
JOINT COMBINED TRAINING CENTRE (JCTC) Project Code P760							
	0	0	5,000				
JOINT SIMULATION SYSTEMS (JSIMS) Project Code P761							
	0	0	11,991	11,092	9,922	9,977	9,990
JOINT INTEGRATION INFORMATION OPERATIONS RANGE/JNTC (JIOR) Project Code P762							
	0	0	10,300	10,600	10,900	11,200	11,600

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: Funds moved from Navy (Program Element 0603727N) to Defense Wide starting in FY 2007, as directed in the National Defense Authorization Act for FY 2005.

These RDT&E programs are each part of a coordinated effort to develop and deploy capabilities for rapidly linking and integrating live, virtual, and constructive (LVC) forces of Services, Combatant Commanders (COCOM), coalition, and interagencies by creating a realistic battlespace environment in which to train as a Joint Warfighting force to meet emerging mission requirements including the Global War

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on Terrorism. These investments support the Secretary of Defense's (SEC DEF) T2 initiative to enable and enhance Joint Warfighting readiness by training as we intend to fight. The elements associated with this coordinated effort consist of:

- Joint National Training Capability (JNTC)
- Training Capability Analysis of Alternatives (TCAoA)
- Joint Combined Training Centre (JCTC)
- Joint Simulation Systems (JSIMS)
- Joint Integration Information Operations Range (JIIR)

Initially established in 2003, JNTC continues to develop and integrate Advanced Training Technologies (ATT) into a seamless Joint training environment. JNTC establishes the overarching Joint framework and context necessary for COCOMs and Services to achieve a Joint operating environment through an integrated network of training sites and nodes. JNTC provides the common standards, architecture, and development processes required to link the other training transformation programs within this program element. These initiatives develop and enhance future Joint training capabilities to meet current and future training requirements.

The TCAoA effort focuses on comparing current training capabilities with training requirements in order to identify gaps in our current joint training capability, to identify alternatives for removing those gaps, and to assess the cost and effectiveness of these alternatives. Specifically, the TCAoA focuses on: (1) developing and integrating enhancements to the existing and programmed constructive simulations (Alt 3), (2) pursuing selected alternative training methodologies (Alt 4), (3) developing an innovative acquisition prototype (Alt 4) (4) developing solutions to implement recommendations from the Joint Staff's comprehensive study to re-engineer Joint training (Alt 4 & 5), and (5) developing a clear management and oversight structure to meet future Joint training requirements (Alt 4). These efforts provide solutions to the 35 gaps and seams in Joint and Service training requirements identified by the COCOM's in the SECDEF 2004 TCAoA study. These efforts increase warfighter Joint training capabilities with improved constructive simulations, streamlined acquisition processes, and leveraging industry training methodologies and technologies to provide on-demand Joint training tailorable to COCOM requirements for Joint Task Force headquarters staffs and individuals.

At the July 2004 Australia/US Ministerial Consultations (AUSMIN), the SECDEF signed an Australian – United States Joint Statement of Principles of Interoperability and affirmed the development of a Joint/Combined Training Centre (JCTC) in Australia. This enables the

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PROJECT TITLE:

linkage of JCTC to Department of Defense's (DoD) JNTC leveraging each other's training capabilities and providing the environment to exercise Coalition mission essential tasks.

In 2003, SECDEF tasked U.S. Joint Forces Command (USJFCOM) with the responsibility for continued development of JSIMS software. Significant investments were made under the JSIMS program and complete the transition and integration of selected residual JSIMS capabilities into the Joint Force Trainer Toolkit (JFTT). This effort provides warfighters with enhanced Joint LVC based training capabilities resident in the JFTT.

The Joint Integration Information Operations Range (JIIOR) will establish a secure, flexible, and seamless environment for the Services and Joint warfighters to test, train, develop tactics, and exercise simulated computer network attack using selected offensive electronic warfare capabilities. This environment enables the COCOM's warfighters to visualize non-kinetic weapons effects, understand the intricate and interactive effects generated by kinetic and non-kinetic weapons and achieve the same level of confidence and expertise in employing IO weapons that they have with kinetic weapons.

Note: Previous JIIOR funding was under Navy PE 0804758N and transferred to Defense Wide PE 0603757D8Z starting in FY 2007, as directed in the National Defense Authorization Act for FY 2005.

B. PROGRAM CHANGE SUMMARY:

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
Previous President's Budget Submission	0	0	0
President's Budget	0	0	72,897
Total Adjustments	0	0	0
Congressional Adjustment	0	0	0
Transfers	0	0	0
Program Adjustments	0	0	0

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PROGRAM ELEMENT TITLE: JOINT TRAINING TRANSFORMATION (T2)

PROJECT TITLE:

PROGRAM CHANGE SUMMARY EXPLANATION: Funds moved from Navy PE 0603727N to Defense Wide starting in FY 2007, as directed in the National Defense Authorization Act for FY 2005.

Technical: Not applicable.

Schedule: Not applicable.

C. OTHER PROGRAM FUNDING SUMMARY: Not applicable

D. ACQUISITION STRATEGY: Not applicable.

E. PERFORMANCE METRICS:

Performance metrics apply to the five projects of the Joint Force Trainer RDT&E program (JNTC, TCAoA, JCTC, JSIMS, and JIIR) through the USJFCOM Joint WarFighting Center (JWFC) Joint Force Trainer Technology Planning Board. The board will consist of senior technical, operational, program manager, and stake holder representatives within the Joint Force Trainer Community. The board will merge and prioritize technical training requirements. It will apportion work to the RDT&E elements based on an assessment of where the work is best accomplished. The board will evaluate the efficacy of development efforts based on performance metrics and will vote on whether or not to continue the effort. This process will ensure the Joint Force Trainer capabilities development effort synchronizes with warfighter requirements. Performance metrics include, but are not limited to; time, money, realism, and fidelity as defined below:

- Time – Will the effort enable the Joint Force Trainer to prepare and execute training faster than current capabilities allow?
- Money – Will the effort enable the Joint Force Trainer to prepare and execute training at a more effective and efficient cost than current capabilities allow?

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- Realism – Will the effort enable the Joint Force Trainer to create a training environment that is closer to the real world environment than current capabilities allow?
- Fidelity – Will the effort enable the Joint Force Trainer to create more detailed capabilities in the training environment than current capabilities allow?

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PROGRAM ELEMENT: 0603757D8Z

PROJECT NUMBER: P758

PROGRAM ELEMENT TITLE: JOINT TRAINING TRANSFORMATION (T2)

PROJECT TITLE: JOINT NATIONAL TRAINING CAPABILITY (JNTC)

COST: (Dollars in Thousands)

Project Number & Title	FY 2005 Actual	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate
JOINT NATIONAL TRAINING CAPABILITY (JNTC) Project Code P758							
	0	0	34,906	31,741	26,371	27,003	28,148

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: DOD directed USJFCOM to establish the JNTC Advanced Training Technology (JNTC/ATT) to develop future training concepts and capabilities. The mission is to develop the robust RDT&E capabilities that integrate LVC elements into a seamless Joint training environment. JNTC creates Joint warfighting conditions through a networked collection of interoperable training sites, ranges, and nodes that synthesize personnel, doctrine, and technology to deliver and achieve "Joint Context" for COCOM and Service training requirements. These products train and better prepare our Joint/Coalition Service members and interagency partners going into combat theaters of operations and stabilization. These funds provide critical Joint warfighter training to allow requisite enhancements to existing training systems, capabilities, and technologies; these enhancements improve training efficiencies and provide an integrated LVC environment. This capability precludes the necessity for conducting large-scale live exercises to achieve the SECDEF's T2 vision. Three years worth of JNTC/ATT RDT&E funding to date has provided important training enablers facilitating successful Joint training events.

B. ACCOMPLISHMENTS/PLANNED PROGRAM: Under the Navy's Program Element 0603727N, JNTC performed research and development (R&D) within an LVC distributed test-bed supporting the advancement of training technologies in the context of a Joint integrated battlespace. The test-bed operated as a continuous training R&D environment and provided the foundation for a distributed and deployable Mission Rehearsal System, which integrated live Intelligence, Surveillance & Reconnaissance feeds into the Common Operational Picture. The LVC test-bed supported advancement of training technologies, R&D test events, experimentation, and interoperability certification assessments. The test-bed enabled new training Concept of Operations to drive efficiency into the planning and conduct of complex Joint training events. It also provided capability to identify, evaluate, and solve training system shortfalls. This test-bed established as a laboratory at USJFCOM, draws on other facilities through distributed communication links.

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PROGRAM ELEMENT: 0603757D8Z

PROJECT NUMBER: P758

PROGRAM ELEMENT TITLE: JOINT TRAINING TRANSFORMATION (T2)

PROJECT TITLE: JOINT NATIONAL TRAINING CAPABILITY (JNTC)

ACCOMPLISHMENTS CONTINUED:

- Developed the Initial Capabilities Document for the Joint Rapid Distributed Database Development Capability (JRD3C) by implementing JRD3C into the Joint Capability Improvement Document System process.
- Designed, developed, tested and evaluated JRD3C proof of concept.
- Prototyped a knowledge management framework by providing access to digital libraries and distributing to centers of excellence in support of Standing Joint Force Headquarters training and mission rehearsal.
- Developed a real world database and distribution system for geospatial intelligence data and force data sharing to facilitate training and mission rehearsal capability.
- Developed Opposing Forces (OPFOR) Threat Systems to include service instrumentation, interoperability standards, weapons models, simulated terrain, and virtual training capabilities.
- Established the JNTC/ATT Laboratory's initial infrastructure support to operate and maintain the robust RDT&E lab environment in support of the JNTC certification program. This certification program provides the "to be" standards and architecture identification, development, and support for multiple R&D projects in technical focus areas such as: networking, Joint Command and Control, instrumentation, data collection, after action review, opposing forces technologies, live, virtual, constructive (LVC) technologies, knowledge management, information management, and training systems operations research.

FY 2007

JOINT NATIONAL TRAINING CENTER (JNTC) ADVANCED 34,906
TRAINING TECHNOLOGY (ATT) P758

FY 2007 Plans:

- Previous funding for JNTC/ATT was under Navy Program Element (PE) 0603727N and transferred to Defense Wide PE 0603757D8Z starting in FY 2007, as directed in the National Defense Authorization Act for Fiscal Year 2005.
- Develop Joint After Action Review tool set.

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PROGRAM ELEMENT TITLE: JOINT TRAINING TRANSFORMATION (T2)

PROJECT TITLE: JOINT NATIONAL TRAINING CAPABILITY (JNTC)

- Integrate instrumentation capability into Joint training environment.
- Enhance and integrate space domain representations into Joint training environment.
- Develop and integrate Chemical Biological Radiological/Nuclear and Explosive capabilities into the Joint training environment.
- Perform RDT&E in new and emerging technologies such as immerse virtual technologies, story driven training, light simulation/federations, massive-multiplayer online games, training objective driven simulations, embedded training, and Joint community unique simulations.
- Perform migration testing of training applications to Global Information Grid infrastructure.

C. OTHER PROGRAM FUNDING SUMMARY: Funds moved from Navy (Program Element 0603727N) to Defense Wide starting in FY 2007, as directed in the National Defense Authorization Act for FY 2005.

D. ACQUISITION STRATEGY: Not applicable.

E. MAJOR PERFORMERS:

Recipients

City/State

Description

No performer in this PE received more than 15% of the program or \$10 million.

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PROGRAM ELEMENT: 0603757D8Z

PROGRAM ELEMENT TITLE: JOINT TRAINING TRANSFORMATION (T2)

PROJECT NUMBER: P759

PROJECT TITLE: JOINT TRAINING CAPABILITY ANALYSIS OF ALTERNATIVES (TCAoA)

Project Number & Title	FY 2005 Actual	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate
JOINT TRAINING CAPABILITY ANALYSIS OF ALTERNATIVES (TCAoA) Project Code P759							
	0	0	10,700	11,000	8,600	5,600	5,077

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: JWFC will support development capabilities in Joint simulations to eliminate training gaps that are identified by the COCOMs and in accordance with SECDEF's T2 objectives. In accordance with the Unified Command Plan (2004), USJFCOM JWFC is the lead in the development and operation of systems and architectures that directly support distributed Joint training requirements of other COCOMs, Joint Task Forces (JTFs) and Defense Agencies. The underlying premise of TCAoA (Alt 4 and 5) centers on privatization of training support and development with the competitive market forces driving the development of technologies to reduce the cost of training. JFCOM will create the Joint Oversight Board established as a governance process to review the effectiveness of the tools and the providers. Management of the toolkit will be a government-led Consortium with industry and academia that ensure the tools in the toolkit comply with the requirements of the common architecture. A number of "Out of the Box" technologies from Industry, Government and Academic sources that offer the greatest potential to reengineer Joint training will be identified for training use. These technologies include Light Simulations, Light Federations, Story-Driven Training, Massively-Multi-player Games, Training Objective Driven Simulation, Embedded Training, and Joint Community Unique Simulations.

B. ACCOMPLISHMENTS/PLANNED PROGRAM: Under the Navy's Program Element 0603727N, TCAoA was a new start for FY 2006. It is not a new start in FY 2007.

JOINT TRAINING CAPABILITY ANALYSIS OF ALTERNATIVES (TCAoA) P759	FY07 10,700
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FY 2007 Plans

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PROGRAM ELEMENT: 0603757D8Z

PROGRAM ELEMENT TITLE: JOINT TRAINING TRANSFORMATION (T2)

PROJECT NUMBER: P759

PROJECT TITLE: JOINT TRAINING CAPABILITY ANALYSIS OF ALTERNATIVES (TCAoA)

- Previous funding for TCAoA was under the Navy PE 0603727N and transferred to Defense Wide PE 0603757D8Z starting in FY 2007, as directed in the National Defense Authorization Act for FY 2005.
- Form governance and execution management groups.
- Develop contract models.
- Develop program assessment/exit criteria.
- Identify sites/program for training implementation.
- Develop/initiate and target Training Support Provider acquisition plan.
- Identify capabilities shortfalls for targeted market maker incentive investments – initiate focused call.
- Fund select development/integration proposals.

C. OTHER PROGRAM FUNDING SUMMARY: Funds moved from Navy (Program Element 0603727N) to Defense Wide starting in FY 2007, as directed in the National Defense Authorization Act for FY 2005.

D. ACQUISITION STRATEGY: Not applicable.

E. MAJOR PERFORMERS:

Recipients	City/State	Description
No performer in this PE received more than 15% of the program or \$10 million.		

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PROGRAM ELEMENT: 0603757D8Z

PROGRAM ELEMENT TITLE: JOINT TRAINING TRANSFORMATION (T2)

PROJECT NUMBER: P760

PROJECT TITLE: JOINT COMBINED TRAINING CENTRE (JCTC)

Project Number & Title	FY 2005 Actual	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate
JOINT COMBINED TRAINING CENTRE (JCTC) Project Code P760	0	0	5,000	0	0	0	0

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: At the July 2004 Australia/U.S. Ministerial Consultations (AUSMIN), the SECDEF signed an Australian – United States Joint Statement of Principles of Interoperability and affirmed the development of a Joint/Combined Training Centre (JCTC). The end-state for the JCTC is to enhance coalition training in Joint/Combined mission essential tasks in order to assess operational capability and preparedness, improve interoperability, facilitate capability development and develop recommended solutions, and enhance regional security. The JCTC will link DoD's Joint National Training Capability (JNTC) as part of the Global Joint Training Infrastructure (GJTI) via USPACOM's Gaming and Simulation Facility (GSF) and eventually United States Pacific Command's Pacific Warfighting Center as a cooperative collection of training sites, nodes, simulations, and events. Without this funding, Australia may disengage from this strategic initiative, and could withdraw their AU\$23 Million commitment thereby reducing coalition readiness in the Global War on Terrorism and other potential real world operations.

B. ACCOMPLISHMENTS/PLANNED PROGRAM: Under the Navy's Program Element 0603727N, JCTC was a new start for FY 2006. It is not a new start in FY 2007.

JOINT COMBINED TRAINING CENTRE (JCTC) P760	FY 2007 5,000
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DATE: FEBRUARY 2006

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PROGRAM ELEMENT: 0603757D8Z

PROJECT NUMBER: P760

PROGRAM ELEMENT TITLE: JOINT TRAINING TRANSFORMATION (T2)

PROJECT TITLE: JOINT COMBINED TRAINING CENTRE (JCTC)

FY 2007 Plans:

- Previous funding for JCTC was under Navy PE 0603727N and transferred to Defense Wide PE 0603757D8Z starting in FY 2007, as directed in the National Defense Authorization Act for FY 2005.
- Commission a Program Study and/or a series of planning and design studies of desired capabilities as described in the JCTC scoping study. These studies establish the Modeling and Simulation baseline systems to support Australian participation with the US Joint training community, the technical requirements for US-Australian network interconnection and finally discover the policy and technical requirements to satisfy Multinational Information Sharing for authorizing network interconnection.
- Establish connectivity between USPACOM and Australia JCTC Management Center.
- Prepare instrumented ranges as described in the JCTC scoping study to support a proof of concept demonstration.
- Lease and transport supporting architecture for a deployable and/or permanent live, virtual and constructive environment to support proof of concept demonstration.

C. OTHER PROGRAM FUNDING SUMMARY: : Funds moved from Navy (Program Element 0603727N) to Defense Wide starting in FY 2007, as directed in the National Defense Authorization Act for FY 2005.

D. ACQUISITION STRATEGY: Not applicable.

E. MAJOR PERFORMERS:

Recipients	City/State	Description
No performer in this PE received more than 15% of the program or \$10 million.		

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DATE: FEBRUARY 2006

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PROGRAM ELEMENT: 0603757D8Z

PROJECT NUMBER: P761

PROGRAM ELEMENT TITLE: JOINT TRAINING TRANSFORMATION (T2)

PROJECT TITLE: JOINT SIMULATIONS SYSTEMS (JSIMS)

Project Number & Title	FY 2005 Actual	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate
JOINT SIMULATION SYSTEMS (JSIMS) Project Code P761							
	0	0	11,991	11,092	9,922	9,977	9,990

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: In 2003, SECDEF tasked USJFCOM with the responsibility for continued development of JSIMS software. Additionally, in accordance with Unified Command Plan 2004, USJFCOM JWFC leads the development and operation of systems and architectures that directly support distributed Joint training requirements of other COCOMs, Joint Task Forces (JTFs) and other interagencies. Due to significant investments made under the JSIMS program, this project completes the transition and integration of selected residual JSIMS capabilities into the Joint Force Trainer Toolkit (JFTT). This effort provides warfighters with enhanced Joint LVC-based training capabilities resident in the JFTT. By continuing this level of effort, previous investments in the JSIMS program leverage existing capabilities and prevent the development of products from scratch.

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

JOINT SIMULATION SYSTEM (JSIMS) P761

FY 2007
11,991

Accomplishments: Under the Navy's Program Element 0603727N, these enhancements addressed COCOM training requirements such as:

- Integrated Joint Simulations (JSIMS) Theater Battle Management Core System adapter with Joint Multi-Resolution Model (JMRM). Complete and ready for use for Terminal Fury 2006 exercise.
- Built Run Time Manager Command, Control, Communications, Computers and Intelligence (C4I) interface completed for FY 2006 COCOM exercises to stimulate real world C4I info.

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PROGRAM ELEMENT: 0603757D8Z

PROJECT NUMBER: P761

PROGRAM ELEMENT TITLE: JOINT TRAINING TRANSFORMATION (T2)

PROJECT TITLE: JOINT SIMULATIONS SYSTEMS (JSIMS)

- Developed High Level Architecture (HLA) Interface with Multiple Unified Simulation Environment/AF Synthetic Environment for Reconnaissance and Surveillance unmanned aerial vehicle simulation.
- Purchased Run Time Infrastructure for testing and developmental support during Terminal Fury 2006.
- Developed HLA Interface for Tactical Simulations (TACSIM).
- Identified/developed requirements for level II terrain for use in future exercises (two year development effort).
- Developed HLA Interface with Missile Defense Space Tool for Terminal Fury 2006.
- Developed Entity Level Server for Joint Theater Level Simulation (JTLS) for use in the JMRM Federation.
- Developed Web enabled JTLS for use in all future COCOM exercises.
- Funded analysis and documentation for Weapons affects data for Joint Conflict And Tactical Simulations (JCATS) as authoritative data repository for all Joint exercises.
- Integrated After Action Report tool for JMRM.
- Developed and integrated a JMRM Federation diagnostic tool, Simulation Interoperability Test Harness.

FY 2007 Plans:

- Previous funding for JCTC was under Navy PE 0603727N and transferred to Defense Wide PE 0603757D8Z starting in FY 2007, as directed in the National Defense Authorization Act for FY 2005.
- Integrate, enhance, and/or reengineer selected existing JSIMS capabilities into Joint Force Trainer Toolkit
 - Decision support tools
 - Modeling and Simulation (M&S) interfaces to command and control systems
 - Software utilities for rapidly translating and building simulation databases

C. OTHER PROGRAM FUNDING SUMMARY: Funds moved from Navy (Program Element 0603727N) to Defense Wide starting in FY 2007, as directed in the National Defense Authorization Act for FY 2005.

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PROGRAM ELEMENT: 0603757D8Z

PROJECT NUMBER: P761

PROGRAM ELEMENT TITLE: JOINT TRAINING TRANSFORMATION (T2)

PROJECT TITLE: JOINT SIMULATIONS SYSTEMS (JSIMS)

D. ACQUISITION STRATEGY: Not applicable

E. MAJOR PERFORMERS:

Recipients

City/State

Description

No performer in this PE received more than 15% of the program or \$10 million.

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DATE: FEBRUARY 2006

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PROGRAM ELEMENT: 0603757D8Z PROGRAM ELEMENT TITLE: JOINT TRAINING TRANSFORMATION (T2)

PROJECT NUMBER: P762 PROJECT TITLE: JOINT INTEGRATED INFORMATION OPERATIONS RANGE/JNTC (JIOR)

Project Number & Title	FY 2005 Actual	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate
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JOINT INTEGRATED INFORMATION OPERATIONS RANGE/JNTC (JIOR). Project Code P762

0	0	10,300	10,600	10,900	11,200	11,600
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Previous funding for JIOR was under the Navy PE 0804758N and transferred to Defense Wide PE 0603757D8Z starting in FY 2007, as directed in the National Defense Authorization Act for FY 2005. The Joint IO Range is under development with a planned initial capability of July 2006.

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The National Military Strategy of the United States stresses the importance of integrating Information Operations (IO) capabilities for the success of Joint Operations and Decision Superiority. "Assuring information systems in the face of attack and conducting effective Information Operations" was one of the six critical operational goals in DoD's transformation efforts (2001 Quadrennial Defense Review). In addition, the DoD IO Roadmap, signed on 30 October 2003, explicitly identified DoD's need for the IO Range. The Fiscal Years 2004-2009 Defense Planning Guidance (DPG) stated the need to expand IO training and education for the developing cadre of IO professionals and provide an environment for analysis, testing, training, combat assessments, and measures of effectiveness for more reliable IO capabilities. Deputy SECDEF Memorandum on the IO Range signed 18 November 2005 established the requirement for creating a cooperative information operations range among military services under the leadership of USJFCOM.

Within SECDEF's Training Transformation (T2) objectives the IO Range establishes a secure, flexible, seamless and realistic test, training, and exercise environment for developing and operationalizing IO weapon systems and their associated tactics, techniques and procedures. It allows for effective and thorough Service and COCOM-sponsored training and exercises in an environment representative of actual combat targets and systems. Creating this capability requires a concerted effort across the IO community to achieve an

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PROGRAM ELEMENT: 0603757D8Z PROGRAM ELEMENT TITLE: JOINT TRAINING TRANSFORMATION (T2)

PROJECT NUMBER: P762 PROJECT TITLE: JOINT INTEGRATED INFORMATION OPERATIONS RANGE/JNTC (JIOR)

interoperable infrastructure incorporating representative operational environments, resources, capabilities, and intelligence necessary to effectively evaluate, characterize, and certify IO weapon systems and tactics.

The basis of the functional structure of the IO Range is the integration of existing ranges, laboratories, information warfare centers, and other Government facilities that currently support IO test, training, exercise, and experimentation events. Capabilities at the selected sites will be securely connected and integrated into IO Range. A key feature of this concept is the persistent, secure connection that links the sites together, allowing the exchange of data and the visualization of effects as we employ capabilities. Creation of a "virtual range" based on persistent connections significantly reduces the amount of lead-time required to set up each new warfighter event. The long-term goal for the IO Range is to be a full spectrum IO Range, supporting all the disciplines of IO Operational Security, computer network operations, electronic warfare, psychological operations, and military deception.

In short, the IO Range provides an environment enabling the Services and COCOMs to visualize non-kinetic weapons effects, understand the intricate and interactive effects generated by kinetic and non-kinetic weapons, and achieve the same level of confidence and expertise in employing IO weapons that they have with kinetic weapons.

B. ACCOMPLISHMENTS/PLANNED PROGRAM: Previous funding for JIIOR was under the Navy PE 0804758N and transferred to Defense Wide PE 0603757D8Z starting in FY 2007, as directed in the National Defense Authorization Act for FY 2005. The Joint IO Range is under development with a planned initial capability of July 2006. Ten initial sites will be linked together to create a new, transformational, IO Range capability with USJFCOM JWFC serving as the Lead Agent. JIIOR links existing Service, Agency, and Department of Energy range capabilities, enhancing those capabilities, and creating new capabilities where they do not exist. This provides Services and Joint warfighters a robust, realistic environment for test, training, tactics development, and exercising of computer network attack and selected offensive electronic warfare capabilities. This capability will expand to include the other IO disciplines as the IO range progresses toward its full capability in FY 2011.

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DATE: FEBRUARY 2006

BUDGET ACTIVITY: 06
PROGRAM ELEMENT: 0603757D8Z PROGRAM ELEMENT TITLE: JOINT TRAINING TRANSFORMATION (T2)
PROJECT NUMBER: P762 PROJECT TITLE: JOINT INTEGRATED INFORMATION OPERATIONS RANGE/JNTC (JIOR)

Joint Integration Information Operation Range (JIOR)

FY 2007
10,300

FY 2007 Plans:

- Previous funding for JIOR was under Navy PE 0804758N and transferred to Defense Wide PE 0603757D8Z starting in FY 2007, as directed in the National Defense Authorization Act for FY 2005.
- Demonstrate an IO "use case" in a COCOM exercise to test readiness for future events.
- Develop, test and evaluate IO Range concepts during a minimum of two COCOM sponsored events.
- Develop and publish a computer network defense study.
- Conduct the research and analysis to select the increase of an additional ten IO Range sites (#11-20) to continue expansion of the Range towards full capability.
- Continue the spiral implementation of IO capabilities at the Range sites. This continuing effort supports progress toward reaching full capability in which twenty persistent IO Range sites will be connected and integrated for IO Range use.

C. OTHER PROGRAM FUNDING SUMMARY: Funds moved from Navy (Program Element 0804758N) to Defense Wide starting in FY 2007, as directed in the National Defense Authorization Act for FY 2005.

D. ACQUISITION STRATEGY: Not applicable.

E. MAJOR PERFORMERS:

Recipients	City/State	Description
No performer in this PE received more than 15% of the program or \$10 million.		