

OSD RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

February 2008

APPROPRIATION/ BUDGET ACTIVITY
RDTE, Defense Wide BA 03

PE NUMBER AND TITLE
0603828D8Z - Joint Experimentation

COST (\$ in Millions)	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate
P808 Joint Experimentation	102.222	107.240	114.947	117.571	118.813	120.396	122.092

A. Mission Description and Budget Item Justification: The Joint Experimentation (JE) Program is the centerpiece to the broader Defense Experimentation Enterprise inclusive of investments by the Military Services and Defense Agencies. The JE Program underwrites Department of Defense (DoD) efforts to identify future joint and coalition force capabilities, to ascertain shortfalls in current joint force capabilities, and to examine key attributes of potential solutions for near-term joint shortfalls through effective Doctrine, Organization, Training, Materiel, Leadership and Facilities (DOTMLPF) improvements. Deliverables from Joint Experimentation (JE) Program investments should, then, fall into three categories: specific long-term force composition and mission descriptions that can be expressed as force development policy inputs, joint operational concepts, and DOTMLPF recommendations for force tailoring and improvement. The primary customer for JE is the joint warfighter including major joint Combatant Commanders and joint task force commanders. This customer focus necessarily involves inter-agency, inter-government/coalition, and non-government agency entities with whom the joint commanders must interact in the performance of their assigned missions. Inherent in performance of JE is close alignment and synchronization of experimentation efforts by Services and Agencies vested with responsibility under U.S. Title 10 for the training, equipping, and organizing of military forces assigned to joint commanders in the field.

Conceptually, JE is a critical element in a chain of processes yielding military capabilities. This chain normally begins with assessment and analyses of current military capabilities that frequently takes the form of "lessons learned" or exploratory force design. JE contributes to this process by providing rigorous environments for developing and testing conclusions development through the analysis phase. Ideally, JE progressively narrows the scope of inquiry through iterative examination and analysis leading to recommendations that can confidently serve as proposals for effective future force design, and current force modifications and improvements. Typically, JE deliverables provide the basis for future force development and employment guidance, for operational concept and plan development, and for the DOTMLPF investments that shape the forces fielded for military missions. In essence, JE is a risk reduction investment aiming to explore innovative alternatives for force development and to provide rigorous analyses of variables affecting joint force operational concepts and capability enhancements.

The challenges for joint experimentation include establishing valid hypotheses for examination, determination of effective processes for experimentation, disciplined execution to obtain actionable results, and transition into tangible and meaningful improvements - these all represent critical elements necessary for JE to be relevant to joint warfighting capabilities. In terms of program alignment, programs such as the Joint Warfighting Program (JWP) fund analyses providing the entering argument for experimentation by highlighting areas for improvement and proposing innovative avenues for future force development. JE then provides operationally relevant environments for solution exploration and iterative refinement. Outcomes from JE can take the form of joint operational concepts or joint capability prototypes for DOTMLPF tailoring via demonstrations before investment decisions for transition into force-wide implementation. Programs such as the Joint Capability Technology Demonstration (JCTD) Program and Joint Training (JT) Program should directly benefit from JE in progressing concepts to fielded joint capabilities.

The latest Unified Command Plan (UCP), dated May, 2006, specifies that Commander, US Joint Forces Command (USJFCOM) is functionally responsible to the Chairman of the Joint Chiefs of Staff for "Leading joint concept development and experimentation (CDE)", for "Coordinating the CDE efforts of the Services, combatant command, and defense agencies to support joint interoperability and future joint warfighting capabilities", for "Leading the development, exploration, and integration of new joint warfighting concepts", for "Serving as the DOD executive agent for Joint Warfighting Experimentation, including planning, designing, preparing, and assessing a program of joint warfighting experimentation in coordination with the Services, other combatant commands, and defense agencies, as appropriate", and for "Developing combined operational warfighting transformation efforts with joint CDE in coordination with the other combatant commands."

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Beginning with FY 2007, Director, Defense Research and Engineering (DDR&E) exerted executive oversight of Defense Experimentation including the JE Program. In policy guidance for the conduct of RDT&E-funded Joint Experimentation, DDR&E emphasized joint warfighter Combatant Command customer focus, discrete deliverables and project level fiscal accountability. During FY 2007, USJFCOM implemented management initiatives that are under evaluation by OSD. For purposes of broader oversight such as coordination of Defense experimentation and training investments, and integration of Defense experimentation with the Joint Concept Development and Integration System (JCIDS), OSD/AT&L teams with OSD(Policy/Personnel & Readiness), and the Joint Staff.

In FY 2008 and beyond, OSD policy for joint experimentation execution will be decentralization of joint experimentation execution in an effort to make the process more relevant and productive for individual joint combatant commanders. Part of this effort will be reinvigoration of experimental expertise funded through the Joint Warfare Program; part will be a new emphasis on decentralized execution where US Joint Forces command provides experimentation support to events hosted by combatant commander headquarters in balance with USJFCOM acting as a surrogate joint host for large-scale consolidated events. While ample opportunities will be preserved for discovery and innovation, projects under development without acceptable provisions for discrete deliverables and measurable performance metrics will have funding withheld or cancelled by DoD oversight authorities, with funding redirected to other joint experimentation priorities. OSD will also seek opportunities to integrate modeling & simulation and networked distribution technologies across Experimentation and Training Transformation domains for improved return on investment and benefits of cross-fertilization.

JE will benefit from a greater focus discrete deliverables in the areas of development and validation of new operational concepts and definition of joint capability gaps. To this end, and in balance with issues referred directly from CoComs and Services, Joint Experimentation will address those Most Pressing Military Issues (MPMI) and Integrated Priority List (IPL) shortfalls compiled by the Joint Staff through the Joint Capabilities Integration and Development System (JCIDS).

<u>B. Program Change Summary</u>	FY 2007	FY 2008	FY 2009
Previous President's Budget (FY 2008)	103.489	112.017	115.170
Current BES/President's Budget (FY 2009)	102.222	107.240	114.947
Total Adjustments	-1.267	-4.777	-0.223
Congressional Program Reductions		-3.840	
Congressional Rescissions			
Congressional Increases			
Reprogrammings	1.295		
SBIR/STTR Transfer	-2.434		
Other	-0.128	-0.937	-0.223

FY 2007 Congressional adjustments: Reduction (-\$15.9M) for "duplicative efforts"; increase (+\$3.8M) for Modeling and Simulation (M&S).

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

D. Acquisition Strategy Not applicable for this item.

E. Performance Metrics:

FY	Strategic Goals Supported	Existing Baseline	Planned Performance Improvement / Requirement Goal	Actual Performance Improvement	Planned Performance Metric / Methods of Measurement	Actual Performance Metric / Methods of Measurement
08						

Comment: Performance of Joint Experimentation systems is measured by successful development of:

- (1) objective validation of enhanced CoCom capabilities to perform joint missions in their assigned theaters and areas of responsibility,
- (2) documented delivery effective joint operational concepts,
- (3) confirmed production of refined and validated capability descriptions for joint materiel solutions for implementation by Service and Agency force developers and acquisition authorities,
- (4) identification of innovative integrated solutions and joint interoperability standards for Service-developed military capabilities, and
- (5) resolution of specific joint capability shortfalls delineated through the Joint Forces Command Combat Commander Engagement process and through the Concept Joint Capabilities Integration and Development System (JCIDS), specifically in Most Pressing Military Issues (MPMI) and Integrated Priority List (IPL) shortfall compilations.

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COST (\$ in Millions)	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	
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Project Justification: To enable better and more enduring focus over time, and to conform to the Joint Concept Development and Experimentation (JCDE) Enterprise standard, USJFCOM has adopted the use of Lines of Joint Experimentation (LOJX) to organize and track products and outcomes. These align very closely to the Tier I Joint Capability Areas. In any given year, work may be focused on those lines corresponding to solutions to the highest priority warfighter challenges, and so the portfolio of USJFCOM's JCDE may not cover every LOJX. Currently LOJX consist of: Battlespace Awareness, Command and Control, Comprehensive Approach, Force Application, Force Protection, Irregular Warfare, Logistics, Net-Centric Warfare, Shaping, and Stability. One additional category used by USJFCOM is Corporate Management and Support, which captures those projects supporting the Unified Command Plan (UCP)-directed Lead and Coordinate role.

Battlespace Awareness (BA) JCDE:

Joint Concept Development and Experimentation in the BA LOJX includes further development of Maritime Domain Awareness (MDA) and the Joint Intelligence Operations Center _ Transformational (JIOC-X). It also includes several initiatives by the Joint Urban Operations Office to improve BA in the urban environment. Finally, USJFCOM has begun investigation into ways and means to achieve persistent surveillance, and to analyze and display effects of military operations across the spectrum of Political, Military, Economic, Social, Information, Infrastructure (PMESII).

Command and Control (C2) JCDE:

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USJFCOM conducts JCDE in support of the C2 LOJX in several areas, including Homeland Defense and Civil Support (HLD/CS) concept development, interagency coordination, and Joint Urban Operations (JUO). Additionally, advanced technology solutions such as Conflict Modeling, Planning and Outcomes Experimentation (COMPOEX), Theater Effects Based Operations (TEBO) Advanced Concept Technology Demonstration (ACTD), and Cross-Domain Collaborative Information Environment (CDCIE) JCTD are being assessed through joint experimentation.

Comprehensive Approach (CA) JCDE:

The Comprehensive Approach LOJX seeks whole-of-government solutions to warfighter challenges in both a U.S. interagency environment and a multinational environment that involves military forces, other governmental agencies, and non-profit organizations. USJFCOM is a lead organization for the fifth in a series of multinational experiments (MNE5), and supports U.S. interagency experimentation in its Unified Action series and as it supports the stand-up of US Africa Command (AFRICOM). In addition, USJFCOM is conducting Unified Action (UA08) in support of Dept of State Coordinator for Reconstruction and Stability (S/CRS).

Force Application (FA) JCDE:

USJFCOM maintains interest in the Force Application LOJX, experimenting with automated close air support and urban warfare applications. Additionally, USJFCOM is responding to specific request for support from Commander, Multinational Force Iraq (MNF-I) through a tailored program of field experimentation.

Force Protection (FP) JCDE:

The FP LOJX is supported by experimentation in Combating Weapons of Mass Destruction (CWMD).

Irregular Warfare (IW) JCDE:

USJFCOM is beginning exploration in the IW LOJX in FY 2008. Specifically, the augmentation of Special Technical Operations (STO) to mainstream experimentation and work with USSTRATCOM in cyberspace warfare will comprise USJFCOM's initial work in IW.

Logistics JCDE:

USJFCOM plays a large role in the Logistics LOJX. Scalable, tailorable theater logistics concepts and implementation, a concept for a Joint Logistics Command, and multinational logistics comprise three significant efforts that will be undertaken in FY 2008 and FY 2009.

Shaping JCDE:

Beginning in FY 2007 and continuing through FY 2009, USJFCOM is working closely with other COCOMs to develop Joint Operating Concept (JOC) for Shaping that describes the Military Contribution to Cooperative Security Engagement in all global environments. In addition to developing the concept, experimentation activities are being conducted that support both concept development and capability requirements and gaps. As recognized in the 2006 Quadrennial Defense Review (QUADRENNIAL DEFENSE REVIEW), Strategic Communication is an integral part of shaping, and USJFCOM is aggressively developing a Joint Integrating Concept (JIC) to aid military commanders in supporting a unified national message in all operations.

JCDE Community Management and Support:

As directed in the Unified Command Plan 2006, USJFCOM is functionally responsible to the Chairman for leading transformation of the Armed Forces, for coordinating the development of joint concepts, and for coordinating joint warfighting experimentation. These roles are carried out through exercise of four core competencies developed at

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USJFCOM: developing joint concepts, developing joint capabilities, conducting joint experimentation, and managing Concept Development and Experimentation (CDE) through an Enterprise approach.

B. Accomplishments/Planned Program:

<u>Accomplishments/Planned Program Title:</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
Battlespace Awareness (BA)	11.142	10.476	11.154

FY 2007 Accomplishments

- Operational Net Assessment (ONA)/Synthetic Environment for Analysis Support (SEAS) Field Experiment. Conducted field experiment with NATO Interim Security Assistance Force (ISAF), testing both ONA and SEAS tools and concepts for global reachback capability. Engaged Joint Intelligence Operations Center _ Transformational (JIOC-X) in experiment, providing intelligence and planning support to ISAF.
- Sensor Placement Support. Developed and delivered Geospatial Analysis and Planning Support (GAPS) tool to operational forces, enabling them to more accurately assess coverage and optimize sensor placement to monitor tactical environment.
- UAV-Based Forensic Tracking. Working with an existing AFRL/USMC consortium, USJFCOM supported initial deployment of and CONOPS for the Commercial-Off-The-Shelf sensor package, a persistent tactical-level Intelligence, Surveillance and Reconnaissance (ISR) capability, as well as a powerful near-real-time analytical tool. Initial deployment conducted as operational assessment.

FY 2008 Planned Output:

- The Joint Intelligence Operations Center _ Transformational (JIOC-X) provides continuous development and refinement of COCOM JIOC processes, tactics, techniques and procedures (TTP), architectures, and standards in support of intelligence, operations, and plans integration (IOP-I) through JCDE. Intelligence support to information operations and IOP-I will be examined in a series of limited objective experiments, focused on rapid integration of information operations capabilities, providing input to real world operational planning, and informing Strategic Communication concept development. Activity will focus on supporting the stand up of USAFRICOM JIOC capabilities.
- Maritime Domain Awareness (MDA) joint concepts will improve the maritime awareness functional and cognitive processes to enhance decision making, improve the global sharing of maritime domain information at all levels, and facilitate the networking of global maritime operation centers. Contributions from Singapore, Finland and NATO will characterize the productive partnerships in the development of Maritime Domain Awareness concepts. Deliverables include: SenseMaking Limited Objective Experiments Final Report, MDA Information Flow Analysis, Multinational Maritime Situational Awareness Concept and CONOPS, MNE MSA/JEFX TAC 08 Final Report, and MDA National CONOPS Limited Objective Experiments (LOE) Final Report.

FY 2009 Planned Output:

- Lessons learned from MDA will be applied to other warfighting environments to increase the effectiveness of aggregation of information from diverse sources, enhancing physical domain awareness.
- Completion of Phase 4 of JIOC-X, and delivery of Phase 4 products.
- Potential for JCTD work on Joint Persistent Surveillance Sensor Integration (JPSSI).
- Continue transition and improvement of JUO ISR capability definition.

<u>Accomplishments/Planned Program Title:</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
Command and Control (C2)	18.312	17.863	19.124

FY 2007 Accomplishments

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- Cross-Domain Collaborative Information Environment. Developed standards-based, cross-domain whiteboard/web-based chat tool. Used in USPACOM and USSOUTHCOM exercise environments; requested by USNORTHCOM.
 - Noble Resolve Homeland Defense Experimentation. USJFCOM began a groundbreaking effort supporting USNORTHCOM and actively partnering with USSTRATCOM, USPACOM, National Guard Bureau, Department of Homeland Security, state & local governments, and non-governmental organizations. Noble Resolve integrated and synchronized joint experimentation in the areas of homeland defense and defense support to civilian authorities and provided information sharing and synchronization solutions.

FY 2008 Planned Output :

- The Joint Urban Operations (JUO) Capability Based Assessment (CBA) will identify unique urban capability requirements, capability gaps, and potential Doctrine, Organization, Training & Education, Material, Leader Development, Personnel, and Facilities (DOTMLPF) solutions required to improve Joint Force abilities to conduct Joint Urban Operations in the 2015-2027 timeframe
 - Noble Resolve experimentation will continue, in collaboration with USNORTHCOM, Department of Homeland Security, the National Guard Bureau, and state and local governments.
 Deliverables include: improved interagency command and control for disaster response; a shared information environment that supports Federal, State, Local Strategic/Operational information sharing, a harmonized policy for Homeland Defense, an ongoing Homeland Defense/Security experimentation venue, and Combat WMD/CBRN Battlespace Awareness Environment for the Joint Force Commander.

FY 2009 Planned Output:

- USJFCOM will continue supporting a robust environment for collaborative development of joint and interagency experimentation.
 - In coordination with other COCOMs and interagency partners, deliver appropriate tools and solutions that address critical information sharing capability gaps, support border security, and Chemical, Biological, Radiological, Nuclear and Enhanced Conventional Weapons (CBRNE) response.
 - Complete cooperative development with USNORTHCOM of the Homeland Defense & Civil Support Joint Operating Concept.
 - Transition tool from Conflict Modeling, Planning and Outcomes Experimentation (COMPOEX) to a program of record.
 - Deliver modules that will complete the Cross-Domain Collaborative Information Environment, in partnership with Defense Information Systems Agency (DISA) and National Security Agency (NSA).
 - Complete testing and delivery of complete version of Theater Effects Based Operations (TEBO) ACTD, ensure transition to program of record.

Accomplishments/Planned Program Title:

FY 2007

FY 2008

FY 2009

Comprehensive Approach (CA)

22.038

22.803

24.945

FY 2007 Accomplishments

- Completed transition of Joint Interagency Coordination Group (JIACG). Providing doctrinal handbook, DoD Instruction, and Concept of Operations (CONOPS) for staffing.
 - Support to USEUCOM/USAFRICOM. Provided assistance to USEUCOM in the development and transition of USAFRICOM, integrating U.S. interagency personnel throughout its structure, and focusing primarily on security and stability operations.
 - Conducted Rule of Law prototyping in support of USSOUTHCOM and Joint Task Force-Horn of Africa (JTF-HOA). Developed Justice Sector Assessment Tool, Rule of Law (ROL) Handbook, Draft CONOP for Comprehensive Approach to Security, Stability, Reconstruction (SSR) including assessment process and metrics, Draft CONOP for integration of Stability Police Units (SPUs) into US military operations, Draft CONOP for integration of a civilian/military justice planning cell, and illicit power structures taxonomy.
 - Conducted initial planning and shaping Multinational Experiment 5 (MNE5), collaboratively developing and implementing mutually acceptable process for screening international expansion to requesting nations.

FY 2008 Planned Output:

- Support to USEUCOM in the stand-up and operationalizing of U.S. Africa Command (USAFRICOM). Specifically, support will consist of initial mission analysis and experimentation necessary to help determine the necessary structure, roles, mission and partnerships.

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- Unified Action 08 is a highly collaborative experimentation program designed to deliver whole-of-government applications and products. Purpose is to support implementation of National Security Presidential Directive 44 (NSPD-44) by transforming the joint force's capability to conduct integrated planning and execution of complex emergencies at home and abroad with USG departments and agencies, to collaborate with intergovernmental organizations (IGOs), non governmental organizations (NGOs), and the private sector, and to conduct activities in support of broader National Security Reform. Deliverables include USG Planning Framework (S/CRS lead), Interagency Management System (S/CRS lead), Interagency Logistics Capability (JFCOM lead), Metrics and Assessment Tools and Frameworks (Multiple leads including United States Army Corps of Engineering (USACE), United States Institute of Peace (USIP), Regional Security Organization Architecture (COCOM-after-next) (AFRICOM / SOUTHCOM lead), Federal Foreign Disaster Response Plan (USAID lead), Information-Sharing Procedures (JFCOM lead), Ungoverned Areas and Threats from Safe Havens Paper (JFCOM lead with USAID), Haiti Stabilization Initiative Plan Report (HSI lead), Draft CONOP for Formed Police Unit (FPU) Integration (JFCOM lead), Draft CONOP for Civilian/Military Justice Coordination Cell (JFCOM lead), Interagency C2 and Common Operational Picture (COP) Solutions (JFCOM lead), Military Support to Governance Handbook; Interagency (IA) Chapter in Certification and Accreditation (CA) Manual (JFCOM lead), Military Support to Economics Handbook (JFCOM lead), Integrated National Planning and Execution System _Adaptive Planning and Execution/Global Force management (NPES-APEX/GFM) Capability (JFCOM and DHS lead), National Homeland Security Plan (NORTHCOM lead), Pre-Doctrinal Rule of Law Handbook for Joint Operations (JFCOM / US Army Center for Law and Military Operations (CLAMO) lead, and Pre-Doctrinal CONOP Comprehensive Approach to Security, Stability, Reconstruction (SSR) (JFCOM, USAID, OECD lead).

- Multinational Experiment 5 (MNE5), a multi-year effort, will conduct narrowly focused events in FY 08 and a capstone major integrating event in spring 09. Using a disciplined experimentation campaign plan, experiment issues and expected deliverables drive individual workshops and limited objective experiments. The MNE 5 community of interest membership currently includes 17 nations, NATO and the European Union. Partner nations will lead development of many of the deliverables. Deliverables include:

-- Coalition Handbook, a guidebook that provides operational-level guidance in discrete areas of operations, is capable of being used in entirety or in parts, and is easily adaptable to partial, intermittent revisions over time.

-- Comprehensive Approach White Paper (US): White Paper that frames the overarching approach harmonizing all elements of power.

-- Strategic Planning Guide (FR): Multinational Strategic Planning Guide used to establish coalition guidance at the strategic level.

-- Implementation Planning, Management, and Evaluation Guide (UK& US): Cooperative Implementation Planning (CIP) Guide; CIP Course Syllabus & Course Handbook

-- Multinational Effects-based Approach (MN-EBAO) CONOPS (NATO): EBAO CONOPS for military planning, execution and assessment in a civilian-compatible format; EBAO Handbook for either military or non-military players; Joint Planning and Engagement Tool for System Analysis, Planning and Assessment

-- Best Practices for Assessment, Planning (NATO): Code of Best Practice (CoBP) for Assessment within the EBAO framework and compatible with civilian planning; EBAO CONOPS (Ch 7 EB Assessment) refined; Joint Planning and Engagement Tool for System Analysis, Planning and Assessment

-- Knowledge Development (KD) framework concept (GE): Generic Framework for KD support of a Comprehensive Approach; Comprehensive Knowledge Base for MNE 5

-- Knowledge Base (KB) - MNE 5 Crisis Area and Kosovo Field Study (GE): Fully built KB that supports real-world operations in Kosovo; CONOPS Limited Field Experiment (LFE) HQ Kosovo Peacekeeping Forces (KFOR)

-- Technical Architecture and Design document (SE): Documentation of supporting CONOPS using NATO Architecture Framework version 3 concepts, providing a common architecture definition and design thru use of Design Rules, a Service Oriented integration environment for Service Oriented Architecture (SOA)-based applications, compatible with US and Finnish technical platforms.

-- Shared Information Framework and Technology structure/processes (FI): Framework for sharing information across agency and national boundaries; Compendium of Best Practices - Theoretical Model of Information Flows; Package of tools for the Secure Hosted Interface For File Transfer (Shift) community utilizing service oriented architecture (SOA) and commercial off the shelf technology (COTS)

-- Coalition Info Strategy CONOPS and White Paper (GE): White Paper _Information Activities in Future Coalition Operations _ A Comprehensive Approach_ ; CONOPS _Coordination of Information Activities in Support of Coalition Information Strategy.

-- Multinational Logistics CONOPS (US): CONOPS describing logistics organizational structure, processes, tools and information sharing requirements necessary to support a Comprehensive Approach in a coalition environment.

FY 2009 Planned Output:

- Work will continue supporting USAFRICOM, with deliverables including a USG Deployment & Sustainment Handbook, a USG Strategic Framework for Africa, and recommended appropriate decision support tools.

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- MNE5 major integrating event and culminating Senior Leader Review will validate and accelerate implementation of MNE5 deliverables.
 - Complete experimentation and begin delivery of capabilities developed through the Unified Action experimentation and begin delivery of capabilities developed through the Unified Action experimentation series.

<u>Accomplishments/Planned Program Title:</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
Force Application (FA)	8.284	8.886	9.461

FY 2007 Accomplishments:
 - Joint Urban Fires Prototype. Hand-held tactical level imagery mensuration capability developed and has entered systems integration phase with existing Service fires systems (Precision Strike Suite for Special Operations Forces, Army Field Artillery Tactical Data System, Joint Automated Deep Operations Coordination System).

FY 2008 Planned Output:
 - The Joint Urban Operations Office (JUOO) serves as the DOD-wide single point of contact and proponent for joint urban operations doctrine, training and equipment over the full spectrum of urban contingencies that the Joint Force could confront. The JUOO will ensure USJFCOM is able to provide trained/capable/interoperable Joint Forces for urban operations. It will enhance Joint Command and Control through the development of concepts and capabilities that enable Joint Force Commander to observe, orient, decide and act inside the adversary's decision cycle. The JUOO will serve as the communication conduit of Urban Operations focus throughout DOD and the Joint Force.
 - Further enhancement of the Joint Urban Fires Prototype will provide joint warfighters the ability to apply precision fires from any source in an urban environment with improved precision, discrimination and response.
 - Joint Urban Fires Project (JUFPP) capabilities, with associated tactics, techniques and procedures (TTP) will transition in FY 2008. Funds will provide contractor personnel support, and creation of JUFPP capabilities performed under an experimental support agreement (ESA) between USJFCOM and the Weapons Engagement Office (WEO) at Naval Weapons Center (NWC) China Lake.

FY 2009 Planned Output:
 - The JUOO will continue to support advances in joint integrated fires applications in joint urban operations; complete final capability demonstration of JUFPP integration with unmanned aerial systems (UAS) scene matching.
 - Complete Spiral 3 of Joint Automated Close Air Support Suite (JACS), with aircraft Precision Fires Image Generator.

<u>Accomplishments/Planned Program Title:</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
Force Protection (FP)	0.849	0.911	0.970

FY 2007 Accomplishments:
 - Senior Leader Review for Combating Weapons of Mass Destruction (SLR-CWMD). Partnered with USSTRATCOM and Defense Threat Reduction Agency (DTRA) to execute SLR-CWMD and initiated follow-on actions to implement recommendations.

FY 2008 Planned Output:
 - Complete detailed plan capturing potential solutions for CWMD warfighter challenges.

FY 2009 Planned Output:

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- Execute CWMD plan of experimentation.				
<u>Accomplishments/Planned Program Title:</u>		<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
Irregular Warfare (IW)			1.680	1.788
<p>FY 2007 Accomplishments:</p> <ul style="list-style-type: none"> - None new start in FY 2008 <p>FY 2008 Planned Output:</p> <ul style="list-style-type: none"> - The Integrated Joint Special Technical Operations (IJSTO) program will provide support to COCOMs, Services, and other organizations through the analysis and experimentation of special access program capabilities and processes. This program will examine potential solutions to real-time collaborative planning at the strategic through tactical levels within the Special Access Program (SAP) environment, participating as a distributed location in joint experimentation technical spirals, experiments, and exercises as required. <p>FY 2009 Planned Output:</p> <ul style="list-style-type: none"> - Provide experimentation support for USMC and SOCOM development of Irregular Warfare (IW) Joint Operating Concept. 				
<u>Accomplishments/Planned Program Title:</u>		<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
Logistics (Log)		17.086	18.328	19.513
<p>FY 2007 Accomplishments:</p> <ul style="list-style-type: none"> - Joint Deployment & Distribution Enterprise. Assisted USTRANSCOM in support for the Joint Deployment and Distribution Enterprise and development of the Joint Capabilities Requirements tool. - Joint Experimental Deployment and Support (JxDS). Provided direct support to U.S. Forces Korea in developing organization, architectures and CONOPS for integrated Joint Force Support Component Command. Full Operational Capability to be achieved by end of FY 2007. Provided direct support to USPACOM, developing CONOPS for Enhanced Joint integrated joint logistics directorate), demonstrating scalability of JxDS solution set. - Multinational Logistics (MN-Log) Handbook. In support of MNE5, developed the MN-Log handbook for evaluation in robust multinational experimentation environment. - Joint Force Projection Advanced Concept Technology Demonstration (JFP ACTD). Continued development of JFP ACTD, developing the Reception Staging Onward Movement and Integration (JRSO&I) planning and execution suite, building a Service Oriented Architecture/Web Services technical environment, and documenting business rules for operational planning and execution using an operational capabilities-based construct. - Adaptive Planning (AP). Conducted initial baseline assessment to support Joint / OSD effort to develop an AP capability for the Department. <p>FY 2008 Planned Output:</p> <ul style="list-style-type: none"> - The Joint Experimental Deployment & Support (JxDS) initiative, a family of scalable joint and combined logistics capabilities, will be continued. Following FY07 declaration of full operational capability of the Joint Force Support Component Command (JFSCC) at U.S. Forces Korea (USFK), support will transition to a developing and implementing a Joint Logistics Command under the new Korea Command transformation construct. USPACOM and USJFCOM will jointly develop and implement the Enabled J4 concept, and USJFCOM will work with USSOUTHCOM and USCENCOM to prepare a follow-on program of work to deliver tailored joint logistics capabilities in those respective theaters. Additionally, USJFCOM and USSOCOM will jointly develop the Special Forces _plug_ for each of these theaters of operation. - USTRANSCOM Partnering Activities will be continued. Two deliverables anticipated in FY 2008 are a Theater Enterprise Deployment Distribution CBA and an assessment of the concept of a Director for Mobility-Surface. - USJFCOM will partner with Joint Staff J4 in rewriting Joint Publication 4-0, (JP 4-0 Rewrite; Joint Logistics Education; Joint Logistics Training) 				

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- USJFCOM will assess the ability of current and future technology to comprehensively support an Adaptive Planning and Execution (APEX) system encompassing both contingency (formerly deliberate) and crisis planning. APEX is a candidate to be a three-spiral/two-year JCTD that carries out DoD AP Roadmap Recommendation 9.

- Joint Force Projection (JFP) Automated Workflow _ Adaptive Response & Execution (JFP AW-ARE) is follow-on work associated with the JFP ACTD. Using service oriented architecture/web portal available in JFP ACTD, the project will: automate Joint Deployment & Distribution Architecture (JDDA) primary thread activities/ information exchanges in web-based electronic forms (e-forms); provide notification/acknowledgement service to trigger actions/guide progression of JFP workflow; develop role-based _write-back_ capability to key authoritative data sources in the primary thread; and provide crisis response _watchboards_ for primary stakeholders to monitor process status/execution.

FY 2009 Planned Output:

- Collaborative development will continue with USFK on implementing a Joint Logistics Command as part of USFK's transformation to U.S. Korea Command (KORCOM).
- Joint Force Projection ACTD will provide enterprise-wide visibility of force capabilities from requirements generation through integration in the battlespace, transitioning an end-to-end force projection capability to the Network Enabled Command and Control (NECC) that utilizes operations capabilities-based construct of force management, deployment, and employment.
- USJFCOM will provide expertise to other joint experimentation efforts, merging joint logistics concepts with other joint warfighting concepts to ensure currency and interoperability.

Accomplishments/Planned Program Title:

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
Shaping	7.046	7.558	8.046

FY 2007 Accomplishments:

- Initial version of Shaping Joint Operating Concept (JOC) was completed in FY 2007, in collaboration with USEUCOM.
- Preliminary work completed on Strategic Communications Joint Integrating Concept (JIC).

FY 2008 Planned Output:

- As tasked by the 2006 Quadrennial Defense Review (QDR) Strategic Communications Roadmap, USJFCOM will develop a Strategic Communication JIC to describe how a Joint Force Commander (JFC) could plan and perform strategic communication circa 2015-2027 at the theater-strategic and operational levels within the context of broader national-level strategic communications.
- The Shaping Joint Operating Concept (JOC) describes how future JFCs will conduct cooperative security and engagement activities in combination with other available instruments of national power and in concert with partners to achieve strategic objectives notionally in the 2015 to 2027 timeframe. The Defense Contribution to Cooperative Security and Engagement JOC posits an operational-level solution for the following military problem: _How does a JFC contribute to fostering a security environment favorable to U.S. interests as well as establish a solid base for effective crisis response when it is often difficult to anticipate where and in what types of situations he will be involved, the willingness and ability of others to cooperate, and what will constitute success in a given situation?_ The concept identifies operational-level effects considered essential for achieving the end states envisioned. It focuses on the associated broad military capabilities necessary to create those effects.

FY 2009 Planned Output:

- Delivery of Doctrine, Operations, Training, Materiel, Leadership & Education, Personnel and Facilities (DOTMLPF) recommendations to provide solutions to capability gaps identified through COCOM experimentation with the Shaping JOC and Strategic Communications JIC.

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Accomplishments/Planned Program Title:

FY 2007

FY 2008

FY 2009

Community Management and Support (CM&S)

17.465

18.735

19.946

FY 2007 Accomplishments:

- Concept Development and Experimentation (CDE) Enterprise. To fulfill its lead and coordinate role within the Joint Concept Development and Experimentation (CDE) Enterprise, USJFCOM developed and delivered an organizational framework by which the enterprise is now able to maintain situational awareness on enterprise activity, enable the enterprise leadership to make informed decisions, and based on those decisions develop a comprehensive, coordinated plan to more efficiently utilize experimentation resources.
- Provided direct support to combatant commands. Delivered innovations to USCENTCOM, Commander Joint Task Force- Horn of Africa (HOA), USEUCOM, USNORTHCOM, USSTRATCOM, USPACOM, USSOUTHCOM, and USTRANSCOM.
- The Joint Operational Environment (JOE) provides a framework for considering the future and determining the impact of the operational environment on joint force operations. It anticipates a range of potential future operational environments and discusses those critical variables that help describe the JOE, the trends that will influence those variables, the range of possible conditions shaped by those trends, and those threats that may arise in such future operational environments. Finally, the JOE considers the implications of these alternative futures on the way we will train, equip, and employ the future Joint Force. As the military seeks to anticipate and shape the future, the JOE forms the basis for that debate and argument essential to innovative and creative thinking.
- Joint Context. Examined and evaluated joint concepts while supporting execution of FY07 Title X Service, COCOM, and other agency experimentation (Unified Quest, Noble Resolve, Unified Engagement, Joint Urban Warrior, and Crisis Management II).
- Joint Operations Concepts (JOpsC) development. Partnered with USEUCOM to deliver version 1.0 of Military Support to Shaping Operations (MSSO) Joint Operating Concept (JOC) to Joint Requirements Oversight Council (JROC). Completed and submitted version 2.0 of Major Combat Operations (MCO) and Security, Stability, Transition and Reconstruction Operations (SSTRO) JOC.

FY 2008 Planned Output:

- DoD Joint Concept Development & Experimentation (JCDE) enterprise campaign plan, process guide, and Virtual Operations Center that increases availability and transparency of experimentation planning information across the Enterprise.
- Deep Futures program will: update the Global Joint Operational Environment document; provide executive summaries of major future trends and variables; assist in developing Alternative Future experiment scenarios; and identify potential future solutions to enduring Warfighter Challenges.
- The COCOM/Service Support project will provide support to Army Unified Quest Title 10 war game, experimentation support to USSOUTHCOM and USCENTCOM (Multi National Forces-Iraq), and support development of CONOPS for conducting forcible entry from strategic distances and building partnership capacity support to Expeditionary Warrior and Joint Urban Warrior.
- Coalition Warrior Interoperability Demonstration (CWID) support includes participation in seven FY08 shadow events with deliverables in the form of after-action reports/briefs.
- Enhancements to the Joint Technology Exploration Center (JTEC) will provide additional lab and office space supporting both virtual and live experiments, while at the same time reducing the size and cost of the USJFCOM physical footprint in the Suffolk area.
- Capabilities already developed for Cross-Domain Collaborative Information Environment (CDCIE) will be transitioned at their present level.
- Experimentation Environment Development will focus primarily on building the knowledge products for West Africa and instantiation into a robust model and simulation environment to enable analysis of experimentation objectives.
- Continued management and oversight of the JFCOM Advanced Concept Technology Demonstration/ Joint Concept Technology Demonstration (ACTD/JCTD) program.

FY 2009 Planned Output:

- Continuation of an experimentation campaign that provides a succession of Limited Objective Experiment (LOE) events for execution in COCOM theaters, allowing more robust participation while decreasing associated Operational Tempo/Personnel Tempo (OPTEMPO/PERSTEMPO).
- Continuation of Deep Futures exploration of plausible alternative futures, captured in a continuously updated Global Joint Operational Environment document.
- Expansion of the experimentation environment to globally distributed sites, providing a consistent joint context for all participants while allowing geographic flexibility for participation.
- Continuation of JFCOM-directed CWID efforts, to include two CWID 09 execution events (U.S. Combat Development Command (CDC) and Coalition CDC) that will begin the execution cycle.

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- Support to Joint Staff in the integration of all warfighter requirement input channels into a revised and more efficient Joint Strategic Planning Process.
- Enhanced and expanded interagency and international participation in JI&E Enterprise campaign planning, execution, analysis, and assessment.
- Continued management and oversight of the JFCOM ACTD/JCTD program.

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

D. Acquisition Strategy Not applicable for this item.

E. Major Performers Not applicable for this item.