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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Office of Secretary Of Defense	DATE: February 2011
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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 3: <i>Advanced Technology Development (ATD)</i>	R-1 ITEM NOMENCLATURE PE 0603828D8Z: <i>Joint Experimentation</i>
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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	105.656	111.946	58.130	-	58.130	52.045	53.076	54.140	55.135	Continuing	Continuing
P808: <i>Joint Experimentation</i>	105.656	111.946	58.130	-	58.130	52.045	53.076	54.140	55.135	Continuing	Continuing

Note

The Department of Defense is developing the Joint Experimentation Program strategy and objectives for FY 12 and beyond.

A. Mission Description and Budget Item Justification

Consistent with strategic guidance, the Joint Experimentation (JE) Program Element targets DoD's highest priority experimental needs, defined by combatant commands and Services, and synchronizes development of relevant and actionable Doctrine, Organizational, Training, Materiel, Leadership, Personnel, Facilities, and Policy (DOTMLPF-P) solutions to enable trained, ready and adaptable joint and coalition forces and improve capabilities of current and future Joint Force Commanders. The program is governed through the JCD&E Executive Council, which is composed of generals, admirals, and members of the Senior Executive Service representing the combatant commands and Services. The JE program is the key synchronizing program for a diverse portfolio of concept development and solution evaluation and validation focused on combatant command and Service problems defined in Integrated Priority Lists (IPL), Joint Urgent Operational Needs (JUON), and Warfighter Challenges (WFC). In addition to defining the problems, the combatant commands and Services prioritize the JE program of work and are active partners in the execution, oversight, and governance of the efforts. Partners also include a broad range of civilian agency, multinational, academic, and private sector partners. When appropriate, state and local governments participate in the development of solutions. Projects typically confirm critical joint mission capability gaps; identify potential remedies; explore a range of DOTMLPF-P solutions; and establish the best path to solving security challenges. The JE program is the Department's primary program to explore the connecting ideas and processes that cannot be solved by buying a new tool or creating a new acquisition program. Experiments span a spectrum from early efforts to develop new joint operational concepts, to refinement of joint doctrine, to scenario-based examination of science and technology-based solutions, to validation of non-material solutions such as organization structure, new processes, improved training and education, and recommended policy changes. By defining emergent shortfalls and exploring force enhancement options, JE serves as an early risk mitigation tool that precedes implementation of doctrine changes, capability demonstrations, acquisition investment decisions, and policy changes. JE supports the development of projected mission critical capabilities through rigorous, objective assessment of enabling processes and technologies, identification of capability/system requirements and innovative employment of existing capabilities in the context of scenarios depicting current and projected Defense operations. Combatant commanders and Services are the primary customers of projects funded by the JE Program, but through a whole of government approach, projects also provide collateral benefits to a wider Defense Experimentation Enterprise including Agencies and the Office of the Secretary of Defense (OSD), intra-government, international and Non-Government Organization (NGO) partners. The experiments funded by this program establish the path to resolve current joint warfighting deficiencies and lay the foundation for trained, ready and adaptive joint and coalition forces. The Assistant Secretary of Defense, Research & Engineering (ASD(R&E)) within the Office of the Secretary of Defense (OSD) provides oversight to ensure alignment with strategic guidance and emphasizes disciplined design and cost control of individual projects with meaningful results that can be assessed with metrics based on incremental force improvements. The experimentation efforts in this program align directly to the Key Mission Areas (KMA) outlined in the February 2010 Quadrennial Defense Review (QDR), the National Military Strategy, and the Secretary of Defense's Efficiency Initiatives. Flexibility will be maintained in the JE Program to address emergent requirements identified by combatant commanders and Services and will be prioritized by the JCD&E Executive Council. The Joint Staff J7 executes the

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Office of Secretary Of Defense		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE
0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 3: <i>Advanced Technology Development (ATD)</i>		PE 0603828D8Z: <i>Joint Experimentation</i>
<p>JE program and leads the JCD&E Enterprise. The Joint Staff J7 works with the Assistant Secretary of Defense, Research & Engineering (ASD(R&E)) to provide responsive support to customers and partners.</p> <p>The JE Program Element provides funding for the Department's Joint Experimentation (JE) effort, carried out by the JCD&E Enterprise, governed by an Executive Board composed of admirals, generals and Senior Executive Service members, and led by a JCD&E Executive Agent. The JCD&E Enterprise includes the combatant commands, the military services, the National Guard Bureau, the Joint Staff, the Office of the Secretary of Defense (OSD), and several Defense agencies. Intra-government agencies and coalition partners often participate in JCD&E processes and projects. The JE program element focuses on producing validated concepts and solutions to combatant command and Service defined problems. Important collateral benefits accrue to other members and partners in the extended experimentation community; much of the joint content in military "Title 10" wargames can be traced to coordination within the JCD&E Enterprise. To ensure the program focuses on needs of the warfighters, joint experiments originate from an annual call for nominations from combatant commands and Services, and from assessment of combatant command identified critical warfighting capability gaps articulated in combatant command Integrated Priority Lists and Joint Urgent Needs documents submitted, to the Chairman of the Joint Chiefs of Staff (CJCS). JE nominations undergo preliminary analysis by the JCD&E Enterprise to confirm suitability for experimentation, alignment to strategic guidance and, where feasible, to associate closely related subjects for economy of effort. The resultant list is termed Warfighter Challenges (WFCs), and constitutes experimentation efforts eligible for design and execution. These efforts are prioritized and approved by the combatant command and Service members of the Executive Council. Experimentation plans are developed in consultation with JE partners, and consolidated into an annual program of joint experimentation, known as the JCD&E Campaign Plan. The Executive Council meets regularly to review and approve the progress of the efforts in the campaign plan. The JCD&E Campaign Plan allows the Department to synchronize experimentation efforts over multiple years to avoid duplication of effort and to create synergy among the defense experimentation entities.</p> <p>JE experiments and activities examine potential solutions for combatant command operational needs through targeted DOTMLPF-P improvements. JE tackles joint concept and capability issues demanding sophisticated analysis, innovative design and complex execution. JE addresses topics that would prove difficult for individual combatant commands and Services to capture in the context of their immediate operational and force generation responsibilities. Experiments and efforts produce a range of outcomes inclusive of fundamental joint doctrine, inputs to major policy documents such as the Quadrennial Defense Review and the Defense Planning and Programming Guidance (DPPG). In partnership with the combatant commands and Services, JE mitigates operational risk by establishing procedural models to conduct emergent concepts like Irregular Warfare, Integrated Financial Operations and Joint Operational Access that are not yet instantiated in conventional force generation. The results are briefed to Functional Capability Boards who integrate solutions into their functional investment plans.</p> <p>JE examines joint concepts and develops exploratory concepts to describe how the Joint Force Commander will meet current and future security challenges, and explores joint capabilities required to execute those concepts. To support the continued transformation of the joint force even while it is engaged in operations around the world, joint concept development applies historical precedents, lessons learned from current operations, and Defense planning scenarios, then studies the projected joint operational environment to lay the conceptual foundation for the future force. After the current adjustment, a relatively stable investment projection for the JE Program drives aggressive efforts to derive greater return on investment for the DOD in the face of increasing demand for projects from combatant commands and joint experimentation partners.</p>		

UNCLASSIFIED

UNCLASSIFIED

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APPROPRIATION/BUDGET ACTIVITY

0400: *Research, Development, Test & Evaluation, Defense-Wide*
 BA 3: *Advanced Technology Development (ATD)*

R-1 ITEM NOMENCLATURE

PE 0603828D8Z: *Joint Experimentation*

Joint and Service experimentation are complementary efforts and require a unified approach. Joint experimentation focuses on the needs of the Joint Force Commander, while Service experimentation enables the components the Joint Force Commander will employ. Complementing the efforts undertaken by the JCD&E Executive Agent (USJFCOM and/or successor organization), other combatant commands conduct Limited Objective Experiments (LOEs) to address operational capability gaps and support identification of potential solutions for theater specific and functional joint warfighter needs, as part of the overall JCD&E campaign. Within the process, the JCD&E enterprise leverages Service wargame/experimentation to address joint challenges. Experimentation activities are coordinated within the JCD&E enterprise to cover gaps and pursue efficiency, and the results are shared throughout the enterprise. The collaborative planning effort of the JCD&E enterprise is intended to ensure coherent and transparent application of JE funds, joint context, and concepts capabilities are integrated into Service experimentation as appropriate.

A biennial report captures activities across the Defense Experimentation enterprise activities to inform Congress of program execution and project accomplishments.

B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	124.480	111.946	113.999	-	113.999
Current President's Budget	105.656	111.946	58.130	-	58.130
Total Adjustments	-18.824	-	-55.869	-	-55.869
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-1.000	-			
• SBIR/STTR Transfer	-1.424	-			
• Other Program Adjustments	-16.400	-	-	-	-
• Defense Efficiency - JFCOM Task Force	-	-	-54.215	-	-54.215
• Defense Efficiency - Reports, Studies, Boards, and Commissions	-	-	-1.499	-	-1.499
• Economic Assumptions	-	-	-0.155	-	-0.155

Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: P808: *Joint Experimentation*

Congressional Add: *Tidewater Full Scale Exercise*

Congressional Add Subtotals for Project: P808

Congressional Add Totals for all Projects

FY 2010	FY 2011
2.320	-
2.320	-
2.320	-

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Office of Secretary Of Defense		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)		R-1 ITEM NOMENCLATURE PE 0603828D8Z: Joint Experimentation
<p><u>Change Summary Explanation</u></p> <p>Defense Efficiency – JFCOM Task Force. As part of the Department of Defense reform agenda, a review of the organization to align resources to the most critical departmental priorities and eliminate lower priority functions was performed. This reflects the current changes for FY12. Additional information will be provided when available.</p> <p>Defense Efficiency – Report, Studies, Boards and Commissions. As part of the Department of Defense reform agenda, reflects a reduction in the number and cost of reports, studies, DoD Boards and DoD Commissions below the aggregate level reported in the previous budget submission.</p>		

UNCLASSIFIED

UNCLASSIFIED

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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
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A. Mission Description and Budget Item Justification

Consistent with strategic guidance, the Joint Experimentation (JE) Program Element targets DOD's highest priority experimental needs, defined by combatant commands and Services, and synchronizes development of relevant and actionable Doctrine, Organizational, Training, Materiel, Leadership, Personnel, Facilities, and Policy (DOTMLPF-P) solutions to enable trained, ready and adaptable joint and coalition forces and improve capabilities of current and future Joint Force Commanders. The program is governed through the JCD&E Executive Council, which is composed of generals, admirals, and members of the Senior Executive Service representing the combatant commands Services. The JE program is the key synchronizing program for a diverse portfolio of concept development and solution evaluation and validation focused on combatant command and Service problems defined in Integrated Priority Lists (IPL), Joint Urgent Operational Needs (JUON), and Warfighter Challenges (WFC). In addition to defining the problems, the combatant commands and Services prioritize the JE program of work and are active partners in the execution, oversight, and governance of the efforts. Partners also include a broad range of civilian agency, multinational, academic, and private sector partners. When appropriate, state and local governments participate in the development of solutions. Projects typically confirm critical joint mission capability gaps; identify potential remedies; explore a range of DOTMLPF-P solutions; and establish the best path to solving security challenges. The JE program is the Department's primary program to explore the connecting ideas and processes that cannot be solved by buying a new tool or creating a new acquisition program. Experiments span a spectrum from early efforts to develop new joint operational concepts, to refinement of joint doctrine, to scenario-based examination of science and technology-based solutions, to validation of non-material solutions such as organization structure, new processes, improved training and education, and recommended policy changes. By defining emergent shortfalls and exploring force enhancement options, JE serves as an early risk mitigation tool that precedes implementation of doctrine changes, capability demonstrations, acquisition investment decisions, and policy changes. JE supports the development of projected mission critical capabilities through rigorous, objective assessment of enabling processes and technologies, identification of capability/system requirements and innovative employment of existing capabilities in the context of scenarios depicting current and projected Defense operations. Combatant commanders and Services are the primary customers of projects funded by the JE Program, but through a whole of government approach, projects also provide collateral benefits to a wider Defense Experimentation Enterprise including Agencies and the Office of the Secretary of Defense (OSD), intra-government, international and Non-Government Organization (NGO) partners. The experiments funded by this program establish the path to resolve current joint warfighting deficiencies and lay the foundation for trained, ready and adaptive joint and coalition forces. The Assistant Secretary of Defense, Research & Engineering (ASD(R&E)) within the Office of the Secretary of Defense (OSD) provides oversight to ensure alignment with strategic guidance and emphasizes disciplined design and cost control of individual projects with meaningful results that can be assessed with metrics based on incremental force improvements. The experimentation efforts in this program align directly to the Key Mission Areas (KMA) outlined in the February 2010 Quadrennial Defense Review (QDR), the National Military Strategy, and the Secretary of Defense's Efficiency Initiatives. Flexibility will be maintained in the JE Program to address emergent requirements identified by combatant commanders and Services and will be prioritized by the JCD&E Executive Council. The Joint Staff J7 executes the JE program and leads the JCD&E Enterprise. The Joint Staff J7 works with the Assistant Secretary of Defense, Research & Engineering (ASD(R&E)) to provide responsive support to customers and partners.

The JE Program Element provides funding for the Department's Joint Experimentation (JE) effort, carried out by the JCD&E Enterprise, governed by an Executive Board composed of admirals, generals and Senior Executive Service members, and led by a JCD&E Executive Agent. The JCD&E Enterprise includes the combatant

UNCLASSIFIED

UNCLASSIFIED

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<p>commands, the military services, the National Guard Bureau, the Joint Staff, the Office of the Secretary of Defense (OSD), and several Defense agencies. Intra-government agencies and coalition partners often participate in JCD&E processes and projects. The JE program element focuses on producing validated concepts and solutions to combatant command and Service defined problems. Important collateral benefits accrue to other members and partners in the extended experimentation community; much of the joint content in military "Title 10" wargames can be traced to coordination within the JCD&E Enterprise. To ensure the program focuses on needs of the warfighters, joint experiments originate from an annual call for nominations from combatant commands and Services, and from assessment of combatant command identified critical warfighting capability gaps articulated in combatant command Integrated Priority Lists and Joint Urgent Needs documents submitted, to the Chairman of the Joint Chiefs of Staff (CJCS). JE nominations undergo preliminary analysis by the JCD&E Enterprise to confirm suitability for experimentation, alignment to strategic guidance and, where feasible, to associate closely related subjects for economy of effort. The resultant list is termed Warfighter Challenges (WFCs), and constitutes experimentation efforts eligible for design and execution. These efforts are prioritized and approved by the combatant command and Service members of the Executive Council. Experimentation plans are developed in consultation with JE partners, and consolidated into an annual program of joint experimentation, known as the JCD&E Campaign Plan. The Executive Council meets regularly to review and approve the progress of the efforts in the campaign plan. The JCD&E Campaign Plan allows the Department to synchronize experimentation efforts over multiple years to avoid duplication of effort and to create synergy among the defense experimentation entities.</p> <p>JE experiments and activities examine potential solutions for combatant command operational needs through targeted DOTMLPF-P improvements. JE tackles joint concept and capability issues demanding sophisticated analysis, innovative design and complex execution. JE addresses topics that would prove difficult for individual combatant commands and Services to capture in the context of their immediate operational and force generation responsibilities. Experiments and efforts produce a range of outcomes inclusive of fundamental joint doctrine, inputs to major policy documents such as the Quadrennial Defense Review and the Defense Planning and Programming Guidance (DPPG). In partnership with the combatant commands and Services, JE mitigates operational risk by establishing procedural models to conduct emergent concepts like Irregular Warfare, Integrated Financial Operations and Joint Operational Access that are not yet instantiated in conventional force generation. The results are briefed to Functional Capability Boards who integrate solutions into their functional investment plans.</p> <p>JE examines joint concepts and develops exploratory concepts to describe how the Joint Force Commander will meet current and future security challenges, and explores joint capabilities required to execute those concepts. To support the continued transformation of the joint force even while it is engaged in operations around the world, joint concept development applies historical precedents, lessons learned from current operations, and Defense planning scenarios, then studies the projected joint operational environment to lay the conceptual foundation for the future force. After the current adjustment, a relatively stable investment projection for the JE Program drives aggressive efforts to derive greater return on investment for the DOD in the face of increasing demand for projects from combatant commands and joint experimentation partners.</p> <p>Joint and Service experimentation are complementary efforts and require a unified approach. Joint experimentation focuses on the needs of the Joint Force Commander, while Service experimentation enables the components the Joint Force Commander will employ. Complementing the efforts undertaken by the JCD&E Executive Agent (USJFCOM and/or successor organization), other combatant commands conduct Limited Objective Experiments (LOEs) to address operational capability gaps and support identification of potential solutions for theater specific and functional joint warfighter needs, as part of the overall JCD&E campaign. Within the process, the JCD&E enterprise leverages Service wargame/experimentation to address joint challenges. Experimentation activities are coordinated within the JCD&E enterprise to cover gaps and pursue efficiency, and the results are shared throughout the enterprise. The collaborative planning effort of the JCD&E</p>		

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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 3: <i>Advanced Technology Development (ATD)</i>	R-1 ITEM NOMENCLATURE PE 0603828D8Z: <i>Joint Experimentation</i>	PROJECT P808: <i>Joint Experimentation</i>
<p>enterprise is intended to ensure coherent and transparent application of JE funds, joint context, and concepts capabilities are integrated into Service experimentation as appropriate.</p> <p>A biennial report captures activities across the Defense Experimentation enterprise activities to inform Congress of program execution and project accomplishments.</p> <hr/> <p>Description (JE Program): The JE Program delivers relevant, sufficient, and necessary DOTMLPF-P comprehensive solutions responding to specific needs of Joint Force Commander articulated Warfighter Challenges. Warfighter Challenges are DOD's most important security challenges now and in the future; inform and are informed by strategic guidance; and address issues from the tactical to strategic levels of war. From the perspective of OSD engagement and oversight, emphasis will be focused on the following refinements to influence the JE business model.</p> <p>Refinements to the JE Business Model.</p> <p>The JE program is executed through a global business model that is governed by a 2-Star Executive Council, operates on a 1 year cycle, supported by integrating technologies to close geographic gaps, standardized through systems engineering discipline, and progresses through formal enterprise decision making. Lean principals are applied to enterprise, technical, and supporting processes to maximize program efficiency. The JE program continues to evolve with solution spirals included in experimentation efforts to drive affordable speed to capability.</p> <p>The JCD&E Enterprise strives to:</p> <ul style="list-style-type: none"> • Trace JE efforts to discriminate changes to joint capabilities. • Tie JE closer to DoD operational analysis & Defense Planning Scenarios. • Provide specific input to joint training and joint capability development to ensure adaptable joint forces. • Position joint experimentation in a larger scheme of overarching capability development that begins with lessons learned and critical analysis, enjoins experimentation tools, and progresses through demonstration, acquisition, and training. • Design experiments for more responsive deliverables through quicker starts, event-driven "go/no go" reviews, and incremental designs permitting faster "do-learn-decide" cycles for continued investment. <p>Analytical Rigor.</p> <p>Increased emphasis has been placed on adherence to standards of analytical rigor in design, conduct, and exploitation of experiments. Typical of this rigor is aligning the experimentation concepts to the Key Mission Areas specified in the Quadrennial Defense Review. FY 2011-2012 experimentation efforts seek to provide innovative joint solutions and joint interoperability standards to address capability shortfalls identified by Warfighter Challenges conforming to the DoD Joint Capability Areas (JCAs) employed by the Department to validate joint needs. The FY 2012 Warfighter Challenges mapped to six JCAs: Building Partnerships, Battlespace Awareness, Command and Control, Force Application, Logistics, and Net-Centric. No FY12 WFCs were submitted by the COCOMs or Services in the JCAs. The JE enterprise is capable and prepared to accept Warfighter Challenges from all nine JCA's and accepts emergent requirements throughout the year.</p> <p>Initiatives.</p>		

UNCLASSIFIED

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<div>- Solution spin offs (spirals), are included in experiment design to identify affordable capability deliveries and increase speed to capability.</div> <div>- Lean six sigma principals have been implemented for metrics based efficiency assessments. Achieved 46 percent improvement in contracting process, 26% cycle time/17% cost reduction in enterprise process, and 31% reduction in experimentation conduct. - Integrated framework for Joint Experimentation. Transparent decision-making, systems engineering thinking, and application of Lean management principles have been integrated into a technical framework for lifecycle management of the joint experimentation program. JCD&E Enterprise members now submit WFCs with supporting technical information that promotes accelerated starts, spiral development and reduced costs and schedules for experimentation and concept development.</div> <div>- Improvements to Networked Coordination. Upgrade of the Virtual Operations Center (VOC) has enhanced Enterprise-wide participation during project planning and execution, decreasing travel associated with customer service and enterprise-wide coordination. Increasing use of distributed experimentation design will allow geographically separated groups to join experimental projects from their home bases, again saving travel funds and increasing the potential partner base.</div> <div>- Increased integration with the S&T community to address the science and technology element COCOM S&T Integrated Priority Lists in JE, and to both include Joint Capability Technology Demonstrations (JCTD) in, and inform JCTD efforts through, experimentation to Increase speed to capability.</div>				
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2010	FY 2011	FY 2012
Title: Building Partnerships (BP)		15.465	15.738	8.514
Description: The evolving nature of joint operations creates a corresponding need to integrate operations with international, governmental and non-governmental partners to address a wide variety of security challenges using a comprehensive approach.				
FY 2010 Accomplishments: <div><div>• Refined Joint Force Commander ability to apply fiscal resources & capabilities to separate the population from insurgents and destroy/disrupt enemy financial networks through development and publishing of an Integrated Financial Operations (IFO) operating concept. Concept was tested in two operational environment scenarios, Afghanistan and CJTF Horn of Africa. Concept received strong positive response from all (civilian and military) participants in the IFO process.</div><div>• Streamlined and improved DOD interagency campaign planning through development and submission of a DOTMLPF-P Change Request (DCR), that when approved, will enable DOD theater campaign plans to be more complementary and supportive of the larger USG approach to steady-state activities. Products included three seminal documents guiding curriculum development in the military training base. The Naval War College and the Army's Peacekeeping and Stability Operations Institute (PKSOI) use these documents to enhance joint professional military education (JPME) curricula and to improve UN Department of Peacekeeping Operations doctrine.</div><div>• Provided solutions to multinational challenges of irregular warfare through accomplishment of nine experimental objectives. Military and civilian agencies of 18 countries and NATO developed improved coalition capabilities to counter irregular adversaries and other non-compliant actors within a comprehensive approach. Objectives concentrated on improving a coalition's ability to build partnerships and sought to mitigate non-compliant actors, support host nation governance, harmonize efforts of coalition partners, develop a framework for strategic communication, share methods for campaign assessment, and increase cultural awareness.</div></div>				

UNCLASSIFIED

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2010	FY 2011
<ul style="list-style-type: none"> • Provided DOD with interagency-endorsed capabilities to coordinate the formal establishment of a Deployable Security Sector Assessment and Assistance Team (DSSAAT), an organization offering the cross-sector expertise required to participate in security sector reform. Capabilities included an operating concept, organizational construct and procedures that were validated through support to CENTCOM's JTF-435 in Afghanistan, and field experimentation as part of a Department of State-led US Government assessment in Albania to support US European Command (EUCOM) Theater Cooperation Planning. Provided combatant commanders' and ambassadors' the capability to develop Theater Cooperation Plans (TCPs) and Mission Strategic Plans (MSPs) through the creation of an in-theater tested security sector reform capability. <p>FY 2011 Plans:</p> <ul style="list-style-type: none"> • Deliver a prototype system to allow real-time information sharing and collaboration with interagency and multi-national partners in support of a whole of government approach to steady-state operations. The prototype technical architecture and capability will be validated through experimentation in USAFRICOM and USEUCOM with multiple mission partners and provide a residual capability to allow the continued development of habitual relations. Partners will include a broad range of DOD, applicable non-DOD/ USG agency, multi-national, multi-lateral, and private sector mission partners. Additionally, enhanced information sharing capability between partner states will contribute to increased cooperation in counter-insurgency, stability and counter-terrorism operations. • Create a Service force generation model/architecture that will improve national capability to synchronize integrated General Purpose Forces and Special Operations Forces (GPF/SOF) Security Force Assistance (SFA) activities. Effort will improve geographic combatant commands and US embassy country teams to satisfy SFA demand signals. Project will improve understanding of Service force generation models and resource application/prioritization. Experimentation will be used to compare solutions for identification of specific roles and responsibilities, prioritization and integration of planning and execution of SFA activity. Planned products are: SFA Operating Concept/Framework, organizational construct, decision support and planning tools, recommendations for SFA lead roles and responsibilities. <p>FY 2012 Plans:</p> <ul style="list-style-type: none"> • The FY 2012 JCD&E program of work in the Building Partnerships Joint Capability Area (JCA) will address the key mission areas identified in the Quadrennial Defense Review and highlighted in the Defense Planning and Programming Guidance. The FY 2012 campaign will address projected mission critical capabilities and concepts required to build security capacity of partner states. The scope of the work will include: security and engagement activities per the Capstone Concepts for Joint Operations (CCJO) and experimentation to identify and evaluate enabling technologies to increase US capability to increase the security capacity of partner states. The specific focus areas identified for FY 2012 include: <ul style="list-style-type: none"> • Strengthen and institutionalize General Purpose Force capabilities in conducting security force assistance missions • Increase socio-cultural/ human terrain awareness of the force • Increase information sharing capacity between US and partner states and within partner states 			

UNCLASSIFIED

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2010	FY 2011
<ul style="list-style-type: none"> Develop collaborative planning and assessment tools to support of security force operations Improve effective and efficient methods to provision logistical support to partner states Five Warfighter Challenges (14 percent of total submissions) were submitted by the JCD&E Enterprise identifying deficiencies in the BP JCA to be addressed through joint experimentation. 			
<p>Title: Battlespace Awareness (BA)</p> <p>Description: The evolving nature of joint operations creates a corresponding need to understand complex and dynamic environments through collection, synchronization and visualization of information across all domains, and sharing with interagency and multinational partners.</p> <p>FY 2010 Accomplishments:</p> <ul style="list-style-type: none"> Refined persistent surveillance processes by creating a standardized, repeatable methodology focused on planning, execution, re-tasking, and assessing. Developed and validated through experimentation more responsive and reactive support to operational commanders. Capabilities included architecture, CONOP and DOTMLPF-P recommendations, with Tactic, Techniques and Procedures (TTPs) to guide joint operators. Initial results from experimentation validated an improved process for Afghanistan AOR to reduce planning time for deliberate and dynamic retasking of ISR assets by 51 percent with demonstrated 18 percent increase in asset utilization. Transitioned capabilities to improve integration and interoperability of Counter Intelligence/Human Intelligence. Capabilities included TTPs and DOD Architectural Framework (DODAF) compliant architectures, CI and HUMINT System Interoperability Report, and proposed changes to the Defense HUMINT Manual. Improved Joint Force Commander's ability to interdict weapons of mass destruction by delivering a Radio-Nuclear Stand-Off Detection Concept of Operations with Maritime and Land Concept of Employment. <p>FY 2011 Plans:</p> <ul style="list-style-type: none"> Deliver an experimentally validated assessment prototype for Deterrence Operations (DO) course of action assessments. Prototype capability will enable the Joint Force Commander to assess results and implications of whole of government pre-crisis deterrence actions before and after actions are taken. Planned products are: DO Assessment Guide, Preliminary Decision Support Tool (DST) Evaluation & Recommendations, Process map, Operational architecture, DST(s) Evaluation and Recommendations, Joint Capability Technology Demonstration (JCTD) input, and Prototype capability package. <p>FY 2012 Plans:</p> <ul style="list-style-type: none"> The FY 2012 JCD&E program of work in the Battlespace Awareness JCA will address the key mission areas identified in the Quadrennial Defense Review and highlighted in the Defense Planning and Programming Guidance. The FY 12 campaign 		13.967	7.640
			8.269

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Office of Secretary Of Defense		DATE: February 2011	
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 3: <i>Advanced Technology Development (ATD)</i>	R-1 ITEM NOMENCLATURE PE 0603828D8Z: <i>Joint Experimentation</i>	PROJECT P808: <i>Joint Experimentation</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2010	FY 2011
<p>will address projected mission critical capabilities and concepts required to succeed in preventing proliferation and countering weapons of mass destruction.</p> <ul style="list-style-type: none"> The scope of the work may include experimentation to identify and evaluate enabling technologies that lengthen detection ranges and strengthen ISR and communications ties between special and general purpose forces. Five Warfighter Challenges (14 percent of total submissions) were submitted by the JCD&E Enterprise identifying deficiencies in the BA JCA to be addressed through joint experimentation. 			
<p>Title: Command and Control (C2)</p> <p>Description: Joint force commander requires secure, robust and reliable networks to provide responsive command and control in complex, chaotic and degraded information environments to integrate and share information with a full range of partners.</p> <p>FY 2010 Accomplishments: These Command and Control accomplishments resulted from projects with primary focus in the Building Partnership (BP) and Force Application (FA) JCA's. Funding was shown under the BP and FA JCA's.</p> <ul style="list-style-type: none"> Enabled the Joint Force Commander to conduct operations in a complex environment exercising command and control of a coalition force combating an irregular adversary. Experimentation aligned functional competencies to optimize actions, assess campaign progress, create and assess a communications strategy, create situational understanding and apply cultural understanding to enhance the planning process. Redefined apportionment & allocation processes for joint command and control enablers to support distributed operations in complex & uncertain terrain. Provided CONOPs and TTPs identifying the command and control structure and joint enabling capabilities necessary to support integrated joint maneuver and engagement and rapid disaggregation and/or re-aggregation of distributed units. <p>FY 2011 Plans:</p> <ul style="list-style-type: none"> In collaboration with interagency and multi-national partners, deliver complementary concepts and capabilities to deter, prevent and respond to a disruption or a denial of access to Global Commons. Concepts and capabilities will be validated through joint and multi-national experimentation. This effort will mitigate risk of disruption and denial of access to and use of the maritime, air, space and cyber space domains by state and non-state actors. Denial of access would limit US and coalition ability to conduct commercial and military operations. Develop C2 architectures that support readiness reporting, sustainment of forces, and operations in C2 denied and degraded environments. These architectures will be validated through joint experimentation and will support the JFC's ability to assess, respond to, and incrementally restore C2 in a denied and degraded communications environment. Planned products are: JFC 		-	14.738
			14.886

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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 3: <i>Advanced Technology Development (ATD)</i>	R-1 ITEM NOMENCLATURE PE 0603828D8Z: <i>Joint Experimentation</i>	PROJECT P808: <i>Joint Experimentation</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2010	FY 2011
C2 continuity processes and technologies, C2 templates and architectures, Multi-Service TTPs, CONOPS, and C4 training recommendations.			
FY 2012 Plans: <ul style="list-style-type: none"> The FY 2012 JCD&E program of work in the Command and Control JCA will address the key mission areas identified in the Quadrennial Defense Review and highlighted in the Defense Planning and Programming Guidance. The FY 2012 campaign will address projected mission critical capabilities and concepts required to succeed in operating effectively in cyberspace. The scope of work may include experimentation to identify and evaluate enabling technologies that support command and control for battle management in cyberspace. Nine Warfighter Challenges (26 percent of total submissions) were submitted by the JCD&E Enterprise identifying deficiencies in the C2 JCA to be addressed through joint experimentation. 			
Title: Force Application (FA) Description: Joint Force Commander requires improved kinetic or non-kinetic capabilities to maneuver and engage adversaries from political, strategic, operational, and tactical perspectives. FY 2010 Accomplishments: <ul style="list-style-type: none"> Provided conceptual basis for revision to joint doctrine, joint force development, and conduct of future joint operations. Developed four activity concepts to complement the Capstone Concept for Joint Operations (CCJO). The activity concepts identified future joint capabilities required to address Combat, Security, Engagement, and Relief and Reconstruction activities as they relate to the future joint operating environment. Redefined apportionment & allocation processes for joint enablers (e.g. ISR, fires and logistics) to support distributed operations in complex & uncertain terrain. Provided CONOPs and TTPs identifying the command and control structure and joint enabling capabilities necessary to enable integrated joint maneuver and engagement and rapid disaggregation and/or re-aggregation of distributed units. FY 2011 Plans: <ul style="list-style-type: none"> Develop network attack/exploit concept of operations, organizational construct, processes and enabling authorities/policies to strengthen ability to attack and exploit adversary critical infrastructure. This effort will validate concept of operations, processes and tools through experimentation and M&S. Products will include Critical Infrastructure Computer Network Attack/Exploitation concept of operations and decision support tool/methodology that provides visibility of adversary critical infrastructure (networks and systems). Develop a concept that describes how the Joint Force Commander will gain and maintain access by defeating anti-access capabilities in the hands of state and non-state actors, in order to project power and influence. This effort will integrate joint 		22.302	9.991
			11.577

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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 3: <i>Advanced Technology Development (ATD)</i>		R-1 ITEM NOMENCLATURE PE 0603828D8Z: <i>Joint Experimentation</i>		PROJECT P808: <i>Joint Experimentation</i>	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2010	FY 2011	FY 2012
<p>experimentation with Title 10 experiments and other Service products and studies (e.g., Navy SSG, Army-Marine Staff Talks, and Air Force-Navy Air Sea Battle Concept, TRADOC JFEO Study) to explore and develop a joint concept. Aggressive red teaming will be used to explore the concept and validate the experimentation results. Products will include a summary of vulnerabilities and recommended capabilities, CJCS Red Team report, input to the Status & Recommendations Report, and a final concept approved/signed by CJCS.</p> <p>FY 2012 Plans:</p> <ul style="list-style-type: none"> • The FY 2012 JCD&E program of work in the Force Application JCA will address the key mission areas identified in the Quadrennial Defense Review and highlighted in the Defense Planning and Programming Guidance. The FY 2012 campaign will address projected mission critical capabilities and concepts required to deter and defeat aggression in an anti-access environment. • The scope of work may include experimentation to identify and evaluate enabling technologies that focus on electronic warfare, long range strike, and undersea superiority. • Seven Warfighter Challenges (20 percent of total submissions) were submitted by the JCD&E Enterprise identifying deficiencies in the FA JCA to be addressed through joint experimentation. 					
<p>Title: Logistics (Log)</p> <p>Description: Joint Force Commander requires responsive, agile logistics support to project force, sustain operations and ensure freedom of action wherever the force engages and in whatever form the engagement takes.</p> <p>FY 2010 Accomplishments:</p> <ul style="list-style-type: none"> • Enabled synchronization of logistics operations by providing a CONOP for USAFRICOM logistics planning and execution. Initial CONOP informed development of the Joint Staff J4 Joint Logistics Concept Paper, with potential application to multiple combatant commands. • Improved the Joint Force Commander's ability to project and sustain geographically separated forces operating independently or in concert in a complex operational environment by development and delivery of products including a Logistics Annex to the JDO Concept of Operations/Handbook, doctrine change recommendations to JP 4 series, and input to USTRANSCOM Future Deployment and Distribution Analysis. • Improved logistics situational awareness for the International Security Assistance Force (ISAF) Commander in Afghanistan, and commanders within contributing nations. Facilitated process and policy changes and developed tool prototypes, including a quick reference guide for Logistics Functional Area Services and Reporting that enabled a more effective and efficient exchange of information in the ISAF theater of operations. <p>FY 2011 Plans:</p>			13.084	6.389	8.269

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B. Accomplishments/Planned Programs (\$ in Millions)			FY 2010	FY 2011	FY 2012
<ul style="list-style-type: none"> Assess sufficiency of the Joint Logistics Concept (JLC) to integrate, synchronize and optimize the logistics enterprise to support joint operations in a wide variety of anticipated challenges in the future operating environment. Through joint experimentation, the following aspects of the JLC will be assessed: integration and synchronization of end-to-end logistics processes; delivering, positioning and sustaining joint forces to and from any location; and networking of the joint logistics enterprise in a real-time global information system. Results of this experimentation will be used by the Joint Staff to inform investment decisions. Products will include: Capability Gap Analysis Report; Logistics Enterprise Solution Evaluation; DOTMLPF-P Recommendations. <p>FY 2012 Plans:</p> <ul style="list-style-type: none"> The FY 2012 JCD&E program of work in the Logistics JCA will address the key mission areas identified in the Quadrennial Defense Review and highlighted in the Defense Planning and Programming Guidance. The FY 2012 campaign will address projected mission critical capabilities and concepts required to build the security capacity of partner states. The scope of work may include experimentation to identify and evaluate enabling technologies that create mechanisms to facilitate more rapid transfer of critical materiel. Five Warfighter Challenges (14 percent of total submissions) were submitted by the JCD&E Enterprise identifying deficiencies in the Log JCA to be addressed through joint experimentation. 					
<p>Title: Protection (P)</p> <p>Description: Joint Force Commander lacks sufficient ability to detect, prevent and mitigate adverse effects of attacks on personnel (combatant/non-combatant) and physical assets of the United States, allies and friends.</p> <p>FY 2010 Accomplishments:</p> <ul style="list-style-type: none"> Engaged with key interagency partners and OSD to close capability gaps in WMD mission areas by developing organizational and operational constructs for DOD to detect, interdict, and seize, destroy or defeat nuclear yield devices. This was done by providing an organizational and operational construct to better synchronize detection, interdiction, seizure, destruction or defeat of nuclear yield devices. This effort focused on the authorities, responsibilities, intelligence requirements and operational concepts. Identified requirements and developed concepts/TTPs to employ current and near-term capabilities to counter irregular adversaries' use of advanced weapons systems to disrupt airspace operations. Based on feedback from the JCD&E Enterprise and analysis of ongoing production across DoD, it was determined that applying joint experimentation resources to the problems of countering the use of biological agents as weapons of mass destruction (WMD) and countering irregular adversaries' use of advanced weapons systems to disrupt airspace operations was not necessary. Resources allocated to these efforts were redirected to new, urgent joint experimentation needs identified by combatant commands and the Services. <p>FY 2011 Plans:</p>			21.552	21.263	-

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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 3: <i>Advanced Technology Development (ATD)</i>	R-1 ITEM NOMENCLATURE PE 0603828D8Z: <i>Joint Experimentation</i>	PROJECT P808: <i>Joint Experimentation</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2010	FY 2011
<ul style="list-style-type: none"> Develop a Ballistic Missile Defense (BMD) C2 architecture and prototype to reduce gaps and disconnects within Geographic Combatant Commands (GCCs) and between GCCs, allies and partners. The C2 architecture and prototype will be evaluated through experimentation, M&S and real world exercise events. Planned products are: Global C2 BMD Integration Guide, prototype C2 architecture/structure and DOTMLPF-P recommendations. Develop an implementation guide and decision/planning tools that support implementation of a phased adaptive approach to ballistic missile defense (PAA BMD) in defense against threats to the homeland, allies, partners and US forces abroad. In coordination with the Missile Defense Agency and Joint Integrated Air and Missile Defense Organization (JIAMDO), experimentation will contrast current and programmed PAA BMD capabilities using M&S to conduct an analytical wargame in order to determine and validate allocation, prioritization, deployment, employment, risk and burden-sharing recommendations. In addition, this effort will identify PAA force development and operational implications to mitigate future risks. Planned products are: decision/planning tools (risk assumption, burden-sharing, force allocation, prioritization and deployment), PAA Implementation Guide Book and DOTMLPF-P recommendations. Develop and provide an experimentally validated Countering Precision Guided Munitions (CPGM) Concept and concept of operation. This effort will improve joint force ability to plan, execute, and employ friendly capabilities in operations against irregular adversaries with access to significant numbers of precision guided munitions. <p>FY 2012 Plans:</p> <ul style="list-style-type: none"> Based on work accomplished in FY 2010 and FY 2011, and absence of specific Protection JCA FY 2012 joint experimentation requirements from COCOMs, it is expected that FY 2012 accomplishments in this JCA will be generated as byproducts from work in other areas. 			
<p>Title: Net Centric (NC)</p> <p>Description: Joint Force Commander requires the ability to provide a framework for full human and technical connectivity and interoperability that allows all DOD users and mission partners to understand and act on with confidence, and protects information from those who should not have it.</p> <p>FY 2011 Plans:</p> <ul style="list-style-type: none"> Develop Computer Network Defense (CND) concept of operations, organizational construct, procedures, and enabling authorities/policies to strengthen the defense of critical infrastructure. This effort will validate the concept of operation and procedures through experimentation and Modeling and Simulation. Products will include Critical Infrastructure CND concept of operations and CND decision support tool/methodology focused on situational awareness and defense of critical infrastructure (networks and systems). <p>FY 2012 Plans:</p>		-	10.937
			6.615

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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 3: <i>Advanced Technology Development (ATD)</i>	R-1 ITEM NOMENCLATURE PE 0603828D8Z: <i>Joint Experimentation</i>	PROJECT P808: <i>Joint Experimentation</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2010	FY 2011
<ul style="list-style-type: none"> The FY 2012 JCD&E program of work in the Force Application JCA will address the key mission areas identified in the Quadrennial Defense Review and highlighted in the Defense Planning and Programming Guidance. The FY 2012 campaign will address projected mission critical capabilities and concepts required to deter and defeat aggression in anti-access environments. The scope of work may include experimentation to identify and evaluate enabling technologies that focus assuring access to space and use of space-based assets. Four Warfighter Challenges (12 percent of total submissions) were submitted by the JCD&E Enterprise identifying deficiencies in the BP JCA to be addressed through joint experimentation. 			
<p>Title: Combatant Command, Service Experimentation Support (CCSES)</p> <p>Description: Combatant command, Service Experimentation Support enables the combatant commands and Services to conduct experimentation within the joint context in order to build enterprise capacity and to integrate solutions across DOD. This leads to collaborative development, participation and support that inform the warfighter challenges and joint concepts. It provides joint context to Service experimentation through collaborative design, analysis, planning and execution</p> <p>FY 2010 Accomplishments: Combatant Command Experimentation</p> <ul style="list-style-type: none"> Supported USNORTHCOM with joint analysis and consequence management subject matter expertise for two limited objective experiments to revise the Homeland Defense and Civil Support Joint Operating Concept version 4.0. Supported USSTRATCOM with facilities and network architecture to execute Nimble Titan 10 that explored coalition mission defense policy, challenges, and solutions. Provided experiment design/control and joint analysis support to USEUCOM/USAFRICOM/USTRANSCOM in execution of Theater Lift/Point of Need Delivery (POND). When complete, this project will determine near, mid, and long term solution to deliver within three to five days a ready-to-employ, task organized element up to brigade-sized or equivalent, to or from a point-of-need, independent of receptive infrastructure. <p>Joint Service Experimentation</p> <ul style="list-style-type: none"> Army – Unified Quest 10: Supported the Army's Training and Doctrine Command with joint analysis for major irregular warfare experimentation efforts within the Unified Quest 10 campaign of learning. Army – Earth, Wind, and Fire 10: Supported the Army's Training and Doctrine Command with joint analysis to inform the Joint Air Ground Integration Cell to provide solutions to airspace de-confliction and integration. 		10.644	19.038
			-

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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 3: <i>Advanced Technology Development (ATD)</i>	R-1 ITEM NOMENCLATURE PE 0603828D8Z: <i>Joint Experimentation</i>	PROJECT P808: <i>Joint Experimentation</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2010	FY 2011
<ul style="list-style-type: none"> Air Force – Unified Engagement 10: Provided joint analysis and planning resources to provide solutions to warfighter challenges and Chief of Staff, Air Force objectives. Marines – Expeditionary Warrior 10: Supported the Marine Corps Warfighting Laboratory with joint analysis and subject matter expertise to inform the Seabasing concept. <p>FY 2011 Plans:</p> <p>Combatant Command Experimentation</p> <ul style="list-style-type: none"> Support USSOCOM with joint analysis to complete the Final Report on Global Scout 11. Support USPACOM with laboratory capacity to conduct Cyber Experimentation. Support USEUCOM with joint analytical capacity to conduct Socio-Cultural Analysis. Provide program and analytical support to USEUCOM to transition Point-Of-Need Delivery (POND). Enabled distributed, combatant command-led experimentation in the following areas: Cyberspace Joint Operational Concept Experimentation (USSTRATCOM) Building Partnership Capacity – Mexico Experimentation (USNORTHCOM) Cyber Warfare Experimentation (USPACOM) Electronic Warfare Experimentation (USPACOM) Joint Anti-Submarine Warfare Experimentation (USPACOM) Countering Anti-Access Technologies Experimentation (USPACOM) Support emergent, time-sensitive combatant command requirements as funding and priorities permit. <p>Joint Service Experimentation</p> <ul style="list-style-type: none"> Army – Unified Quest 11: Support the Army's Training and Doctrine Command with joint analysis for the Unified Quest 11 campaign of learning. Navy – Global 11: Support the U.S. Naval War College with joint analysis to prepare the final report on Navy's Global 11 war game. Air Force – Unified Engagement 11: Support the Air Force with joint analysis perspective in development of the final report on Unified Engagement 11. Marine Corps – Expeditionary Warrior 11: Provide joint context and analysis support to the Marine Corps Warfighting Laboratory in development of the final report on Expeditionary Warrior 11. 			
Title: Joint Urban Operation (JUO) / Joint Irregular Warfare Center (JIWC)		5.189	5.100
			-

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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 3: <i>Advanced Technology Development (ATD)</i>	R-1 ITEM NOMENCLATURE PE 0603828D8Z: <i>Joint Experimentation</i>	PROJECT P808: <i>Joint Experimentation</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2010	FY 2011
<p>Description: Joint Urban Operations (JUO) – To ensure DOD is prepared to dominate future threats and deny sanctuary to our adversaries in urban areas, the Secretary of Defense assigned Commander, U.S. Joint Forces Command (USJFCOM) as the DOD Executive Agent (EA) for Joint Urban Operations (JUO). JUO Lines of Joint Experimentation (LOJX) projects will provide the Joint Force Commander with the ability to lead, coordinate, and integrate the urban operations doctrine, organization, training, and equipment activities of the DOD Components and improve and transform the capabilities of joint forces in conducting urban operations over the full range of urban contingencies. To execute the mission, USJFCOM established the DOD JUO Program. In 2008, the JUO program and the DOD EA for JUO mission were subsumed into the USJFCOM Joint Irregular Warfare Center (JIWC), led by the JIWC Director who was assigned to execute JUO Executive Agent responsibilities for Commander, USJFCOM.</p> <p>FY 2010 Accomplishments:</p> <ul style="list-style-type: none"> • Supported technical development efforts to enhance and accelerate fielding capabilities critical to success in current and future complex, urban, and irregular operations including, cargo unmanned aircraft systems (UAS) demonstration and assessment, non-lethal unmanned aerial vehicle (UAV) program initial hybrid/asymmetric target set assessment and geospatial analysis and planning support (GAPS) toolkit . • In conjunction with Army Test and Evaluation Command and OSD Test Resource Management Center (TRMC), completed Urban Environment Test Capabilities (UETC) Needs Analysis Report. • Identified Joint Urban Operations (JUO) unique gaps with recommended DOTMLPF approaches to mitigate the gaps for the twelve (12) capabilities defined by the JUO Joint Integrating Concept (JIC). • Developed the JUO Master Plan as the overarching strategy to provide direction to DOTMLPF-P initiatives and supporting Joint Capability Integration & Development System (JCIDS) documentation. • Executed discovery seminar wargames with multi-national, interagency, and academic partners to develop understanding of how to positively influence relevant populations and foster multi-national support during conflict "shaping" in complex operational environments and when required defeat adversaries embedded within urban areas while protecting the population and society. (Joint Urban Warrior 09 which continued into FY10 and US-Israel Hybrid Threat Seminar) • Conducted Irregular Warfare Training Simulator Integrated Product Team (IWTSIPT) Report that identified and consolidated persistent IW training simulation capability gaps to include the inability to replicate complex/urban environments scenarios and actors, which will be used in determining allocation of Resource Management Decision (RMD) 700 funds to the Services to address small unit training deficiencies. In addition to identifying capability gaps, the IWTSIPT also identified near and long term mitigation strategies. • Provided Subject Matter Expertise to NATO Allied Command Transformation in support of the development of the "Military Contribution to Countering Hybrid Threats Capstone Concept". • Participated in the conduct of the seminar wargame "Joint Irregular Warfare 2010" with cosponsors USSOCOM and the USMC, Center for Irregular Warfare that examined the joint forces' ability to conduct irregular warfare, identify gaps in the ability to enable, 			

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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 3: <i>Advanced Technology Development (ATD)</i>		R-1 ITEM NOMENCLATURE PE 0603828D8Z: <i>Joint Experimentation</i>		PROJECT P808: <i>Joint Experimentation</i>	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2010	FY 2011	FY 2012
support and sustain distributed operations, and opportunities to execute a comprehensive approach to conflict where defense synthesizes with diplomacy and development.					
FY 2011 Plans: <ul style="list-style-type: none"> • Continue development, articulation and refinement of DOD Joint Urban Operations Master Plan, as a comprehensive document describing DOD's approach to lead, coordinate, and integrate urban operations doctrine, organization, training, and equipment that transform the capability to conduct urban operations. • Conduct analysis of emerging urban materiel solutions to address prioritized urban gaps areas to include capability review/ technology assessment of relevant efforts within battlespace awareness, force application or protection. • Assess the urban environment test solutions of the Joint Urban Test Capability (JUTC) Program to determine progress in mitigating gaps identified in the UETC Report and DOD's ability to replicate, simulate and emulate the urban environment for test and evaluation (T&E). • Lead and coordinate efforts to identify and expand M&S capabilities related to the small unit training simulations and urban environment to optimize service programs and ensure immersive training capabilities/technologies are provided for ground units within Close Combat Infantry Immersive Training. • Lead and coordinate efforts to identify gaps/shortfalls, assess potential solutions, and make prioritized recommendations to ensure integration of IW and JUO capability development activities across the Joint Capability Integration Development System, Defense Acquisition System, and the Planning, Programming, and Budget Execution and other DOTMLPF-P process. • Continue established discovery seminar wargames to build on work optimizing joint and coalition force activities in complex environments. Extend network of multi-national, interagency, and academic partners to advance understanding of how to positively influence relevant populations, when required, defeat adversaries embedded and diffused within urban areas. (Joint Irregular Warfare 10 concepts carrying into FY11 and US-Israel Hybrid Threat Seminar). • Plan and conduct the Joint Urban Wargame 2011 in order to determine the capability and capacity to systematically assess the critical functions, processes, and structures of an urban system and its embedded adversaries. This includes identifying critical functions, processes and structures of an urban system and its embedded adversaries that must be understood to enable integrated planning and execution of military and non-military actions in an urban operational environment, and identify measures of success for military and non-military actions in an urban environment. • Partner with NATO to wargame the "Military Support to Countering Hybrid Threats" concept in order to gain the NATO Military Committee's endorsement of the concept and tasking to accomplish future work. 					
Title: Joint Futures Group			1.133	1.112	-
Description: The Joint Futures Group (JFG) is a unique DoD team specifically focused on identifying the next big challenges or opportunities for the joint force and Combatant Commanders that are not being addressed elsewhere in DoD. It is a unique					

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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 3: <i>Advanced Technology Development (ATD)</i>	R-1 ITEM NOMENCLATURE PE 0603828D8Z: <i>Joint Experimentation</i>	PROJECT P808: <i>Joint Experimentation</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2010	FY 2011
<p>entity within DoD that utilize analytic and research processes integrates doctoral level future thinking and extrapolates likely future operational environments within which innovative ideas about challenges and military implications for the Department of Defense are generated. The JFG integrates the results of its “futures” research into downstream processes for concept and development, experimentation scenarios, capabilities definition, doctrine, and inclusion in the majority of professional military education (PME). Their unclassified professionally developed products are globally disseminated and inform every Service, Combatant Command and all of our multinational partners. "We must focus concept development on the specific problems identified in the Joint Operating Environment or on identified gaps in doctrine..." – General Mattis</p> <p>The objective of the JFG is to provide a vision of the future and support identification and articulation of joint force implications, through collection, analysis, synthesis, dissemination of the world's strategic and international relations futures. The current means of articulation is the Joint Operating Environment (JOE) report. Unlike other classified DIA or JCS “future focused” documents the unclassified JOE provides the foundational problem statement for the CJCS's Capstone Concept for Joint Operations (CCJO), and is intended to inform the development of Joint Operating Concepts and Joint Integrating Concepts, as well as to provide a framework for Combatant Command and Service LOEs and experiments through its vision of the future. The JOE has been downloaded globally well over two million times in the past two years and is a key Combatant Command, Service and CJCS reference document on future challenges and opportunities. Support to the DoD analytical agenda consists of improving and refining the classified Integrated Security Contexts (ISCs). This dedicated analytical support ensures that the ISCs reflect a balanced and plausible set of future warfare challenges.</p> <p>FY 2010 Accomplishments:</p> <ul style="list-style-type: none"> • Supporting the Chairman's CCJO, completed the 2010 JOE White Paper Update. Produced research papers with emphasis on the future trends, conditions, challenges, and opportunities faced by future joint warfighting. • At the request of the many of the Combatant Commands, Services, and multinational governments provided detailed “future briefs” to Government Accountability Office (GAO), combatant commanders, DOD officials, multinational partners, staff and war colleges, NDU, concept developers, Service boards, and other government agencies. • Supported OSD by developing and refining classified ISCs and QDR wargame documents. • Allied Command Transformation (ACT) Support: provided U.S.-perspective futures support to NATO's ACT Multiple Futures Project (MFP) and supported the development of NATO future-related analysis, research, and strategic reports. Co-sponsored with ACT and others the “Cooperation and Conflict in the Global Commons” Conference and provided a white paper to define the problem. • Delivered: • 2010 Joint Operating Environment (JOE) • Developed realistic future scenarios and vignettes in support of the older DPSs and the new ISC scenarios. 			

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Office of Secretary Of Defense		DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 3: <i>Advanced Technology Development (ATD)</i>	R-1 ITEM NOMENCLATURE PE 0603828D8Z: <i>Joint Experimentation</i>	PROJECT P808: <i>Joint Experimentation</i>		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2010	FY 2011	FY 2012
<ul style="list-style-type: none"> Planned, coordinated and executed a conference in coordination with Defense Intelligence Agency (DIA) and National Academies of Science focused on future Science and Technology threats. The output from this is a classified study on likely threat challenges and capabilities in S&T and associated time horizons. Planned, coordinated and executed a conference in coordination with Allied Command Transformation, Naval Post-graduate School, and National Defense University focused on future conflict in the Global Commons. Provided a white paper to frame the nature of future problems in the Commons. Planned, coordinated and executed a conference in coordination with Defense Intelligence Agency (DIA), Old Dominion University, and the National Defense University focused on the possible fragmentation of Russia and its implications for destabilization and conflict in Eurasia. Published White Papers: "Future Threats to Access to the Global Commons", "A Synthesis of Futures Scenarios and Implications for the Joint Force", and "Rise and Fragmentation of Great Powers". Coordinated for an exterior Red Team to challenge the concept "Countering Irregular Threats to Air Operations"; created a plausible scenario based upon a hybrid threat in a major urban environment to assist in understanding plausible future threats and CONOPS. This effort will focus on two QDR missions (Defeat Aggression in Anti-access Environments and Succeed in COIN, Stability, and Counterterrorist Operations) and five subordinate tasks. <p>FY 2011 Plans:</p> <ul style="list-style-type: none"> Support the Chairman's CCJO review and all Combatant Command concept and doctrine development, LOEs and experimentation program through research and publishing of the 2011 JOE. Based on doctoral level SME future focused input, JFG will research, review and produce detailed research papers with emphasis on the future trends, conditions, challenges, and opportunities to be faced by future joint warfighters. Set the "context" for the future fight. Provide detailed input to support the development of products, papers and classified studies that support the DoD Analytical Agenda as it transitions to Support to Strategic Analysis. Senior analyst will review and refine OSD's Integrated Security Contexts (ISCs) and Foundational Activities (FA) scenarios and participation in the Support to Strategic Analysis process; provide input to the Comprehensive Joint Assessment (CJA) and other policy and strategy "future focused" documents. Research, analyze, synthesize and promote a vision of the future that includes critical analysis of battlefield innovation of disruptive technologies through partnership with DIA, command and service intelligence, information dominance and national defense intelligence agencies. To this end, plan, coordinate, and execute international conferences focused as follows and provide DoD, JCS, Combatant Command, Service and Multinational attendee actionable white papers on: <ul style="list-style-type: none"> Ideological Conflict over Global Networks "Winning the Global War of Ideas" The Rise and Fragmentation of Great Powers: China The Rise and Fragmentation of Great Powers: India Specific and measurable outcomes include: 				

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2010	FY 2011
<ul style="list-style-type: none"> • A clear statement of the future challenges and implications for the joint force that allows concepts to be developed to prepare for these challenges. • A set of alternative futures scenarios to guide focused scenario development for joint exercises and Combatant Command and Service LOEs and experiments. 			
Accomplishments/Planned Programs Subtotals		103.336	111.946
		FY 2010	FY 2011
Congressional Add: Tidewater Full Scale Exercise		2.320	-
FY 2010 Accomplishments: Funds executed by the Virginia Office of the Commonwealth Preparedness utilizing the experience and unique capabilities of the U.S. Naval Postgraduate School's Center for Asymmetric Warfare and Old Dominion University's Virginia Modeling Analysis and Simulation Center. The Tidewater Full Scale Exercise enhanced the Commonwealth of Virginia's interdiction, response, and recovery capabilities to a WMD event through the conduct of a multi-agency, maritime Full Scale Exercise.			
Congressional Adds Subtotals		2.320	-
C. Other Program Funding Summary (\$ in Millions)			
N/A			
D. Acquisition Strategy			
N/A			
E. Performance Metrics			
<p>Performance of Joint Experimentation efforts is measured by successful development of:</p> <ol style="list-style-type: none"> (1) objective assessment and validation of enhanced capabilities enabling the joint force commander to perform joint missions. (2) delivery of relevant, intellectually rigorous joint concepts to enhance or change Joint Doctrine. (3) confirmed transition of capability/products from experimentation to force implementation through the DOTMLPF-P Change Recommendations (DCR) process. (4) identification of innovative integrated solutions and joint interoperability standards for Service and Agency capability developers to pursue through demonstration, acquisition and/or employment. (5) resolution of specific joint concept and capability shortfalls delineated through the JCD&E experimentation campaign plan development process. 			

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