

**UNCLASSIFIED**

**Exhibit R-2, PB 2010 Office of Secretary Of Defense RDT&E Budget Item Justification** **DATE:** May 2009

<b>APPROPRIATION/BUDGET ACTIVITY</b>					<b>R-1 ITEM NOMENCLATURE</b>					
0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 3 - Advanced Technology Development (ATD)					PE 0603727D8Z Joint Warfighting					
<b>COST (\$ in Millions)</b>	<b>FY 2008 Actual</b>	<b>FY 2009 Estimate</b>	<b>FY 2010 Estimate</b>	<b>FY 2011 Estimate</b>	<b>FY 2012 Estimate</b>	<b>FY 2013 Estimate</b>	<b>FY 2014 Estimate</b>	<b>FY 2015 Estimate</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
Total Program Element	10.635	12.031	11.135						Continuing	Continuing
P727: Joint Warfighting	10.635	12.031	11.135						Continuing	Continuing

**A. Mission Description and Budget Item Justification**

The OSD Joint Warfighting Program (JWP) account supports two related activities supporting the Department's Joint Experimentation. The Joint Advanced Warfighting Program (JAWP) captures lessons learned and assessments from contingency operations to inform resource allocation, and the Direct Analysis Support for Combatant Commander (DASCC) account enables Combatant Commands to examine operational needs and capability gap alternatives via limited objective experiments and concept development.

The Joint Advanced Warfighting Program (JAWP) is supported by the Office of the Secretary of Defense (OSD) Policy and AT&L, with the continuing concurrence of the Joint Staff (J7) to serve as a catalyst for critical analysis and development of innovative concepts on an accelerated basis. The JAWP provides an independent capability for joint warfare analysis and bridges operational lessons learned in the Combatant Commands with joint experimentation conducted at US Joint Forces Command and the other Combatant Commands. This program fuses a team of civilian operational analysis experts with mid-grade and senior military officers to provide first-hand research into topics of pivotal importance to current and future joint campaigns. These analyses serve as a basis for formulation and assessment of advanced concepts and capabilities, identifying enabling technologies and operational integration options for the Department. Resultant concepts drive changes in the doctrine, organization, training, materiel, leadership, personnel, and facilities (DOTMLPF) of the Services. The JAWP serves an essential, expert, and independent feedback role in identifying, exploring and evaluating breakthrough war fighting capabilities. It captures and builds on lessons learned from joint contingency operations and earlier joint and Service experimentation. From that foundation, it identifies and helps formulate advanced joint concepts, explores their effectiveness by recommending design and conduct of joint experiments, and helps streamline implementation processes. Its work complements and supports the activities of Joint Forces Command, the Joint Staff, CoComs and OSD.

The Direct Analysis Support for Combatant Commands (DASCC) activity invigorates Combatant Command staffs participation in joint experimentation as a fundamental element of joint capability development. This activity assists CoComs to specify operational needs and examine capability gap alternatives. Through this activity, JWP also directly funds CoComs specific operational needs and examines capability gap alternatives. The process assesses military contingency operations and formulates advanced joint concepts to be tested and refined via experiments, doctrine development, and demonstrations. The JWP directly enfranchises the CoComs to employ capabilities for mission needs analysis and joint experimentation. This JWP investment strategy expands earlier practice of offsetting costs for Defense Adaptive Red Team/DART services to the CoComs. Likewise, the DASCC incorporates the former Technology Feeder Support (TFS). It aims to reinvigorate CoCom staff capabilities to employ rigorous analysis and experimentation methodologies in support of their specific mission assignments. By empowering CoCom staffs to critically assess their own needs and examine viable capability gap solutions, the JWP aims to focus larger research and development investments, like Joint

**UNCLASSIFIED**

**UNCLASSIFIED**

<b>Exhibit R-2, PB 2010 Office of Secretary Of Defense RDT&amp;E Budget Item Justification</b>	<b>DATE:</b> May 2009
--	-----------------------

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 3 - Advanced Technology Development (ATD)	<b>R-1 ITEM NOMENCLATURE</b> PE 0603727D8Z Joint Warfighting
--	---

Experimentation and Joint Capability Technology Demonstrations to specific warfighter requirements. The JWP enables joint commanders to conduct limited objective experiments in theater that explore capability gaps and potential capability solutions unique to their mission set. The JWP is intended to be seed funding encouraging leveraged employment of existing defense analysis and experimentation infrastructure such as networked access to the centralized Joint Futures Laboratory facilities at U.S. Joint Forces Command. This approach minimizes redundant investment, strengthens the relevance of defense analysis and experimentation projects, and diversifies the range of solutions considered for pursuit by the department.

**B. Program Change Summary (\$ in Millions)**

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
Previous President's Budget	10.964	11.098	11.339	
Current BES/President's Budget	10.635	12.031	11.135	
Total Adjustments	-0.329	0.933	-0.204	
Congressional Program Reductions				
Congressional Rescissions				
Total Congressional Increases				
Total Reprogrammings				
SBIR/STTR Transfer	-0.307			
Undistributed reductions	-0.022			
Internal realignment of funds		0.933	-0.057	
Other			-0.147	

**UNCLASSIFIED**

**UNCLASSIFIED**

<b>Exhibit R-2a, PB 2010 Office of Secretary Of Defense RDT&amp;E Project Justification</b>								<b>DATE:</b> May 2009		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 3 - Advanced Technology Development (ATD)				<b>R-1 ITEM NOMENCLATURE</b> PE 0603727D8Z Joint Warfighting					<b>PROJECT NUMBER</b> P727	
<b>COST (\$ in Millions)</b>	<b>FY 2008 Actual</b>	<b>FY 2009 Estimate</b>	<b>FY 2010 Estimate</b>	<b>FY 2011 Estimate</b>	<b>FY 2012 Estimate</b>	<b>FY 2013 Estimate</b>	<b>FY 2014 Estimate</b>	<b>FY 2015 Estimate</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
P727: Joint Warfighting	10.635	12.031	11.135						Continuing	Continuing

**A. Mission Description and Budget Item Justification**

Centralized funding for Defense Joint Experiment (JE) was established in FY 2000 in Navy PE 060372N. US Joint Forces Command (USJFCOM) was designated as executive agent for this funding. A smaller residual analysis and experimentation support account for was deliberately maintained under the aegis of the Office of the Director, Defense Research & Engineering (DDR&E) to provide leverage over the larger USJFCOM account, and to establish an independent capability for joint warfare analysis. This OSD Joint Warfighting Program (JWP) account supports the Joint Advanced Warfighting Program (JAWP) and directly empowers joint commanders' ability to conduct analysis and experimental concept development.

The Joint Advanced Warfighting Program (JAWP) is strongly supported by the OSD Policy and AT&L, with the continuing concurrence of the Joint Staff (J7) to serve as a catalyst for critical analysis and development of innovative concepts on an accelerated basis. This program fuses a team of civilian operational analysis experts with mid-grade and senior military officers to provide first-hand research into topics of pivotal importance to current and future joint campaigns. These analyses serve as a basis for formulation and assessment of advanced concepts and capabilities, identifying enabling technologies and operational integration options for the department. Resultant concepts drive changes in the doctrine, organization, training, materiel, leadership, personnel, and facilities (DOTMLPF) of the Services. The JAWP serves an essential, expert, and independent feedback role in identifying, exploring and evaluating breakthrough war fighting capabilities. It captures and builds on lessons learned from joint contingency operations and earlier joint and Service experimentation. From that foundation, it identifies and helps formulate advanced joint concepts, explores their effectiveness by recommending design and conduct of joint experiments, and helps streamline implementation processes. Its work complements and supports the activities of Joint Forces Command, the Joint Staff, CoComs, and the OSD.

An invigorated defense enterprise for joint experimentation is a fundamental element of joint capability development. Elements of the JWP assist CoComs to specify operational needs and examine capability gap alternatives. The JWP also directly funds CoComs specific operational needs and examine capability gap alternatives. The processes assess military contingency operations and formulate advanced joint concepts to be tested and refined via experiments, doctrine development, and demonstrations. The JWP directly enfranchises the CoComs to employ capabilities for mission needs analysis and joint experimentation. This JWP investment strategy expands earlier practice of offsetting costs for defense Adaptive Red Team/DART services to the CoComs. It aims to reinvigorate CoCom staff capabilities to employ rigorous analysis and experimentation methodologies in support of their specific mission assignments. By empowering CoCom staffs to critically assess their own needs and examine viable capability gap solutions, the JWP aims to focus larger research and development investments, like Joint Experimentation and Joint Capability Technology Demonstrations to specific warfighter requirements. The JWP enables joint commanders to conduct limited objective experiments in theater that explore capability gaps and potential capability solutions unique to their mission set. The JWP is intended to be seed funding encouraging leveraged employment of existing defense analysis and experimentation infrastructure such as networked access to the centralized Joint Futures Laboratory facilities at U.S. Joint Forces

**UNCLASSIFIED**

**UNCLASSIFIED**

<b>Exhibit R-2a, PB 2010 Office of Secretary Of Defense RDT&amp;E Project Justification</b>			<b>DATE:</b> May 2009	
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 3 - Advanced Technology Development (ATD)	<b>R-1 ITEM NOMENCLATURE</b> PE 0603727D8Z Joint Warfighting			<b>PROJECT NUMBER</b> P727
<p>Command. This approach minimizes redundant investment, strengthens the relevance of defense analysis and experimentation projects, and diversifies the range of solutions considered for pursuit by the department.</p> <p>The defense Adaptive Red Team/DART effort evolved into an expanded effort to assist CoComs with analysis and experimentation services tuned to their respective mission needs. DART met its objectives as a springboard to enfranchise CoComs with a voice in defense analysis and experimentation. Likewise, Technology Feeder Support (TFS) was a separate fund segment supporting CoCom internal analysis and experimentation technology needs. Both DART and TFS are now incorporated into the larger Joint Warfighting Program.</p>				
<b>B. Accomplishments/Planned Program (\$ in Millions)</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>
<p>Direct Analysis Support for Combatant Command Support (DASCC)</p> <p>DASCC activities support CoComs by promoting the use of joint experimentation to address challenges specific to their theater or functional missions. It aims to reinvigorate CoCom staff capabilities to employ rigorous analysis and experimentation methodologies in support of specific mission assignments. DASCC provides a "trial and error" experiment to understand a concept or technology that addresses a specific CoCom challenge. DSCC activities are selected through an annual candidate nomination review and selection process.</p> <p><i>FY 2008 Accomplishments:</i></p> <p>DASCC continued to provide resources to CoComs for joint experimentation that addresses regional capability gaps and improves understanding of new technologies and concepts. Developed concepts for Joint Capabilities Technology Demonstration projects.</p> <ul style="list-style-type: none"> <li>- USNORTHCOM. Planned and conducted a series of limited objective experiments to investigate capability gaps in the Homeland Defense &amp; Civil Support Joint Operating Concept (JOC).</li> <li>-USCENTCOM. Developed the Command's concept and experimentation roadmap allowing partnership and integration with USJFCOMs joint experimentation activities.</li> <li>-USTRANSCOM. Planned and executed the Unified View Wargame in collaboration with USJFCOM.</li> <li>- USPACOM. Developed an experimentation campaign plan that mapped capability gaps and identified potential technology solutions through insertions into field exercises including Terminal Fury, Northern Edge and Cobra Gold; initiated a Maritime Domain Awareness limited objective experiment (LOE) in coordination with USJFCOM.</li> </ul>	4.935	6.331	5.435	

**UNCLASSIFIED**

**UNCLASSIFIED**

<b>Exhibit R-2a, PB 2010 Office of Secretary Of Defense RDT&amp;E Project Justification</b>			<b>DATE:</b> May 2009	
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 3 - Advanced Technology Development (ATD)	<b>R-1 ITEM NOMENCLATURE</b> PE 0603727D8Z Joint Warfighting		<b>PROJECT NUMBER</b> P727	
<b>B. Accomplishments/Planned Program (\$ in Millions)</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>
<p>- USSOUTHCOM. Assisted in building partnership with Honduras through a crisis management experiment designed to address information sharing and collaboration in a natural disaster crisis situation; enabled the development of theater specific cooperative security engagement activities through a series of limited objective experiments.</p> <p>- USSTRATCOM. Provided analysis and validation of the Command's Operational Concepts and Integrated Priority Lists through wargame experiments on space, missile defense, information operations and deterrence; enabled participation in Nimble Titan Experiment that addressed policy level missile defense issues.</p> <p><i>FY 2009 Plans:</i>  FY09 Planned Output:  Task 1 – Balancing Capabilities for Future Challenges. Using an “alternative futures” approach and the strategic planning framework developed during FY08 for defense strategy development and balancing military capabilities, further develop and test the framework in support of the next Quadrennial Defense Review (QDR) and to inform the plans of the new Administration.  Task 2 – Training and Education. Develop evidence-based training and education solutions that will better enable joint forces to operate across the full range of military operations. Solutions will build on the theme that acquiring, refining, and sharing information and assimilating lessons from operations and training are fundamental joint actions. Develop an approach for capitalizing on new training methods and innovations in joint professional military education (JPME) to enable future joint forces to quickly adapt to new missions and challenges. Primary Sponsor: JS/J7  Task 3 – Support to Ongoing Operations. To learn from current wars while contributing to their success, provide on-site and on-call analytical support to joint and multi-national force commanders in Iraq and Afghanistan. Address campaign-level questions for which external expertise and perspective are needed.  Task 4 – Broaden Irregular Warfare Capabilities. Develop concepts and capabilities to fill gaps identified by senior officials as critical and that joint force commanders (JFCs) have not been able to do. The immediate goal is to provide current JFCs and their staffs with capabilities by the end of FY09 in the form of illustrative Joint Campaign Plan annexes. More advanced capabilities for future JFCs will be identified in the form of DOTMLPF plus improvements for military forces and better leveraging the capabilities of</p>				

**UNCLASSIFIED**

R-1 Line Item #45

Page 5 of 9

**UNCLASSIFIED**

<b>Exhibit R-2a, PB 2010 Office of Secretary Of Defense RDT&amp;E Project Justification</b>			<b>DATE:</b> May 2009	
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 3 - Advanced Technology Development (ATD)	<b>R-1 ITEM NOMENCLATURE</b> PE 0603727D8Z Joint Warfighting		<b>PROJECT NUMBER</b> P727	
<b>B. Accomplishments/Planned Program (\$ in Millions)</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>
<p>other government agencies (US, allied, host nation, international) and non-government organizations (NGOs).</p> <p>Task 5 – Future Adaptive EUCOM . Review the current operational environment that shapes US European Command responsibilities. Identify emerging pressures on NATO allies and develop concepts for countering those pressures. Develop a construct for an adaptive EUCOM headquarters framework by promoting the use of joint experimentation to address challenges specific to their theater or functional missions. Funds will be used to assess regional capability gaps and improve understanding of new technologies and concepts. Develop concepts for Joint Capabilities Technology Demonstration projects.</p> <p><i>FY 2010 Plans:</i> FY 2010 Planned Output - Continue to provide resources to CoComs for joint experimentation that addresses regional capability gaps and improves understanding of new technologies and concepts. Develop concepts for Joint Capabilities Technology Demonstration projects.</p>				
<p>Joint Advanced Warfighting Program (JAWP)</p> <p>JAWP serves as a catalyst for innovation and change. This effort focuses on formulation and assessment of advanced concepts and capabilities, plus identifying enabling technologies and integration options for the Department. Annual JAWP activities are reviewed and approved by a Board of Directors chaired by USJFCOM, including Joint Staff (J7), and OUSD-Policy.</p> <p><i>FY 2008 Accomplishments:</i> The JAWP continued support of full spectrum transformation objectives addressing irregular, catastrophic, and disruptive challenges. Funds were used to design, conduct, and support joint experimentation, joint concept development, and analysis of joint operations, with the intent to inform and effect resource allocation and acquisition. Efforts were made to align the department processes in ways that make them more responsive to the needs of CoComs and their subordinate forces. Topics analyzed in FY08 included: - Strategic Development. (Customer: OSD-Policy) Recommendations for making investment strategy choices by analyzing and contrasting future security environment challenges in order to inform the QDR.</p>	5.700	5.700	5.700	

**UNCLASSIFIED**

**UNCLASSIFIED**

<b>Exhibit R-2a, PB 2010 Office of Secretary Of Defense RDT&amp;E Project Justification</b>			<b>DATE:</b> May 2009	
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 3 - Advanced Technology Development (ATD)	<b>R-1 ITEM NOMENCLATURE</b> PE 0603727D8Z Joint Warfighting		<b>PROJECT NUMBER</b> P727	
<b>B. Accomplishments/Planned Program (\$ in Millions)</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>
<ul style="list-style-type: none"> <li>- Combatant Command Experimentation. (Customer: USNORTHCOM &amp; USSOUTHCOM) Supported USSOUTHCOM &amp; USNORTHCOM in designing and planning limited objective experiments to address capability gaps and identify solutions.</li> <li>- Balancing Capabilities. (Customer: Joint Staff and OSD-Policy) Developed and compared alternative paths for achieving balanced US military capabilities to meet future security challenges with emphasis on the integration of interagency and international capabilities in long-term plans.</li> <li>- Operationalizing Unified Action. (Customer: USSOUTHCOM and USAFRICOM) Building on previous work on interagency interplay in the Global War on Terror and its effect in the Horn of Africa, identified whole of government best practices for geographic CoComs. Use the effort to help inform the mission and organization of AFRICOM and SOUTHCOM.</li> <li>- Training and Education. (Customer: Joint Staff) Developed evidenced-based training and education solutions capitalizing on new training methods and innovations in education to enable adaptation to new missions.</li> <li>- Support to Multinational Force Iraq (Customer: Multi-National Force Iraq) continuing effort. Organized, conducted and report the results of expert panels, exploring issues identified by MNF-I.</li> </ul> <p><i>FY 2009 Plans:</i> The JAWP will continue support of full spectrum transformation objectives addressing irregular, catastrophic, and disruptive challenges. It will design, conduct, and support joint experimentation, joint concept development, and analysis of joint operations, with the intent to inform and effect resource allocation and acquisition. It will continue efforts to align Department processes in ways that make them more responsive to the needs of CoComs and their subordinate forces.</p> <p>FY 2009 JAWP efforts</p> <ul style="list-style-type: none"> <li>- Balancing Capabilities for Future Challenges. Using an “alternative futures” approach and the strategic planning framework developed during FY08 for defense strategy development and balancing military capabilities, further develop and test the framework in support of the next Quadrennial Defense Review (QDR) and to inform the plans of the new Administration.</li> <li>- Training and Education. Develop evidence-based training and education solutions that will better enable joint forces to operate across the full range of military operations. Solutions will build on the theme that acquiring, refining, and sharing information and assimilating lessons from operations and</li> </ul>				

**UNCLASSIFIED**

R-1 Line Item #45

Page 7 of 9

**UNCLASSIFIED**

<b>Exhibit R-2a, PB 2010 Office of Secretary Of Defense RDT&amp;E Project Justification</b>			<b>DATE:</b> May 2009	
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 3 - Advanced Technology Development (ATD)	<b>R-1 ITEM NOMENCLATURE</b> PE 0603727D8Z Joint Warfighting		<b>PROJECT NUMBER</b> P727	
<b>B. Accomplishments/Planned Program (\$ in Millions)</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>
<p>training are fundamental joint actions. Develop an approach for capitalizing on new training methods and innovations in joint professional military education (JPME) to enable future joint forces to quickly adapt to new missions and challenges.</p> <ul style="list-style-type: none"> <li>- Support to Ongoing Operations. To learn from current wars while contributing to their success, provide on-site and on-call analytical support to joint and multi-national force commanders in Iraq and Afghanistan. Address campaign-level questions for which external expertise and perspective are needed.</li> <li>- Broaden Irregular Warfare Capabilities . Develop concepts and capabilities to fill gaps identified by senior officials as critical and that joint force commanders (JFCs) have not been able to do well. The immediate goal is to provide current JFCs and their staffs with capabilities by the end of FY09 in the form of illustrative Joint Campaign Plan annexes. More advanced capabilities for future JFCs will be identified in the form of DOTMLPF+ improvements for military forces and better leveraging the capabilities of other government agencies (US, allied, host nation, international) and NGOs.</li> <li>- Future Adaptive EUCOM . Review the current operational environment that shapes US European Command responsibilities. Identify emerging pressures on NATO allies and develop concepts for countering those pressures. Develop a construct for an adaptive EUCOM HQ command and control structure.</li> </ul> <p><i>FY 2010 Plans:</i> FY 2010 Planned Output - The JAWP will continue support of full spectrum transformation objectives addressing irregular, catastrophic, and disruptive challenges. It will design, conduct, and support joint experimentation, joint concept development, and analysis of joint operations, with the intent to inform and effect resource allocation and acquisition. It will continue efforts to align department processes in ways that make them more responsive to the needs of CoComs and their subordinate forces and coalition partners.</p>				
<b>C. Other Program Funding Summary (\$ in Millions)</b> N/A				
<b>D. Acquisition Strategy</b> N/A				

**UNCLASSIFIED**

**UNCLASSIFIED**

<b>Exhibit R-2a, PB 2010 Office of Secretary Of Defense RDT&amp;E Project Justification</b>		<b>DATE:</b> May 2009
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 3 - Advanced Technology Development (ATD)	<b>R-1 ITEM NOMENCLATURE</b> PE 0603727D8Z Joint Warfighting	<b>PROJECT NUMBER</b> P727

**E. Performance Metrics**

Performance of Joint Experimentation systems is measured through metrics including (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.