

OSD RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

Date: February 2007

APPROPRIATION/ BUDGET ACTIVITY
RDT&E/ Defense Wide BA# 3

PE NUMBER AND TITLE

0603727D8Z - Joint Warfighting

Cost (\$ in Millions)	FY 2006 Actual	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Total Program Element (PE) Cost	9.757	10.580	11.060	11.120	11.447	11.623	11.775	11.941
P727 Joint Warfighting	9.757	10.580	11.060	11.120	11.447	11.623	11.775	11.941

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 experimentation account for was deliberately maintained under the aegis of the Office of the Secretary of Defense (Acquisition, Technology, and Logistics - AT&L) 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) concept development, the Defense Adaptive Red Team (DART), and Technology Feeder Support (TFS).

- The Joint Advanced Warfighting Program (JAWP) is strongly supported by the Office of the Secretary of Defense (OSD) Policy and AT&L, with the continuing concurrence of the Vice Chairman of the Joint Chiefs, to serve as a catalyst for critical analysis and development of innovative concepts on an accelerated basis. This program fuses a team of 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, Combatant Commanders (CoComs), and OSD.

The Defense Adaptive Red Team (DART) was established as a separate project starting with the FY 2003 budget. The DART's mission is to challenge JFCOM, JAWP, the Joint Staff and others in the DoD to develop more robust and resilient concepts for conducting joint operations in the future. Attuned to CoCom analysis requirements, DART proved very successful by providing an independent team of experts to challenge emerging operational concepts from their origin through the experimentation process. DART is particularly effective when applied to areas where immature operational and technical concepts require the sharp focus of critical appraisal before applying funds for experimentation and demonstration. It does so through four sets of activities:

(1) Involvement in the planning and implementation of JFCOM, JAWP and Joint Staff concept development and experimentation; (2) direct interaction with CoCom staffs on customer-nominated topics; (3) support of joint demonstration program efforts; and (4) development and refinement of red teaming best practices. The DART develops and provides adversary roles for joint analysis wargames and other activities as appropriate, and provides independent reports documenting lessons learned and recommendations. A senior advisory group meets annually under OSD sponsorship to review DART activities and accomplishments, and to recommend future areas of emphasis.

This PE also underwrites the Technology Feeder Support (TFS) process for joint experiments. TFS directly empowers CoComs to conduct joint experimentation within their theaters of operation. It reinvigorates experimentation by joint commanders as an effective means to develop and explore options for assigned missions. The CoComs employ this limited funding to

OSD RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

Date: February 2007

APPROPRIATION/ BUDGET ACTIVITY
RDT&E/ Defense Wide BA# 3PE NUMBER AND TITLE
0603727D8Z - Joint Warfighting

address regional capability gaps and unique mission area requirements, often leveraging the on-going joint exercises and a variety of Service- and OSD-sponsored technology capability demonstrations. Indirectly, TFS encourages USJFCOM to incorporate Limited Objective Experiments serving CoCom purposes into the larger over-arching agenda of joint experimentation.

<u>B. Program Change Summary</u>	FY 2006	FY 2007	FY 2008	FY 2009
Previous President's Budget (FY 2007)	10.043	10.641	11.398	11.431
Current BES/President's Budget (FY 2008/2009)	9.757	10.580	11.060	11.120
Total Adjustments	-0.286	-0.061	-0.338	-0.311
Congressional Program Reductions	-0.162	-0.061		
Congressional Rescissions				
Congressional Increases				
Reprogrammings				
SBIR/STTR Transfer	-0.124			
Other			-0.338	-0.311

C. Other Program Funding Summary: Not Applicable.

D. Acquisition Strategy: Not Applicable.

E. Performance Metrics:

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

Comment: Performance of Joint Experimentation systems is measured 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.

OSD RDT&E PROJECT JUSTIFICATION (R2a Exhibit)

Date: February 2007

APPROPRIATION/ BUDGET ACTIVITY
RDT&E/ Defense Wide BA# 3

PE NUMBER AND TITLE
0603727D8Z - Joint Warfighting

PROJECT
P727

Cost (\$ in Millions)	FY 2006 Actual	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
P727 Joint Warfighting	9.757	10.580	11.060	11.120	11.447	11.623	11.775	11.941

A. Mission Description and Project 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 experimentation account for was deliberately maintained under the aegis of the Office of the Secretary of Defense (Acquisition, Technology, and Logistics - AT&L) 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) concept development, the Defense Adaptive Red Team (DART), and Technology Feeder Support (TFS).

- The Joint Advanced Warfighting Program (JAWP) is strongly supported by the Office of the Secretary of Defense (OSD) Policy and AT&L, with the continuing concurrence of the Vice Chairman of the Joint Chiefs, to serve as a catalyst for critical analysis and development of innovative concepts on an accelerated basis. This program fuses a team of 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, Combatant Commanders (CoComs), and OSD.

The Defense Adaptive Red Team (DART) was established as a separate project starting with the FY 2003 budget. The DART's mission is to challenge JFCOM, JAWP, the Joint Staff and others in the DoD to develop more robust and resilient concepts for conducting joint operations in the future. Attuned to CoCom analysis requirements, DART proved very successful by providing an independent team of experts to challenge emerging operational concepts from their origin through the experimentation process. DART is particularly effective when applied to areas where immature operational and technical concepts require the sharp focus of critical appraisal before applying funds for experimentation and demonstration. It does so through four sets of activities:

(1) Involvement in the planning and implementation of JFCOM, JAWP and Joint Staff concept development and experimentation; (2) direct interaction with CoCom staffs on customer-nominated topics; (3) support of joint demonstration program efforts; and (4) development and refinement of red teaming best practices. The DART develops and provides adversary roles for joint analysis wargames and other activities as appropriate, and provides independent reports documenting lessons learned and recommendations. A senior advisory group meets annually under OSD sponsorship to review DART activities and accomplishments, and to recommend future areas of emphasis.

This PE also underwrites the Technology Feeder Support (TFS) process for joint experiments. TFS directly empowers CoComs to conduct joint experimentation within their theaters of operation. It reinvigorates experimentation by joint commanders as an effective means to develop and explore options for assigned missions. The CoComs employ this limited funding to

OSD RDT&E PROJECT JUSTIFICATION (R2a Exhibit)

Date: February 2007

APPROPRIATION/ BUDGET ACTIVITY

RDT&E/ Defense Wide BA# 3

PE NUMBER AND TITLE

0603727D8Z - Joint Warfighting

PROJECT

P727

address regional capability gaps and unique mission area requirements, often leveraging the on-going joint exercises and a variety of Service- and OSD-sponsored technology capability demonstrations. Indirectly, TFS encourages USJFCOM to incorporate Limited Objective Experiments serving CoCom purposes into the larger over-arching agenda of joint experimentation.

B. Accomplishments/Planned Program:

Accomplishment/Planned Program Title	FY 2006	FY 2007	FY 2008	FY 2009
Joint Advanced Warfighting Program (JAWP):	5.335	5.850	5.755	5.707

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).

FY2006 Output: The JAWP analysis teams contributed timely inputs providing objective, third-party assessments on topics of critical interest to CoComs. Many of these efforts served as the conceptual core of USJFCOM products executed at the request of theater CoComs. JAWP projects included:

- "Improving Capabilities for Irregular Warfare Including Security, Stability and Reconstruction Operations, and Transition (Customer: OSD)
- "Quantum Leap" Technologies for Irregular Warfare" (Customers: OSD, Defense Advanced Research Project Agency - DARPA, USJFCOM)
- "Iraqi Perspectives" (Customer: US Joint Forces Command Joint Center for Operations Analyses - Lessons Learned - USJFCOM JCOA-LL) - continuing effort
- "Lessons from the Global War on Terrorism" (Customer: USJFCOM JCOA-LL)
- "Terrorist Perspectives" (Customer: USJFCOM JCOA-LL and OSD)
- "Fallujah Battle Reconstruction (Customer: USJFCOM JCOA-LL)
- "Urban Resolve" (Customer: USJFCOM)
- "Support to Multi-National Force - Iraq" (Customers: OSD, USJFCOM)
- "Joint Command Structure: (Customer: Joint Staff)
- "Exploiting Discovery" (Customer: OSD)

FY 2007 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. Topics undertaken for analysis in FY07 include:

- "Iraqi Perspectives" (Customer: US Joint Forces Command Joint Center for Operations Analyses - Lessons Learned - USJFCOM JCOA-LL) - continuing effort
- "Global War on Terrorism - Africa" (Customers: USJFCOM JCOA-LL)
- "Terrorist Perspectives" Customers: USJFCOM JCOA-LL) - continuing effort
- "Support to Multinational Force - Iraq" (Customer: Multi-National Force - Iraq) - continuing effort
- "Improving Capabilities for Irregular Warfare (Customer: OSD, USJFCOM)
- "Urban Resolve Experimentation" (Customer: USJFCOM) - continuing effort
- "Adaptive Planning" (Customer: OSD, USJFCOM)
- "Joint Command and Control Management" (Customer: Joint Staff, USJFCOM)

UNCLASSIFIED

OSD RDT&E PROJECT JUSTIFICATION (R2a Exhibit)

Date: February 2007

APPROPRIATION/ BUDGET ACTIVITY
RDT&E/ Defense Wide BA# 3PE NUMBER AND TITLE
0603727D8Z - Joint WarfightingPROJECT
P727

- "Joint Command and Control Combat Development (Customer: USJFCOM)
- "Exploiting Discovery" (Customer: OSD) - continuing effort

FY 2008 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.

FY 2009 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.

Accomplishment/Planned Program Title	FY 2006	FY 2007	FY 2008	FY 2009
Technology Feeder Support (TFS):	3.396	3.313	3.605	3.713

TFS activities support Combatant Commanders (CoComs) by promoting the use of joint experimentation to address challenges specific to their theater or functional missions. TFS provides a "trial and error" experiment to understand a concept or technology that addresses a specific CoCom challenge." TFS activities are selected through an annual candidate nomination review and selection process.

FY 2006 Output - (1) Supported USNORTHCOM by providing a low cost, responsive reconnaissance platform delivering actionable intelligence for USNORTHCOM Defense support of civil authorities and homeland defense missions; (2) Supported USPACOM's requirement for rapid planning, coordination, implementation, and effective assessment of innovative technologies and procedures to improve readiness and effectiveness for joint and combined operations; (3) Supported USTRANSCOM's need for fast identification for arms, ammunition and explosive (AA&E) drivers entering depot and DoD installations. Through a joint initiative with DHS, DOD and the private sector a common biometric-based driver identification process is being developed; and (4) Supported USSOUTHCOM's requirement to conduct a Combined Crisis Management in PKO demonstration experiment. The experiment's objective as to identify and demonstrate the capabilities and equipment required for crisis management by peacekeeping forces facing an unforeseen crisis; a major chemical and/or biological incident.

FY 2007 Planned Output - TFS will 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. A special request from US Pacific Command to re-establish a regional joint experimentation capability received early funding from FY07 program resources.

FY 2008 Planned Output - Through the FY 2008 annual selection process, TFS will 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.

FY 2009 Planned Output - Through the FY 2009 annual selection process, TFS will 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.

Accomplishment/Planned Program Title	FY 2006	FY 2007	FY 2008	FY 2009
DoD Adaptive Red Team (DART):	1.026	1.417	1.700	1.700

DART supports four activities: (1) planning implementation of JFCOM and Joint Staff Concept Development and Experimentation (CD&E); (2) Support to other CoCOMs; (3) Support development of

R-1 Line Item No. 46

Page 5 of 7

UNCLASSIFIED

Exhibit R-2A
Project Justification

UNCLASSIFIED

OSD RDT&E PROJECT JUSTIFICATION (R2a Exhibit)

Date: February 2007

APPROPRIATION/ BUDGET ACTIVITY

RDT&E/ Defense Wide BA# 3

PE NUMBER AND TITLE

0603727D8Z - Joint Warfighting

PROJECT

P727

technologies and operational concepts underpinning joint and coalition capabilities; and (4) development and refinement of red teaming best practices. DART activities are selected through an annual candidate nomination review and selection process.

FY 2006 Output - DART efforts focused on:

- Global Operations Task Force experimentation development associated with the "New TRIAD" (Customer: US Strategic Command)
- Unmanned Air Vehicle "Precision View" assessment of alternative concepts for pixel registration and operational impact (Customer: US Strategic Command)
- US Strategic Command Strategic Deterrence Assessment Lab red team review (Customer: US Strategic Command)
- Irregular Warfare (IW) concept development red team (Customer: US Special Operations Command)
- Crisis Management in Peace Keeping Operations exercise development and execution red cell (Customer: US Southern Command)
- Global Operations Task Force tabletop assessment support (Customer: US Strategic Command)
- Wargame red team support (Customer: US Strategic Command)
- Theater strategy value function development (Customer: US Central Command)
- Joint Operations Concept red teaming (Customer: Joint Staff)
- Regional experiment design support (Customer: US Southern Command)

FY 2007 Planned Output - Periodic re-competition for the DART support contract will occur mid-year in FY2007, with a full agenda of work undertaken after completion. Meanwhile, the DART staff is completing multi-year efforts initiated in FY06. Candidate selections will be made by mid-March 2007. Through the FY 2007 annual candidate selection process, DART will continue to support the CoComs, JAWP and the Joint Staff concept development and experimentation efforts. Best practices and Senior Advisory Group activities will continue. Specific projects authorized for execution include:

- Unmanned Air Vehicle "Precision View" assessment of alternative concepts for pixel registration and operational impact (Customer: US Strategic Command) - continuing effort
- Crisis Management in Peace Keeping Operations exercise development and execution red cell (Customer: US Southern Command)
- Joint Operations Concept red teaming (Customer: Joint Staff) - continuing effort

FY 2008 Planned Output - Through the FY 2008 annual candidate selection process, DART will continue to support the CoComs, JAWP and the Joint Staff concept development and experimentation efforts. Best practices and Senior Advisory Group activities will continue.

FY 2009 Planned Output - Through the FY 2009 annual candidate selection process, DART will continue to support the CoComs, JAWP and the Joint Staff concept development and experimentation efforts. Best practices and Senior Advisory Group activities will continue.

C. Other Program Funding Summary: Not Applicable.

D. Acquisition Strategy: Not Applicable.

E. Major Performers Not Applicable.

UNCLASSIFIED

OSD RDT&E PROJECT JUSTIFICATION (R2a Exhibit)

Date: February 2007

APPROPRIATION/ BUDGET ACTIVITY
RDT&E/ Defense Wide BA# 3

PE NUMBER AND TITLE
0603727D8Z - Joint Warfighting

PROJECT
P727