

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE February 2002
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/Advanced Technology Development - BA3	R-1 ITEM NOMENCLATURE Counterproliferation Support; 0603160BR	

structured to exploit ongoing DoD agency, Service laboratory, and Department of Energy laboratory technology programs wherever possible. The program emphasis is on functional kill as well as hard kill and on mitigating collateral effects. The goal is rapid development of enhanced counterforce mission capabilities to include, but not limited to, advanced conventional and non-conventional (non-nuclear) weapons, application of sensor technologies to provide weapons of mass destruction (WMD) combat assessment, and target-attack planning tools to optimize weapon and sensor employment.

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A. Mission Description and Budget Item Justification (cont'd)

Prototype or modified systems integrating these capabilities will then be evaluated in demonstrations, those having military utility transition to a Service for acquisition, and, in some cases, a residual operational capability is provided to combatant commanders. These programs have been grouped into two projects, Special Operation Forces (SOF) Counterproliferation Support (Project BJ) and Counterforce (Project BK).

Starting in FY 2003, the planned milestones will be grouped by program instead of product types to provide a clearer link to the programs included in this program element.

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B. Program Change Summary

	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>
FY 2001 President's Budget Request (February 2000)	77.4	76.9	80.3
FY 2002 Amended President's Budget Request (June 2001)	76.6	89.8	77.5
FY 2003 President's Budget Request (February 2002)	75.1	89.7	77.4

Change Summary Explanation:

The decrease in FY 2001 between the FY 2001 President's Budget Request (Feb 2000) and the FY 2002 Amended President's Budget Request (June 2001) is due to general Congressional reductions. The FY 2002 Amended President's Budget Request (June 2001) reflects an addition of \$15M in FY 2002, which resulted from the Secretary of Defense Strategic Review process. Essentially all funds in this Program Element that were added as a result of the Secretary of Defense Strategic Review in FY 2002 are being used to demonstrate technologies identified in the Hard and Deeply Buried Target Defeat (HDBTD) Science & Technology Master Plan (Report to Congress). FY 2003 reflects that no funding was added to continue programs started in FY 2002.

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Project BB - Small business Innovative Research (SBIR) - This project provides the means for stimulating technological innovation in the private sector, strengthens the role of small business in meeting DoD research and development needs; fosters and encourages participation of minority and disadvantaged businesses in technological innovation; and increases the commercial application of DoD supported research and development results. These efforts are responsive to PL 106-554.

FY 2001 Accomplishments

SBIR Total (\$500K)

Supported the Small Business Administration (SBA) National Direction by actively seeking small business contractors to perform innovative research.

FY 2002 Plans

SBIR Total (\$1,712K)

Support the Small Business Administration (SBA) National Direction by actively seeking small business contractors to perform innovative research.

FY 2003 Plans

SBIR Total (\$1,082K)

Support the Small Business Administration (SBA) National Direction by actively seeking small business contractors to perform innovative research.

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Project BJ - Special Operations Forces (SOF) Counterproliferation Support - In 1995, the SECDEF assigned the core task of countering the proliferation of weapons of mass destruction (WMD) to SOF. This project directly supports SOF contributions to the nation's effort to counter the spread of WMD. Efforts in this project include the defeat of hard and deeply buried targets (HDBT), explosive ordnance disposal (EOD), maritime efforts to prevent the spread of WMD technology, and a SOF sponsored Advanced Concept Technology Demonstration (transferred to Project BK in FY 2003). This project supports requirements that apply to all three of the efforts identified above.

Details of this program have been classified per CJCSM 5225-01 dated 23 Oct 1996.

FY 2001 Accomplishments

SOF Projects (\$17,655K)

Specific details are classified.

FY 2002 Plans

SOF Projects (\$17,585K)

Specific details are classified.

FY 2003 Plans

SOF Projects (\$18,292K)

Specific details are classified.

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Project BK - Counterforce - The purpose of this project is to develop technologies, demonstrate prototype systems in an operationally realistic environment, support operators in the definition of the concept of operations, and provide combatant commanders with enhanced capabilities in response to potential adversaries who have the capability to develop and/or employ nuclear, biological and chemical (NBC) weapons of mass destruction (WMD) in future regional conflicts involving the U.S. or its allies. The U.S. requires the capability to attack and neutralize NBC research, production, storage, operations and support, and command and control facilities while mitigating collateral effects resulting from expulsion and release of NBC agents. The potential target sets include fixed, aboveground and underground, hardened and unhardened, and tunnel facilities. The project is structured to exploit ongoing technology programs wherever possible. The project emphasis is on functional kill as well as hard kill and on mitigating collateral effects through advanced weapon development and greatly enhanced target attack planning to optimize weapon employment. The goal is the development of an enhanced counterforce mission capability to include penetrating weapons, WMD combat assessment, and the supporting planning tools. Prototype or modified systems integrating these technologies will then be evaluated in demonstrations, and, in some cases, a residual operational capability is provided to combatant commanders.

This project emphasizes technology demonstrations to include Advanced Technology Demonstrations (ATD) and Advanced Concept Technology Demonstrations (ACTD). Seven programs are currently planned: the Second Counterproliferation (CP2) Counterforce ACTD, the Agent Denial Demonstration (a proposed ACTD), the Biological Characterization Testbed, a classified program, the Hard Target Defeat (HTD) C3I Demonstration, the Thermobaric Demonstration (a proposed ACTD), and the CP Analysis and Planning System (CAPS). Essentially all funds added in this Project, as a result of the Secretary of Defense Strategic Review in FY 2002, are being used to demonstrate technologies identified in the

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RDT&E, Defense-Wide/Advanced Technology Hard and Deeply Buried Target Defeat (HDBTD) Development - BA3	Counterproliferation Support; 0603160BR Science & Technology Master Plan. These	

programs are described in the following paragraphs:

Project BK - Counterforce (cont'd)

The CP2 ACTD objective is to develop, demonstrate, and deliver enhanced standoff, counterforce capabilities in conjunction with operational concepts to combatant commanders for planning attacks and timely, reliable defeat of WMD related facilities while minimizing collateral hazards. The CP2 ACTD depends on technology base and products in PE 0602715BR and PE 0602716BR, Projects BD for planning tools and test planning and execution support, and Projects BE for the operational demonstrations. The Navy and Air Force are both participating in weapons and WMD combat assessment system development for the ACTD. The CP2 ACTD has been approved by Deputy Under Secretary of Defense for Advanced Systems and Concepts DUSD(AS&C), and the management plan was signed April 21, 1999. USEUCOM is the operational sponsor with USJFCOM and USSTRATCOM participating. The CP2 ACTD started in FY 1999 and will be completed in FY 2003.

The Agent Denial Demonstration is a joint program with the U.S. Air Force. The objective is to demonstrate and transition an enhanced capability to deny the use of biological weapons, with DTRA interest in obtaining collateral effects test data and enhancing target planning tools with this data. The program starts in FY 2003. The final demonstration is planned for FY 2005. This program responds to the 1994 U.S. Air Force Mission Need Statement for Agent Defeat Weapons.

The Biological Characterization Testbed provides a realistic and baselined demonstration capability in support of Combating Terrorism and counterproliferation programs. Starting in FY 2003, the testbed leverages and integrates technologies developed by various customers to demonstrate an enhanced capability. Details of this program have been classified per CJCSM 5225-01 dated 23 Oct 1996.

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The classified program has been transferred from Project BJ in FY 2003 to demonstrate enhanced capabilities for the customer, USSOCOM. Details of this program have been classified per CJCSM 5225-01 dated 23 Oct 1996.

Project BK - Counterforce (cont'd)

The HTD program objective is to develop and demonstrate end-to-end capabilities for the functional defeat of hard targets, particularly tunnels, and assess developing weapon and sensor concepts against such targets. The program does not develop new sensors; it assesses existing or emerging technologies being developed by others. The HTD program develops technologies under PE 0602715BR and PE 0602716BR, Project BF and transitions them to this program for demonstration. The demonstrations require test planning and execution support from PE 0602715BR, Project BE, or from PE 0602716BR starting in FY 2003. The currently planned HTD C3I Demonstration ends in FY 2003. HTD customers are USPACOM, USSTRATCOM, USSOCOM, and the Air Force's Air Combat Command.

The Thermobaric Demonstration will develop a weapon concept that is based on a new class of thermobarics. Thermobarics include a broad range of high-energy density materials that are capable of producing high temperatures ("thermo") and high pressures ("barics") for extended periods of time. This technology develops the potential for producing sustained, distributed damage in hard targets. The weapon could be used against certain type of tunnel targets for a maximum functional kill of the tunnels. Prototype weapons will be tested under operational conditions for their performance, and leave-behinds will be delivered to the customer.

The Counterproliferation Analysis and Planning System (CAPS) program responds to the need for a comprehensive and timely counterproliferation (CP) target planning tool to assist combatant commanders in the conduct of their Concept of Operations Plan (CONPLAN) 0400

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RDT&E, Defense-Wide/Advanced Technology targeting responsibilities. Products from Development - BAS	Counterproliferation Support; 0603160BR CAPS include end-to-end descriptions of country	

specific Nuclear, Biological, Chemical, and Means of delivery (NBC/M) programs of proliferation concern. The analysis provides combatant commanders highly detailed assessments of a country's NBC/M programs, proliferation pathways, and identifies the critical nodes and key facilities that, if eliminated, would cause the greatest impact to that program. This information will directly support the combatant commanders in the planning and execution of their CP missions. These analyses are conducted in successive

Project BK - Counterforce (cont'd)

levels of detail, identified as Level 1-5 analysis, with Level 1 having the lowest analytical detail and Level 5 the highest. As an output of the analyses, CAPS will provide CP target planners with the critical data elements needed to take effective action against the NBC/M programs of proliferating countries, and will also predict whether there will be environmental consequences (hazards) produced by these actions. There are five major aspects of the CAPS program. (1) The integration of intelligence and NBC/M production process analyses to create highly-detailed models of the proliferation efforts underway in selected countries, identifying the specific function and location of the major production sites, and developing detailed layouts of these sites within each country. (2) Element analyses of each country model to select the critical nodes in the country's proliferation pathway. Critical nodes will include those facilities essential to research, production, weaponization, and storage, which if eliminated, would require extended time to replace and significantly degrade the NBC/M program being analyzed (Level 1-3 analysis). (3) Conduct highly detailed inside-the-building analysis necessary for the employment of precision-guided munitions or special operations forces (Level 4-5 analysis). (4) The execution of consequence analyses to determine and to quantify the level of damage that might occur as a result of potential interdiction/counterforce actions, to include: possible casualties, economic losses, and other environmental issues. (5) The completed CAPS analyses will be provided via secure means to the user community in a logical, user-friendly format

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incorporating the latest advances in computer software development. The Counterproliferation Mission Support Senior Oversight Group and its Requirements Subcommittee, comprised of OSD, JCS, and CINC J-2/3/5 representatives have identified 45 NBC/M programs in 16 different countries as the requirements basis for CAPS analysis.

The planned programs provide products in five areas: WMD combat assessment, collateral effects prediction, target response, weapons, and operational demonstrations. These product areas are described in the following paragraphs:

Project BK - Counterforce (cont'd)

WMD Combat Assessment. This product area has evolved from the former (completed in FY 1998) Counterproliferation 1 (CP1) ACTD sensor product area to provide WMD combat assessment capabilities. Product area efforts will provide improved warfighting capabilities against the spectrum of WMD-related facilities. These efforts will leverage existing programs to (1) evaluate near-term technologies; (2) define concepts of operation and system architecture for chemical combat assessment; (3) produce data fusion and mission planning modules to meet user requirements on existing platforms; and (4) integrate chemical and biological combat assessment capabilities onto delivery systems, such as unmanned air vehicle (UAV) and expendable mini-UAV platforms. Further, the effort will demonstrate the ability to confirm, identify, and assess the release of biological/chemical agents in support of attacks on NBC facilities and assist in predicting transport patterns by updating pre-strike predictions of the potentially hazardous plume with real-time data.

The combat assessment product area will not develop its own sensors, but will leverage ongoing chemical sensor efforts within the chemical and biological defense community to minimize program risk for applying this technology to counterforce missions. In CP2, a Chemical Combat Assessment System (CCAS) will be demonstrated. The feasibility of a Biological Combat Assessment System (BCAS) is being studied.

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APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/Advanced Technology Development Collateral Effects Prediction.	R-1 ITEM NOMENCLATURE Counterproliferation Support; 0603160BR The collateral effects effort provides predictive tools	

for a variety of applications supporting Nuclear, Biological and Chemical (NBC) target attack planning to include NBC expulsion and dispersion resulting from attacks on WMD facilities as well as acts of terrorism and hostile use of WMD. Requirements include high-resolution weather models, weather measurement systems, and population databases. A key element in developing these collateral effects codes is chemical/biological expulsion tests and modeling. Modeling of chemical/biological expulsion sources will be based on theoretical models and empirical data. Codes will be validated from existing data, other predictive models and special collateral effects experiments. The collateral effects tools will provide pre-attack prediction and post-attack assessment.

Project BK - Counterforce (cont'd)

The Hazard Prediction and Assessment Capability (HPAC) is a major product that predicts the release and transport of NBC materials and the subsequent collateral effects. The high-resolution weather prediction capability, another area of emphasis in the product area, will provide timely wind, cloud, and precipitation data necessary for more detailed NBC collateral effects predictions. These tools will also be integrated into the target attack planning tools to assess the consequences of attacks on WMD facilities.

Target Response. This effort will provide a new target attack planning, combat assessment capability and a major upgrade for existing theater-level planning capabilities for defeating or denying NBC facilities and capabilities. This effort builds upon the Integrated Munitions Effects Assessment (IMEA) planning tool developed for CP1 ACTD. IMEA provides a forward deployable, target planning capability for NBC targets. IMEA is an integration of the Munitions Effects Assessment (MEA) tool providing targeting solutions using conventional weapons for a variety of structures and equipment and the HPAC developed under the Collateral Effects Prediction product area. The integrated capability supports the warfighters in the attack planning phase with target response and collateral effects prediction, and in the post-attack phase with combat assessment and re-strike decision support. Upgrades to IMEA for the CP2 ACTD include additional target types (including

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complex facilities), additional weapons as developed in the Weapons area below (including multiple weapon effects), additional platforms, more operator-friendly displays, more WMD material types, weather interfaces and sources, and more detailed weapon input parameters (such as angle of attack). The ultimate CP2 IMEA product will be able to run stand-alone or in a web-based client-server distributed architecture as it migrates into the Integrated Target Planning Tool Set (ITPTS) suite of tools, the second deliverable during CP2. The ITPTS will provide a spectrum of planning and assessment capabilities from deliberate to crisis. ITPTS provides the warfighter a standardized weaponeering framework that greatly increases weaponeering efficiency and fidelity while minimizing warfighter training requirements. It expedites cross service/coalition weaponeering and joint planning. The ITPTS architecture provides the warfighter with cross platform interoperability

Project BK - Counterforce (cont'd)

and a common look and feel, independent of weapon or target. In addition, it provides the warfighter critical decision support services for all target classes including those associated with weapons of mass destruction. ITPTS will also predict weapons performance and associated NBC collateral effects, develop targeting solutions that minimize collateral effects, and provide results through appropriate interfaces for a variety of targets including functionally and structurally complex facilities. ITPTS will provide an enhanced seamless interface to the Intelligence Community (IC) data sources. ITPTS will be the weaponeering segment in the Joint Targeting Toolbox (JTT) and provides the warfighter with targeting information in a JTT's "Electronic Target Folder" (ETF). This effort will execute a full verification and validation program, in accordance with the Joint Technical Coordinating Group for Munitions Effects (JTCEG/ME) Procedures, for all delivered capabilities including extensive verification testing and operational and field testing at all functional levels.

Weapons. This product area will develop, integrate and demonstrate advanced conventional weapons technologies to improve mission effectiveness against NBC facilities while mitigating collateral effects. The focus for CP2 ACTD is to provide combatant

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commanders with a demonstrated option to attack NBC facilities in a standoff mode. This effort will improve on existing standoff weapon platforms to provide enhanced penetration and advanced fuzing developed during CP1. Standoff weapons to be enhanced include the Tactical Tomahawk in a penetrator variant and the Conventional Air Launched Cruise Missile (CALCM). An enhanced payloads project explores alternate warhead options to conventional blast/fragmentation with the objective of mitigating collateral effects associated with dispersal of NBC. Hard Target Defeat (HTD) will demonstrate non-conventional (non-nuclear) weapons to functionally defeat tunnels. HTD weapons technology being developed includes advanced energetics (like thermobarics) and non-energetics.

Operational Demonstrations. This product area will improve the operational capability for holding NBC targets at risk with minimum collateral effects. The objective is to integrate available or near-term technologies for WMD combat assessment, weapons,

Project BK - Counterforce (cont'd)

collateral effects prediction, and target planning tools, to evaluate the technologies in an operational context, and to transition improved capabilities rapidly to combatant commands. Specifically, this product area will enhance and accelerate existing programs to provide integrated target planning, collateral effects prediction codes, a Chemical Combat Assessment System (CCAS) and advanced weapons to meet NBC target defeat requirements. This product area will also support demonstration operations to include system operational concept, demonstration planning, scenario development, execution of the demonstration, and post-demonstration analysis. Planning and execution of demonstrations use a time phased approach to screen candidate technologies for maturity, develop prototype systems and demonstrate enhancements in military capability against a combatant command prioritized subset of all potential NBC target types. This approach results in a cycle of prototype development and testing followed by periods of operational demonstration.

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Three operational demonstration series	are planned for CP2 ACTD over the period of FY	

2000-2003 to provide the operational sponsor, United States European Command, and participating commands with the opportunity to assess the utility of the selected technologies. The objective of the first demonstration series in CP2 ACTD, called Dipole Yukon (DY), is to demonstrate the capability to plan and execute chemical/biological (C/B) counterforce missions with the Joint Air-to-Surface Standoff Missile (JASSM) through operationally realistic attacks against a simulated biological weapons storage facility. The objective of the second demonstration, called Dipole Zodiac (DZ), is to assess the suitability of the CALCM with a penetrating warhead and a Predator unmanned air vehicle (UAV) based standoff collateral effects assessment system. The objective of the third demonstration series, called Divine Canberra (DC), is to evaluate the end-to-end set of products of the CP2 ACTD including the target planning tool, in its final operational context, the Tactical Tomahawk Penetrator Variant (TTPV), and remote combat assessment using a small expendable mini-UAV with a chemical point detector on-board (and deployed from the Predator UAV demonstrated in DZ) against a hard chemical production and storage facility.

Project BK - Counterforce (cont'd)

Agent Denial demonstration will conduct an operational demonstration of an enhanced payload and enhanced target response and collateral effects tools in FY 2005.

HTD will conduct a functional defeat demonstration on a Command, Control, Communications, and Intelligence (C3I) tunnel facility using improved target planning tools and new weapon concepts. The currently planned demonstration ends in FY 2003.

FY 2001 Accomplishments

WMD Combat Assessment (\$8,369K)

Integrated and tested standoff subsystem.

Continued to configure, fabricate, and test components for chemical point detector.

Conducted simulant and agent tests for sampling, remote and point sensors in explosive chamber.

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APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/Advanced Technology Development - BA3 Initiated Divine Invader test series.	R-1 ITEM NOMENCLATURE Counterproliferation Support; 0603160BR	

Integrated point detector/sampler on FINDER mini-UAV.

Collateral Effects Prediction (\$2,620K)

Delivered initial hazard source models for CP2 ACTD standoff weapons.

Integrated Meteorological Data Server in ITPTS architecture.

Provided weather model services to HPAC, IMEA and ITPTS.

Validated weather models and wind field data for priority regional areas.

Developed HPAC access to ITPTS.

Delivered HPAC 4.0 to EUCOM, STRATCOM, JFCOM and other CINCs, utilizing a client-server architecture, incorporating wet biological source terms and enhanced chemical/biological warfare agent source terms.

Target Response (\$3,587K)

Delivered IMEA 4.0 software with CALCM and Joint Air-to-Surface Standoff Missile (JASSM) weapons effects data to support Dipole Zodiac and Dipole Yukon 1.

Project BK - Counterforce (cont'd)

Completed the Independent Verification and Validation (IV&V) of MEA 4.0 to the Accreditation Support Package (ASP) to the JTCG/ME for accreditation.

Delivered CALCM weapon effects/performance models and support operational exercises for Divine Umpire.

Delivered ITPTS 1.0 that includes four tools (MEA, HPAC, Joint Targeting Toolbox {JTT}), and the USAF Modular Effectiveness and Vulnerability Assessment (MEVA), access to intelligence community data sources and use of a common data structure.

Started the IV&V of ITPTS 1.0 and submit the Accreditation Support Package (ASP) to the JTCG/ME for accreditation.

Started the phased integration of the JTCG/ME weaponeering product, Windows version of the Joint Munitions Effects Manual (WinJMEM), into ITPTS.

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RDT&E, Defense-Wide/Advanced Technology Development - BAS	Counterproliferation Support; 0603160BR Completed Component Vulnerability and Agent Release/Agent Release Model (CVAR/ARM)	

validation tests.

Initiated IMEA C3I facility model validation testing.

CP Analysis and Planning System (\$9,216K)

Completed Level 1-3 CAPS analysis on top 18 combatant commanders' NBC/M country programs.

Began second round of CAPS analytical production. The second CAPS production cycle calls for the completion of: Level 1-3 analysis on the remaining six Counterproliferation (CP) Modeling and Simulation (MS) Senior Oversight Group (SOG) near-term country programs, Level 4 analysis of not less than 40 facilities, and Level 5 analysis of a minimum of 5 facilities. This plan was developed in coordination with the CP MS SOG Principals, the CP MS SOG Requirements Subcommittee and representatives from each of the combatant commands.

Continued CAPSNET terminal installations at major commands, priority supporting commands, and support agencies; installations completed for FY 2001 were JWAC, NIMA, DTRA, and several additional USSOCOM elements.

Project BK - Counterforce (cont'd)

Established a CAPS server on JWICS, providing the Intelligence Community much easier access to Level 1-3 CAPS analysis.

Established a high-speed data communications (JWICS T-1) line and Video Tele-Conference (VTC) capability at LLNL supporting the CAPS program. This provides CAPS with full JWICS connectivity and a direct link to the Intelligence Community (IC) for coordination, access to intelligence information, and much easier coordination via the JWICS VTC.

Weapons (\$18,229K)

Conducted TTPV penetrator systems integration.

Completed TTPV penetrator command and control modifications.

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RDT&E, Defense-Wide/Advanced Technology Development Continued TTPV penetrator payload system design, missile systems design and engineering, air-vehicle modification design and fabrication.	Counterproliferation Support; 0603160BR	

Continued TTPV penetrator warhead design, fabrication, and test.
 Conducted TTPV penetrator system test and evaluation (3 sled track tests).
 Conducted CALCM critical design review.
 Initiated system trade studies for enhanced payload concepts against chemical/biological targets.
 Continued modeling and simulation of selected enhanced payloads concept.
 Continued design and effectiveness studies for the HTD classified weapon.

Operational Demonstrations (\$14,878K)

Conducted Divine Zorro static TTPV demonstration and analyzed results.
 Conducted Divine Umpire (CALCM Block I baseline) and analyzed results.
 Conducted Dipole Yukon 1 (JASSM) demonstration and analyzed results.

FY 2002 Plans

WMD Combat Assessment (\$9,200K)

Integrate FINDER mini-UAV on Predator and flight test.
 Exercise CCAS Predator standoff system and mini-UAV point detector at Dipole Zodiac.
 Continue Divine Invader test series with integrated CCAS.

Project BK - Counterforce (cont'd)

Train operators on integrated CCAS.
 Conduct feasibility study for a Biological Combat Assessment System (BCAS).

Collateral Effects Prediction (\$4,038K)

Complete chemical source term validation testing.
 Deliver final hazard source models for CP2 ACTD standoff weapons.
 Integrate initial ensemble weather forecasting and source models for CP2 ACTD weapons.
 Provide HPAC modules for ITPTS 2.0 to meet USEUCOM final product requirements.
 Deliver and validate HPAC 4.1 for Dipole Zodiac and Dipole Yukon.

Target Response (\$6,575K)

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Validate IMEA 5.0 software to support	Dipole Zodiac and Dipole Yukon 2 (JASSM).	

Deliver TTPV and CALCM weapon effects/performance models.

Deliver ITPTS 2.0 that includes access to additional IC data sources and interface to other targeting tools through the Joint Targeting Toolbox (JTT) and Electronic Target Folder (ETF).

Complete the first phase of the integration of WinJMEM into ITPTS, begin integration of the JTCG/ME Air-to-Surface Weaponing System (JAWS) into ITPTS.

Continue IMEA C3I facility model validation testing.

Perform sub-scale validation tests to support the CP2 full-scale operational tests.

Begin the IV&V of ITPTS 2.0 and submit the Accreditation Support Package (ASP) to the JTCG/ME for accreditation.

Complete the integration of the JTCG/ME weaponing product WinJMEM into ITPTS.

Complete the IV&V of MEA 5.0 support the CALCM and JASSM demonstrations in CP2 ACTD and submit the Accreditation Support Package (ASP) to the JTCG/ME for accreditation.

CP Analysis and Planning System (\$8,870K)

Complete the second round of CAPS analytical production on 1 April 2001: Level 1-3 analysis on the remaining six CP MS SOG near-term country programs, Level 4 analysis of not less than 40 facilities, and Level 5 analysis of a minimum of 5 facilities.

Continued CAPSNET terminal installations at major commands, priority supporting commands, and support agencies; installations in advanced planning for FY 2002 are EUCOM (JAC),

Project BK - Counterforce (cont'd)

USFK (PACOM), DIA, WINPAC (CIA), and SOUTHCOM. Other potential CAPSNET installations for FY 2002 are JFCOM (CMSALANT/JFIC), EUCOM (Stuttgart/Ramstein), and potentially other supporting organizations.

Install JWICS CAPS server at LLNL, providing more up-to-date information than is currently available to CAPS users on JWICS.

Pursue hosting CAPSNET on JWICS using Secure Community of Interest (S/COI) Software. This will provide the full CAPS analysis, Level 1-5, and much easier access to the Intelligence Community and other JWICS users.

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APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/Advanced Technology Weapons Development (EAS) (\$13,900K)	R-1 ITEM NOMENCLATURE Counterproliferation Support; 0603160BR	

Conduct TTPV critical design review.
 Complete TTPV penetrator warhead design, fabrication, and test.
 Complete TTPV penetrator systems integration.
 Complete TTPV penetrator command and control modifications.
 Complete TTPV penetrator payload system design, missile systems design and engineering, and air-vehicle modification design and fabrication.
 Conduct TTPV penetrator system test and evaluation.
 Conduct TTPV Flight Event Demonstration.
 Complete design and effectiveness studies for the HTD classified weapon concept.

Operational Demonstrations (\$27,807K)

Conduct Dipole Zodiac (1 and 2) CALCM and UAV demonstrations and analyze results.
 Conduct Midway Blue 1, 2 and 3 demonstrations for the Advanced Unitary Penetrator.
 Conduct Dipole Yukon 2 (JASSM) demonstration and analyze results.
 Initiate target refurbishment for Divine Canberra demonstration.
 Initiate C3I demonstration for the HTD classified weapon concept.
 Develop HTD testbed to provide necessary demonstration and validation capability for new hard and deeply buried target defeat technologies.
 Complete management plan for Thermobaric Weapon (TW) demonstration.
 Initiate integration of thermobaric payload material with weapon system and firing system.
 Validate thermobaric weapon functionally through full and sub-scale testing.

Project BK - Counterforce (cont'd)

FY 2003 Plans

CP2 ACTD (\$28,514K)

Complete Divine Invader flight-testing of CCAS.
 Deliver and validate final version of HPAC incorporating CP2 ACTD hazard source models.
 Deliver and validate final version of IMEA incorporating CP2 ACTD weapons effects data.
 Deliver and validate final version of IPTS incorporating CP2 ACTD requirements.

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE February 2002
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	
RDT&E, Defense-Wide/Advanced Technology Development - BA3	Counterproliferation Support; 0603160BR	
Complete Deline Canberra (DC) demonstration and analyze results.		

Support USEUCOM's military utility assessment of all CP2 deliverables.

Deliver residual capabilities to CINC sponsor, USEUCOM.

Agent Denial Demonstration (\$1,692K)

Initiate collateral effects and weapon effects modeling of the agent denial weapon.

Biological Characterization Testbed (\$1,795K)

Identify technologies for demonstration.

Develop integrated demonstration plan and schedule.

Specific details are classified.

Classified Program (\$11,092K)

Specific details are classified.

HTD C3I Demonstration (\$5,802K)

Complete C3I demonstration for the HTD classified weapons.

CP Analysis and Planning System (\$9,120K)

Initiate third CAPS production cycle, 01 October 02 - 31 March 03, with specific requirements to be determined by the CP MS SOG Principals, Requirements Subcommittee and representatives of the combatant commands in coordination with the CAPS program managers.

Complete any remaining CAPSNET terminal installations.

C. Other Program Funding Summary: N/A

D. Execution (Entities receiving 10% or more of total funding available in the PE/FNC.):

Labs/Centers-N/A

Universities-N/A

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE February 2002
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	
RDT&E, Defense-Wide/Advanced Technology Development - N/A FERDCS - N/A BA3	Counterproliferation Support; 0603160BR	

Contractors-N/A
Other-N/A
Other-N/A