RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)						DATE February 2002		
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/Applied Research - BA2				R-1 ITEM NOMENCLATURE Strategic Defense Technologies; 0602717BR				
COST (In Millions)	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete
Total 0602717BR Cost	0	0	131.2	125.4	124.0	97.6	99.1	Continuing
Project BB Small Business Innovative Research	0	0	1.3	1.3	1.3	1.3	1.3	Continuing
Project BC Force Protection & Technology Applications	0	0	4.0	2.0	2.2	1.8	1.8	Continuing
Project BG Nuclear Operations	0	0	30.5	29.4	25.8	27.3	28.1	Continuing
Project BH System Survivability	0	0	95.4	92.7	94.7	67.2	67.9	Continuing

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A. Mission Description and Budget Item Justification

The mission of the Defense Threat Reduction Agency (DTRA) is to safeguard America and its friends from weapons of mass destruction (WMD) by reducing the present threat and preparing for the future threat. This mission directly reflects the National Military Strategy, supports the provisions of Joint Vision 2010 and is specifically directed by the JCS in the Joint Strategic Capabilities Plan (Nuclear Annex). To achieve this mission, DTRA has identified principal objectives along with strategies and tasks to ensure the objectives are met. Three of these objectives are deter the use of WMD, reduce the present threat and prepare for the future threat. A focused, strong threat reduction technology base is critical to achieving these objectives. DTRA has taken the steps to develop this technology base.

This budget submission provides the essential technologies to deter the use of nuclear weapons and prepare for the projected nuclear threat. It includes funding for assessments and development of strategies, concepts and Strategic Nuclear and WMD deterrence options. In addition, it provides funding for development and testing of special equipment, necessary facilities, and other associated costs necessary to support the development of the technology base needed to support the national deterrent policy and military strategy. Initiatives supported include, but are not limited to, the following development efforts:

- Programs focused on assessing, enhancing and maintaining the survivability and operability of nuclear deterrent forces.
- Operational support programs focused on such activities as balanced survivability assessments, operational assessments, nuclear physical security technology development, and assessments of various OPTEMPO concerns obtained from Chemical, Biological, Radiological, and Nuclear Environments (CBRNE).
- Support to OSD, JCS and CINCs in war planning, force structure options and technology impacts, logistics, WMD mitigation operations and stockpile programs.

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

- Develop and validate advanced technology to provide enhanced WMD Training supporting Joint Mission Essential Tasks (JMETS) for forces and coordination of DoD WMD training requirements.
- Nuclear technology programs focused on:
  - Simulation and testable design protocols
  - Effects Infrastructure and survivability assessments
  - Radiation hardened microelectronics technology
  - High Performance Computing
  - Precision nuclear effects
  - Nuclear technology knowledge promulgation
  - Develop and validate technology programs designed to provide terrorist device defeat across the CBRNE spectrum.

Nuclear sustainment technologies and projects support the viability and credibility of the nuclear force as well as development of nuclear environment survivability for Theater Missile Defense and National Missile Defense.

The nuclear sustainment program, driven by the specific taskings of the National Strategy, National Military Strategy and the Joint Strategic Capabilities Plan, has two projects, i.e., Nuclear Operations and System Survivability.

- Nuclear Operations develops and supports the National Nuclear Mission Management Plan; nuclear and WMD training expertise for DoD; surety risk and hazard analyses; nuclear planning systems; nuclear deterrent option analyses; technical support for Nuclear Weapons Council (NWC) and nuclear C4I requirements; and WMD threat mitigation analyses.
- The System Survivability Project develops simulator technology (nuclear, blast, thermal, radio frequency (RF) propagation, and optical/infrared (IR) background effects), electronics technology (radiation-hardened microelectronics, balanced

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

electromagnetic hardening technology, radio frequency threat reduction), assessment and protection technology, and provides technology to support the Congressionally mandated Nuclear Test Personnel Review. These development areas directly support the development of survivable and reliable systems for the warfighter.

Nuclear Sustainment projects comprise a critical component of the ability of the Department to meet the technology and sustainment challenges posed by the emerging international environment and the National Military Strategy. The coverage of the projects ranges through countering WMD threats to the maintenance of the national strategic nuclear deterrent.

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B. Program Change Summary

	FY 2001	FY 2002	FY 2003
FY 2001 President's Budget Request(Feb 2000)	0	0	0
FY 2002 Amended President's Budget Request(June 2001)	0	0	0
FY 2003 President's Budget Request (Feb 2002)	0	0	131.2

Change Summary Explanation: In order to better define and capture its 6.2 resources, DTRA has created two new program elements: WMD Defeat Technology (0602716BR) and Strategic Defense Technologies (0602717BR). Effective with FY 2003, specific resources associated with Projects BB, BC, BG, and BH will be split from the existing PE 0602715BR and realigned into PE 0602717BR, Strategic Defense Technologies.

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

Funding and activities performed in Project BB are in PE 0602715BR.

FY 2002 Plans

Funding and activities performed in Project BB are in PE 0602715BR.

FY 2003 Plans

Small Business Innovative Research ($1,269K)

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

Execute Agency-approved SBIRs.

Project BC – Force Protection and Technology Applications - This project supports Assessment and Mitigation Technologies, which conducts mission vulnerability assessments of strategic U.S./Allied systems to facilitate the development of investment strategies for improved survivability, to include nuclear command and control. This program also ensures that assessment training programs, engineering designs, and new construction embody sound force protection, vulnerability mitigation, and collective protection principles. DTRA technologies and expertise are applied to enhance U.S. capabilities across the spectrum of the counterproliferation and force protection missions. These may include development of sensor technologies for initially identifying the consequences of weapons of mass destruction (WMD) through countering or protection against this threat. Some of the program's products and services include the Balanced Survivability Assessments (BSA), the Smart Building program's strategic facility construction design and cost estimates, vulnerability out-briefs and written reports, overall vulnerability trend data, National and NATO conferences for Underground Facility Managers, and multi-disciplined technical engineering expertise support.

FY 2001 Accomplishments

Funding and activities performed in Project BC are in PE 0602715BR.

FY 2002 Plans

Funding and activities performed in Project BC are in PE 0602715BR.

FY 2003 Plans

Balanced Survivability Assessments ($2,041K)

- Conduct balanced survivability and integrated vulnerability assessments on DoD facilities as tasked by CINCs, the Joint Staff, and OSD/ C3I.
- Continue integrated vulnerability assessment of defense and critical national infrastructure facilities.

Smart Building Program ($1,950K)

- Complete decommissioning for the Smart Building.
- Prepare final reports and present results at various venues.

Project BG – Nuclear Operations – These programs directly reflect the National Military Strategy, support the provisions of Joint Vision 2010, and are directed by the JCS in the Joint Strategic Capabilities Plan (JSCP) Nuclear Annex. This project for this Program Element encompasses two activities: 1) Nuclear Programs and 2) CINC/Forces/Security Support. Responsive to the oversight of the Nuclear Weapons Council, they provide critical support to the CINCs, Services, JCS and OSD. This project continues the realignment begun by DTRA at its inception so as to deal with the emerging 21s^{t} Century strategic landscape, and is divided into the two areas as described above:

Nuclear Programs.

Nuclear Weapons Surety: As tasked by the DoD Nuclear Weapon System Safety Program, the surety programs will provide CINCs, Services, and JCS with technical analysis, studies, research, and experimental data to identify and quantify risks of plutonium dispersal and Loss of Assured Safety (LOAS) due to accidents, fires or natural causes during normal, peacetime operations of the nations nuclear weapon systems. Additionally, studies to quantify the probability of success of targeted terrorist attacks on DoD facilities, leveraging these risk assessment advances.

Nuclear Mission Management Plan (NMMP): As tasked by Deputy Secretary of Defense and Director, Defense Research and Engineering (DDR&E), and in support of national requirements to maintain a strategic nuclear deterrent, conduct assessments and develop long-range plans, the continued development of the DoD Nuclear Mission Management Plan is designed to provide a comprehensive, integrated DoD roadmap for the sustainment and viability of U.S. nuclear forces, personnel, and infrastructure.

Project BG – Nuclear Operations (cont'd)

Stockpile Sustainment: Continue to act as DDR&E's Executive Agent for Annual Certification and Dual Revalidation and support related stewardship and sustainment activities.

Stockpile Operations Support: In support of national requirements to maintain a viable nuclear deterrent, this program provides automated tools to maintain, report, track and highlight trends affecting the nuclear weapon stockpile. It will provide crucial business process and information support to ensure continued sustainability and viability of the nuclear stockpile.

CINC/Forces/Security Support. As tasked by the JSCP and DoD Directives, these programs will provide CINCs, Services, JCS and DoD with focused analyses in support of nuclear planning and operations and WMD threat mitigation as they pertain to the combat survivability of the forces. Additionally, they provide the DoD nuclear physical security applied research and force-on-force (FoF) testing programs to help insure the security of our nuclear forces. Provides technical support and curriculum development and enhancement for the Defense Nuclear Weapons School (DNWS), to include other WMD support, and other DoD nuclear training activities.

FY 2001 Accomplishments

Funding and activities performed in Project BG are in PE 0602715BR.

FY 2002 Plans

Funding and activities performed in Project BG are in PE 0602715BR.

FY 2003 Plans

Nuclear Programs ($19,937K)

Nuclear Weapon Surety Thrusts:

Continue modeling and testing to respond to weapon and weapon system safety requirements and criteria.

Project BG – Nuclear Operations (cont'd)

Continue the development and population of a weapon surety database and interface to utilize and archive completed assessments, studies, tools and test programs.
Continue to analyze and quantify Nuclear Detonation Safety Exceptions (NDSEs).
Complete Phase II SBIR –AVERT model and Isis model.
Continue development of desktop tool based on Storage Vault Blast Effects Testing and Analysis.
Continue Lightning Effects Testing and Analyses (Air Terminal Testing).
Continue development of electrical system Penetration Tester.
Continue to support abnormal environment scenario development and analysis for nuclear weapons systems (includes other NDSE analyses).

Stockpile Sustainment Program thrusts:

Conduct annual certifications, at Presidential direction, of the continued safety and reliability of the U.S. nuclear stockpile in the absence of underground testing.
Provide personnel, as tasked by Assistant to the Secretary of Defense for Nuclear and Chemical and Biological Defense Programs (ATSD(NCB)), for participation on the joint DoD-DOE Dual Revalidation teams, to conduct a multi-year, in-depth evaluation of the continued safety and reliability of specified weapons in the nuclear stockpile.
Continue evaluation of enduring stockpile weapons in support of the Air Force and Navy.
Prepare an annual performance report, as directed by PDD on the DoD stockpile sustainment accomplishments and future plans.
Continue technical support to the NWC.
Complete third edition of the NMMP.
Continue developing and presenting tailored nuclear weapons expertise and sustainment modules through Outreach 21 efforts to the War Colleges and warfighting units.

Project BG – Nuclear Operations (cont'd)

Stockpile Operations thrusts:

Develop and implement Defense Integration and Management of Nuclear Data Services(DIAMONDS) capability package 3 which includes additional enhancements to Maintenance Bay and Unsatisfactory Reporting System modules as well as field additional integrated modules based upon user priorities and feedback while continuing to enhance fielded modules.

Complete CONUS nuclear storage site fielding and begin fielding OCONUS locations with secure communications to support DIAMONDS data transmission and access to stockpile information, tools, and data. Field enhanced integrated modules based upon user priorities as well as integrated stockpile functions as necessary.

CINC/Forces/Security Support ($10,551K)

Maintain USEUCOM/SHAPE European Theater Nuclear Support Program to provide in-theater nuclear and WMD support to EUCOM and NATO.

Jointly with the TD Directorate, continue the War Plans Support Program for the CINCs. Objective is to respond to CINC requests to address counter-WMD challenges within theater war plans; to provide recommended executable solutions based upon detailed, integrated operational analyses with associated technical applications.

Continue support to STRATCOM and regional CINCs with specific nuclear and WMD threat analysis in support of SIOP preparation, development of integrated effects models, direct planning support to regional CINCs, and specified applications for the Deterrence Framework analytic structure.

Continue to execute the Strategic Deterrence Program to support full range of nuclear and WMD Consequence Management Issues, provide nuclear policy support and the assessment of the full range of nuclear/WMD issues for DoD components.

Complete targeting program to fully integrate the planning processes and target data set of STRATCOM, regional CINC plans and NATO nuclear planning capability.
Conduct Force-on-Force exercise program focused on U.S. forces in USEUCOM/USAFE using the Mighty Guardian series.

Project BG – Nuclear Operations (cont'd)

Complete support of the AFSPACECOM/STRATCOM security analyses of ICBM forces.
Plan to support U.S. Navy potential Mighty Guardian Exercise.
Initiate new program to examine and evaluate the future impacts of technology on political/military/economical trends-focused on WMD/Consequence Management (CM)/Nuclear proliferation.
Complete NATO Nuclear C2, Quadrennial Defense Review Analytical Support program.
Continue to directly support the curriculum development for the Defense Nuclear Weapons School.
Continue to serve as the DoD Executive Agent for nuclear weapons training and education.
Continue to develop a comprehensive WMD Training program.
Continue to expand and enhance expertise outreach training program across DoD.

Project BH – System Survivability – These programs directly reflect the National Military Strategy, support the provisions of Joint Vision 2020, and are directed by the JCS in the Joint Strategic Capabilities Plan (Nuclear Annex). Current and future warfighters and weapon systems, including the associated Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR), missile defense and support systems/equipment, must be able to survive and operate effectively through a spectrum of hostile environments. Planned efforts emphasize the development and demonstration of innovative and cost-effective technologies to sustain the functional survivability of U.S. and Allied Forces and systems when confronted with threats from advanced conventional weapons, special weapons and limited nuclear attack. This project constitutes the DoD's resident science and technology expertise in nuclear and related survivability matters. It develops and demonstrates affordable strategies and hardening technologies for U.S. systems; transfers the technical products to acquisition program offices; conducts component, subsystem, system and end-to-end performance tests and assessments as requested by the Services and CINCs; and provides support to the Office of the Secretary of Defense on technical and policy matters that relate to the acquisition of survivable systems and strategic system sustainment.

Project BH encompasses programs formerly divided into the five business areas: Radiation Hardened Microelectronics, Simulator Technology, Assessments and Protection Technology, Balanced Electromagnetic Hardening, and Human Risk and Technology. These business areas are now divided into three business areas and described below: Radiation Hardened Microelectronics; Simulation Technology and Protocols from the Simulator Technology and part of the Assessments and Protection Technology, and Infrastructure and Survivability Assessments combining the remaining business areas.

Radiation Hardened Microelectronics. Responds to DoD space and missile system requirements for hardened microelectronics and photonics technology to support mission needs. The non-availability of this technology would adversely impact system survivability, performance, weight and cost. The program involves the development and demonstration of technology to support the fabrication of radiation-hardened microelectronics and photonics for DoD

Project BH – System Survivability (cont'd)

missions through private sector and government organizations. This is achieved through the development and demonstration of enabling technologies to ensure the continued availability of special materials and radiation-hardened microelectronics and photonic devices.

Simulation Technology and Protocols. This program is being revised to respond to the Defense Science Board Task Force on Nuclear Effects Simulation, which recommended that DTRA pursue developing some of the capability lost with the moratorium on underground testing. Since the underground testing (UGT) moratorium, simulators have provided the only remaining experimental test bed for the development and validation of radiation-hardened DoD systems. The intensity and fidelity of these simulators do not match that of the UGT testbed, but, through this program, the agency develops, provides and maintains unique DoD radiation test facilities and enabling technologies that are used by the Defense Agencies, the Services and other federal departments (such as DOE) to evaluate the impact of hostile environments on military systems that support missions in the air, on land, at sea, or in space. The program also develops technologies to improve the intensity, fidelity, reliability, reproducibility, and cost effectiveness of existing and future simulators (including radiation sources, power flow and conditioning components, energy storage, diagnostics, instrumentation, other test support equipment, debris shields, and numerical models and computer codes for radiation sources and pulsed power components and test beds); develops concepts, plans, and risk reduction strategies for affordable next-generation radiation simulators with substantially improved intensity and fidelity; support improvements to the two existing test centers, one at Maxwell Physics International (MPI) in San Leandro, California, and one at the Arnold Engineering Development Center (AEDC) in Tullahoma, Tennessee; installs and characterizes upgrades to the new Decade x-ray simulator and to existing radiation simulators at MPI. The program also provides testable system design protocols and modeling and simulation (M&S) tools for

system designers and users of nuclear effects simulators. Includes development and demonstration of cost-effective system design and test qualification techniques to produce hardware that can be tested without the need for underground nuclear tests.

Project BH – System Survivability (cont'd)

Infrastructure and Survivability Assessments. The Infrastructure and Survivability Assessments Project is evolving from an emphasis on strategic assessments for nuclear C2 against prompt radiation to NMD and Theater assessments, balanced protection of battlespace, critical infrastructure and network protection, and portable radiological survey equipment. It directly responds to warfighter and acquisition program survivability needs by providing solutions, including development of affordable technologies and methodologies for system-level and family-of-system-level assessments, systems hardening, and testing of the effects of nuclear weapons. This business area is comprised of three sub-areas, Balanced Electromagnetic Hardening, Operability Assessments and Disturbed Environment Assessment Technology, and Human Survivability.

Balanced Electromagnetic Hardening. Provides the science and technology to ensure protection and survival of military battlefield and civilian infrastructure electronic systems against multiple electromagnetic (EM) environments, including nuclear electromagnetic pulse (EMP), high power microwaves (HPM), as well as WMD threats. Designs and develops innovative, low-cost, balanced EM protection and test technologies for weapon systems; C3; and supporting infrastructure systems to the CINCs, Services and other DoD agencies.

Operability Assessments and Disturbed Environment Assessment Technology. Directly responds to warfighter and acquisition program survivability needs by providing solutions, including development of affordable technologies and methodologies for system-level and family-of-system-level assessments, systems hardening, and testing of the effects of

nuclear weapons. Includes end-to-end assessment technologies for nuclear command and control and Tactical Warning/Attack Assessment networks. Develops disturbed environments test sets to simulate scintillation effects on radar and communications system and to simulate the structure optical and infrared backgrounds, which disrupt space-based and missile defense interceptor sensors.

Project BH – System Survivability (cont'd)

Human Survivability. Applies lessons learned from the Nuclear Test Personnel Review Program (O&M-funded) to allow warfighters and peacekeepers to quantify/mitigate the risk in post-Cold-War settings (i.e., limited nuclear exchanges, terrorist actions, radiological dispersal weapons, and other radiation risk scenarios) by developing field measurement and dosimetry systems to support military radiological guidelines for the protection of human resources. This provides direct support to warfighters by predicting and quantifying the operational impact of nuclear battlefield environments on systems and personnel; providing methods for measuring and increasing soldier effectiveness on NBC battlefields; providing performance and cost analysis to support the Defense Acquisition Board; and joint efforts with system program offices to apply the Agency's expertise and technologies to specific Service applications.

FY 2001 Plans

Funding and activities performed in Project BH are in PE 0602715BR.

FY 2002 Plans:

Funding and activities performed in Project BH are in PE 0602715BR.

FY 2003 Plans

Radiation Hardened Microelectronics ($56,351K)

Demonstrate a prototype 0.25/0.18-micron radiation-hard complementary metal oxide semiconductor (CMOS) fabrication process to support 4M-gate Application Specific Integrated Circuits (ASIC) and 16M Static Random Access Memories.
Demonstrate a prototype radiation-hard, 0.35-micron mixed signal technology for system-on-chip circuit applications with a 4X increase in performance.
Complete initial demonstration of radiation hardened 0.15/0.18-micron technology for Accelerated Program.
Complete testing of prototype Honeywell and BAE 4/8M-gate ASIC.
Complete validation of prototype Boeing Very Deep Submicron digital/analog compiler.

Project BH – System Survivability (cont'd)

Complete qualification of prototype radiation hardened 1Mb Non-volatile Random Access Memory.
Complete demonstration of prototype radiation hardened embedded giant magneto-resistive non-volatile random access memory.
Demonstrate radiation hardened SiGe mixed-signal technology.

Simulation Technology and Protocols ($24,637K)

Improve cold x-ray yield and debris shielding capability by a 3X increase in the fluence – area metric on Decade.
Demonstrate 400 kilo-Joule (kJ) Ar Plasma Radiating Source (PRS) on the Sandia Z Machine.
Demonstrate 1 Mega-Volt (MV) fast Marx generator.
Include radiation transport in MACH2 code.
Demonstrate Ar/Kr/Xe "Black Body" spectrum on Decade Quad (DQ).
Demonstrate 1000 cm^2 survivable lithium debris shield.
Demonstrate 40 kJ Ar PRS on DQ.
Demonstrate 50% increase in warm x-ray dose on Decade Enhanced (DE).
Demonstrate 30% increase in hot x-ray dose-rate on DE.
Continue customer test support at Titan Pulsed Sciences Division.

Upgrade and integrate cold x-ray debris shields at the Decade Radiation Test Facility (DRTF).
Begin replacement of obsolete user and machine instrumentation at the DRTF.
Begin development of an Integrated Design Environment (IDE) by applying advanced modeling and simulation techniques to system hardness qualification.
Complete development of subsystem controller microcircuitry for fast circumvention and recovery (C&R) after radiation exposure applied to GPS recovery.
Continue development of a COTS operability and survivability protocol for designing and testing systems containing COTS parts.
Deliver Testable Hardware Toolkit Version 3.0.
Continue development of a thermostructural response (TSR) toolkit.
Initiate space sensor system demonstration.

Project BH – System Survivability (cont'd)

Infrastructure and Survivability Assessments ($14,463K)

Balanced Electromagnetic Hardening

Develop Mission Degradation Analysis (MIDAS) model integration methodology.
Update MIL-STD-188-125 for Fixed C4I Facilities and MIL-STD-2169 for the High Altitude Electromagnetic (EM) Pulse environment; evaluate 100% of user-suggested improvements and modify documents as required.
Assess digital battlespace architectures for susceptibility to EM upset or damage.
Continue development of a Radio Frequency/High Power Microwave military standard/handbook.
Integrate advanced limiter technology into a sensitive communication receiver in cooperation with the Office of Naval Research.

Operability Assessments and Disturbed Environment Assessment Technology

Begin Upgraded Early Warning Radar (UEWR) Radar Nuclear Effects Clutter Simulator (RNECS) Development.
Complete the Electronic Battle Book (EBB) database to include multiple link assessments due to nuclear weapons detonation for USSPACECOM exercises and assessments.

Complete USSPACECOM operability assessment of tactical warning/attack assessment (TW/AA) system considering impacts of future National Missile Defense (NMD) system integration.
Support NMD hardware-in-the-loop (HWIL) testing.
Continue development of a Visible Display Simulator to support Spaced Based Infra-Red Systems (SBIRS) Low testing and other future customers.
Support NMD In-Flight Information Control System (IFICS) testing.
Develop nuclear environment software modules for integration with HWIL facilities.
Conduct testing of Early Warning Radars (EWRs) in support of NMD program upgrades.
Develop radar disturbance mitigation techniques for NMD Ground-Based Radar and EWRs.
Provide IR scene testing of NMD/TMD (Theater Missile Defense) sensors.
Support IR and communications testing of Space-Based Infrared Satellite (SBIRS).
Continue communication/radar atmospheric effects participation in operational/ warfighting exercises through operational assessments.

Project BH – System Survivability (cont'd)

Complete NMD requirements development support for version C1 of the NMD initial capability.
Initiate NMD requirements development support for command and control.
Complete Navy Theater-Wide requirements development support.
Initiate USSTRATCOM force employment assessment.

Human Survivability

Commence Electro-Paramagnetic Resonance Mobile Response Dosimetry System.
Commence Rolling Circle Amplifier Biodosimeter Development and Construction.
Deliver Automated Hematology Analyzers to the Air Force Radiation Assessment Team for incorporation into Field Laboratory for Assessment of Radiation Exposure (FLARE).
Continue participation in Human Response Steering Committee, The Technical Cooperation Program, and the Arctic Military Environment Cooperation Program.

C. Other Program Funding Summary: N/A

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

N/A

*FY 2001 DERF Supplemental provided $15.7M related to this project. Funding is not reflected in this table.
*FY 2001 DERF Supplemental provided $5.2M related to this project. Funding is not reflected in this table.

A. Mission Description and Budget Item Justification – The proliferation of nuclear, biological, and chemical weapons and their means of delivery (NBC/M) continues to pose a grave threat to national security. The U.S. requires counterproliferation (CP) counterforce capabilities to neutralize this threat. To accomplish this counterforce mission, the U.S. must be able to identify, characterize and defeat NBC/M research, production, storage, operations and support, and command and control facilities while mitigating collateral hazards resulting from release and expulsion of NBC agents. The potential target set includes fixed, aboveground and underground, hardened and unhardened facilities.

Programs funded through this program element develop, demonstrate, and transition CP counterforce technologies to combatant commands and the Services. The programs are