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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)							DATE		
RDT&E, Defense Wide/BA 3							February 2004		
APPROPRIATION/BUDGET ACTIVITY							R-1 ITEM NOMENCLATURE		
							Counterproliferation Support PE 0605160D8Z		
COST (In Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Cost
Total Program Element (PE) Cost	1.683	1.851	1.958	2.018	2.052	2.357	2.408	Continuing	Continuing
Nuclear Matters/P476	1.683	1.851	1.958	2.018	2.052	2.357	2.408	Continuing	Continuing

(U) A. Mission Description and Budget Item Justification

(U) The U.S. nuclear deterrent posture is the most visible and critical element of U.S. military capabilities used to deter aggression and coercion. Therefore, nuclear weapons require special consideration because of this political and military importance and because of the destructive power of a nuclear weapon and the potential consequences of an accident or unauthorized act. The Nuclear Matters Program provides the capability to conduct technical assessments and to develop policy recommendations on complex and vital national issues. The Nuclear Matters program provides analysis and assessments of issues associated with the stockpile size and composition, safety, reliability, security, use control, survivability, transportation, command and control, maintenance, storage, emergency response, and enduring stockpile sustainability.

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<i>COST (In Millions)</i>	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Cost
Total Program Element (PE) Cost	1.683	1.851	1.958	2.018	2.052	2.357	2.408	Continuing	Continuing
Nuclear Matters/P476	1.683	1.851	1.958	2.018	2.052	2.357	2.408	Continuing	Continuing

(U) **Project Number and Title: P476 Nuclear Matters**

(U) **PROGRAM ACCOMPLISHMENTS AND PLANS**

(U) **FY 2003 Accomplishments:**

(U) **Analyses and Assessments:** These provided the basis for preparation of the Nuclear Weapons Council (NWC) Chairman's Annual Report to Congress, the DoD-DOE Annual Surety Report to the President, and the Annual Certification Report to the President. These products provided technical policy recommendations to the President, Secretary of Defense, Secretary of Energy, and the Chairman of the NWC on key nuclear weapon issues. The actions of the Congressionally directed Panel to Assess the Safety, Reliability, and Security of the United States Nuclear Stockpile were completed leading to key policy and technical recommendations. The Office of Nuclear Matters, under its responsibilities as OSD sponsor, sustained the continuing contributions of the Joint Advisory Committee on Nuclear Weapons Surety (JAC) and participated in the Strategic Capabilities Assessment that will develop the roadmap for implementation of the recommendation the 2001 Nuclear Posture Review. (\$ 0.510 million)

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(U) Nuclear Weapons Council: Efficiently managed the operations of the Joint DoD-DOE Nuclear Weapons Council (NWC), as directed by law, and the activities of the supporting NWC Staff, the NWC Standing and Safety Committee (NWCSSC), the Compartmented Advisory Committee (CAC), and the Action Officer Group. Conducted research and framed technical issues for the NWC members and staff concerning the evolution of the nuclear weapons complex and infrastructure in view of Presidential decision to resize the strategic stockpile. Facilitated activities to proceed with Phase 6.2 and 6.2A on a Robust Nuclear Earth Penetrator study (RNEP). Monitored activities of weapon system Project Officer Groups (POG). Conducted reviews of nuclear testing readiness and tritium production readiness. Convened a 1-day conference among 150 nuclear weapons experts and senior defense and energy leaders to discuss stockpile transformation issues. Conducted a week-long trip to several nuclear weapons complex sites for over sixty individuals within the nuclear weapons community including senior DoD/DOE officials. The recommendations of the Federal Advisory Committee on the End-to-End Review on Nuclear Command and Control, and the Panel to Assess the Safety, Reliability, and Security of the United States Nuclear Stockpile (aka the Foster Panel) were assessed and implementation actions were brought into consideration. (\$ 0.300 million)

(U) DoD-NNSA Nuclear Weapons Requirements: Provided contractor Requirements Team to continue the conduct of the joint DoD-NNSA Requirements activities to integrate and prioritize the nuclear weapons-related requirements for both DoD and the National Nuclear Security Administration (NNSA) to support key decisions in the development of and the implementation of the recently conducted Nuclear Posture Review. (\$0.295 million).

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(U) Maintaining the Deterrent Infrastructure: Analyses were conducted on sustaining nuclear weapons safety, use control, survivability, emergency response, certification, transportation, and reliability. These efforts supported DoD oversight of DOE stockpile stewardship activities, such as nuclear weapon sustainment and revalidation, technology issues and infrastructure requirements, nuclear weapon life extension, and stockpile stewardship and maintenance. Conducted nuclear weapon accident response staff exercises. Published update to DoD Directive 3150.1, Joint Nuclear Weapons Life Cycle Activities. Initiated update to DoD Directive 3150.3, Nuclear Forces Security and Survivability. Updated handbooks on Nuclear Weapons Surety, Stockpile Management Information, and the Nuclear Matters Executive Overview to sustain core expertise. Initiated a knowledge management system to help preserve nuclear weapons information for the next generation, for knowledge of designing, testing, and other similar weapons activities. (\$ 0.409 Million)

(U) Policy and Guidance for International Obligations: Oversight and guidance was provided to activities and organizations, such as the NATO High Level Group (HLG), the Joint (SHAPE/EUCOM) Theater Surety Management Group (JTSMG), and technical exchanges with foreign nations under government-to-government agreements, such as WSSX (Russia) and STOCKTAKE (UK). WSSX. Activities included technical exchange meetings in the United States and Russia, a program management meeting in Moscow, conducted a technical exchange at Picatinny Arsenal, NJ, coordination of U.S. proposals for projects, the continuing of a master projects list, and completion of a U.S Procedures Document. Also planned and participated in WSSX technical interchange meetings on nuclear weapons safety and security issues, including a workshop on lightning detection and protection led by the Nuclear Matters office. Visited NATO nuclear capable units and reported on status to raise awareness of surety issues to the NATO HLG. Conducted planning for exercises for developing mutual understanding of issues for the safety and security of nuclear weapons for U.S./France technology exchanges. (\$ 0.169 million)

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(U) FY 2004 Plans:

(U): Analyses and Assessments: Will provide basis for preparation of the annual Nuclear Weapons Stockpile Memorandum to the President, the Requirements and Planning Document, the Nuclear Weapons Council (NWC) Chairman's Annual Report to Congress, the Joint Surety Report to the President, and the Annual Certification Report to the President. These products provide the basis for technical policy recommendations to the President, Secretary of Defense, Secretary of Energy, and Chairman of the NWC on key nuclear weapon issues. Analyses will be produced in preparation for the annual Nuclear Weapons Deployment Request to the President. Continue as the OSD sponsor for the Joint Advisory Committee on Nuclear Weapons Surety (JAC) that will assess nuclear weapon delivery system platforms and associated weapons. Continue to participate and help lead the Strategic Capabilities Assessment that will develop the roadmap for implementation of the recommendation the 2001 Nuclear Posture Review. (\$ 0.590 million)

(U) Nuclear Weapons Council: Manage the operations of the Joint DoD-DOE Nuclear Weapons Council (NWC), as directed by law, and the activities of the supporting NWC Staff, the NWC Standing and Safety Committee (NWCSSC), the Compartmented Advisory Committee (CAC), and the Action Officer Group. Conduct research and frame technical issues for the NWC members and staff concerning the evolution of the nuclear weapons complex and infrastructure. These analyses will facilitate decisions on the refurbishment of specific weapon systems and the development of agenda items for the NWC. The development of the NNSA capability to produce and certify nuclear pits will be analyzed. Efforts will continue on the RNEP program to meet congressional requirements and to continue development activities. DoD and NNSA safety and security standards will be assessed. Plan and execute a week-long trip to several nuclear weapons complex sites for about sixty individuals within the nuclear weapons community including senior DoD/DOE officials. Ongoing actions to implement the recommendations of the Federal Advisory Committee on the End-to-End Review on Nuclear Command and Control, and the Panel to Assess the Safety, Reliability, and Security of the United States Nuclear Stockpile will be continued and additional implementation actions will be initiated. Monitor activities of weapon system Project Officer Groups (POG). (\$ 0.320 million)

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(U) DoD-NNSA Nuclear Weapons Requirements: Provide contractor Requirements Team to assess the joint DoD-NNSA Requirements to integrate and prioritize the nuclear weapons-related requirements for both DoD and the National Nuclear Security Administration (NNSA) to support key stockpile decisions. Activities include the conduct of tradeoff assessments and the update of the First Production Unit (FPU) Milestones Chart of critical stockpile activities for measuring DoD/NNSA performance. Requirements-related issues regarding implementation of the 2001 Nuclear Posture Review and the Moscow Treaty on the reduction of warheads will also be evaluated and addressed. (\$0.320 million)

(U) Maintaining the Deterrent Infrastructure: Manage implementation of Presidential initiatives on stockpile composition and quantities. Conduct assessments for the ATSD (NCB). Perform analyses on issues for sustaining nuclear weapons safety, use control, survivability, certification, transportation, and reliability. These efforts support DoD oversight of DOE stockpile stewardship activities, such as nuclear weapon sustainment and revalidation, infrastructure requirements, nuclear weapon life extension, and stockpile stewardship and maintenance. Conduct nuclear weapon accident staff exercises and identify relationship between homeland defense and nuclear accident response. Initiate update of DoD-DOE nuclear weapon related MOAs/MOUs with emphasis on the 1953 Agreement for the Development, Production, and Standardization of Atomic Weapons. Continue update to DoD Directive 3150.3, Nuclear Forces Security and Survivability. Continue to develop and implement a knowledge management system to help preserve nuclear weapons information for the next generation of nuclear weapons staff. (\$ 0.441 Million)

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(U) Policy and Guidance for International Obligations: Oversight and guidance will be provided to activities and organizations, such as the NATO High Level Group, the Joint Theater Surety Management Group, U.S.-UK STOCKTAKE, and activities under the U.S.-Russia WSSX Agreement. Visit NATO nuclear capable units and report on status to raise awareness of surety issues to NATO HLG. Participate in the initiation of NATO-Russia exchanges on nuclear weapons safety and security, the identification of information to be exchanged and the conduct of an HLG symposium. Continue planning for exercises for developing mutual understanding of issues for the safety and security of nuclear weapons within the U.S./France technology exchanges. Participate in WSSX Joint Steering Committee and Joint Coordinating Group program management meetings in the U.S. and Russia. Review U.S. and Russian proposed projects and consider counter-terrorism related projects, maintain list of ongoing WSSX activities, and approve WSSX project proposals. Initiate update of DoD Directive 5030.14 to affirm responsibilities of Joint Atomic Information Exchange Group (JAIEG). (\$ 0.180 Million)

(U) FY 2005 Plans:

(U) Analyses and Assessments: Will provide basis for preparation of the annual Nuclear Weapons Stockpile Memorandum to the President, the Requirements and Planning Document, the Nuclear Weapons Council (NWC) Chairman's Annual Report to Congress, the Joint Surety Report to the President, and the Annual Certification Report to the President. These products will provide the basis for technical policy recommendations to the President, Secretary of Defense, Secretary of Energy, and Chairman of the NWC on key nuclear weapon issues. These reports must reflect implementation actions for the 2001 Nuclear Posture Review. Analyses will be produced for the annual Nuclear Weapons Deployment Request to the President. Continue as the OSD sponsor for the Joint Advisory Committee on Nuclear Weapons Surety (JAC). Nuclear Matters will continue to participate and help lead the Strategic Capabilities Assessment that will develop the roadmap for implementation of the recommendation the 2001 Nuclear Posture Review. (\$ 0.624 Million)

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(U) Nuclear Weapons Council: Manage the operations of the Joint DoD-DOE Nuclear Weapons Council (NWC), as directed by law, and the activities of the supporting NWC Staff, the NWC Standing and Safety Committee (NWCSSC), the Compartmented Advisory Committee (CAC), and the Action Officer Group. Conduct research and frame technical issues for the NWC members and staff concerning the evolution of the nuclear weapons complex and infrastructure. These analyses will facilitate decisions on the refurbishment of specific weapon systems and the development of agenda items for the NWC. Life extension programs for the enduring stockpile will be closely managed into the successive phases to sustain the viability of the stockpile. Ongoing efforts on the RNEP Program will proceed into later phases of the 6X process while meeting congressional requirements. Activities to initiate or update Memoranda of Agreement between the DOE and DoD will continue. Plan and execute a week-long trip to several nuclear weapons complex sites for about sixty individuals within the nuclear weapons community including senior DoD/DOE officials. Implementation actions for the recommendations of the Federal Advisory Committee on the End-to-End Review on Nuclear Command and Control and the Panel to Assess the Safety, Reliability, and Security of the United States Nuclear Stockpile will continue. Activities of weapon system Project Officer Groups (POG) will be monitored. (\$ 0.340 Million)

(U) DoD-NNSA Nuclear Weapons Requirements: Provide contractor Requirements Team to assess the joint DoD-NNSA Requirements Process to integrate and prioritize the nuclear weapons-related requirements for both DoD and the National Nuclear Security Administration (NNSA) to support key stockpile decisions. Process includes the development and maintenance of a requirements database, quantities and schedules, the conduct of tradeoff assessments. The requirements process will be analyzed for its capability to address cost factors. The requirements process and requirements prioritization guidelines will be modified as necessary and approved by the NWC. Major changes in a NNSA schedule for a warhead life extension will be assessed for its impact on the overall requirements reflected. Actions relating to ongoing Nuclear Posture Review and Moscow Treaty implementation activities will also be evaluated and addressed. (\$0.340 million)

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(U) Maintaining the Deterrent Infrastructure: Manage implementation of presidential initiatives on stockpile composition and quantities. Conduct assessments for the ATSD (NCB). Perform analyses on issues for sustaining nuclear weapons safety, use control, survivability, certification, transportation, and reliability. These efforts support DoD oversight of DOE stockpile stewardship activities, such as nuclear weapon sustainment and revalidation, infrastructure requirements, nuclear weapon life extension, and stockpile stewardship and maintenance. Conduct nuclear weapon accident staff exercises and define relationships between homeland defense and nuclear accident response. Update handbooks on Nuclear Weapons Council and on Systems Nuclear Survivability to sustain core expertise. Continue update of DoD-DOE nuclear weapon related MOAs/MOUs. Assess the need to update DoD Directive 3150.2 and DoD-M 3150.2, Nuclear Weapon Systems Safety and initiate DoD Directive 4540.5 and DoD-M 4540.5, Nuclear Weapons Transportation. Coordinate and publish update to DoD Directive 3150.3, Nuclear Forces Security and Survivability. Manage continuing implementation of presidential initiatives on stockpile composition and quantities as outlined in the 2001 Nuclear Posture Review. Perform analyses on issues for sustaining nuclear weapons safety, use control, survivability, certification, transportation, and reliability. These efforts support DoD oversight of NNSA stockpile stewardship activities, such as nuclear weapon sustainment and revalidation, infrastructure requirements, nuclear weapon life extension, and stockpile stewardship and maintenance. Complete implementation of a knowledge management system to help preserve nuclear weapons information for the next generation of nuclear weapons staff. (\$ 0.464 Million)

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(U) Policy and Guidance for International Obligations: Oversight and guidance will be provided to activities and organizations, such as the NATO High Level Group, the NATO Proliferation Group, the Joint Theater Surety Management Group, U.S.-UK STOCKTAKE, and activities under the U.S.-Russia WSSX Agreement. Visit NATO nuclear capable units and report on status to raise awareness of surety issues to NATO HLG. Participate in the ongoing NATO-Russia exchanges on nuclear weapons safety and security. Conduct U.S./France accident response exercise for developing mutual understanding of issues for the safety and security of nuclear weapons. Participate in WSSX Joint Coordinating Group and Joint Steering Committee program management meetings in the U.S. and Russia, and plan and participate in WSSX technical interchange meetings on nuclear weapons safety and security issues. Review U.S. and Russian proposed projects relating to nuclear weapons safety and security, and nuclear counter-terrorism, maintain list of WSSX activities, and approve WSSX project proposals. Update of overall WSSX agreement to potentially include counter-terrorism and chem-bio issues. Coordinate and publish update of DoD Directive 5030.14 to affirm responsibilities of Joint Atomic Information Exchange Group (JAIEG). (\$ 0.190 Million)

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(U) B. Program Change Summary	FY 2003	FY 2004	FY 2005	<u>Total Cost</u>
Previous President's Budget	1.729	1.882	1.960	Continuing
Current FY 2005 President's Budget	1.683	1.851	1.958	
Total Adjustments	.046	.031	.002	
Appropriated Value	1.806	1.882	0.000	
a. Congressionally Directed Undistributed Reduction	-0.046	-0.031	0.002	
b. Rescission/Below-threshold Reprogramming, Inflation Adjustment	0.000	0.000	0.000	
c. Other				

Change Summary Explanation:

(U) Funding

(U) C. Other Program Funding Summary

(U) NA

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(U) D. Execution

(U) For execution year (CY), provide a list of funding recipients within the following categories:

Labs/centers

Universities

FFRDC's

Contractors Science Applications International Corporation, VA - \$1.000

Other Defense Threat Reduction Agency, \$0.300; Department of Energy - \$0.325

(U) List only those entities receiving 10% or more of total funding available in the PE.

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