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| RDT&EBUDGETITEMJUSTIFICATIONSSHEET(R-2Exhibit) | DATEFebruary2000 |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/Applied Research - BA2 | R-1 ITEM NOMENCLATURE Nuclear Sustainment & Counterproliferation Technologies; 0602715BR |

Project AE - Weapon Safety and Operational Support (cont'd)

Completed initial planning and definition of FoF test program for ICBM facilities.
 Completed consequence management support to ACOM for development of the requirements and training of DoD response forces.

Continued deterrence framework analyses as requested by CINCs and OSD.
 Continued workshops and area focus reports examining the future international context as it impacts nuclear and WMD options, planning requirements and deterrence.
 Continued NATO nuclear planning support, especially analyses of future C4I and planning systems for nuclear operations and WMD threat analyses.
 Continued European Theater support issues (Joint Theater Surety Management Group, High Level Group, dual capable aircraft operations, NATO WS3 vaults, Replacement Training Weapon (RTW)).

Continued nuclear support for PACOM-operational issues/nuclear options.
 Continued prediction calculation (PdCALC) system support and integration with U.S. Army Nuclear and Chemical Agency (USANCA) nuclear effects model.
 Continued Single Integrated Operational Plan (SIOP) support for STRATCOM J-5.
 Continued WMD threat analysis for CENTCOM/USFK/TRANSKOM, focused on the chemical threat to air and infrastructure operations.

Prepared and provided direct support to NATO nuclear exercises (Able Staff) and assisted with nuclear exercises Able Crystal and Able Ally.
 Continued to provide quick-turn analysis on WMD consequence issues for OSD, Services, and Joint Staff and provide weapons effects analysis to weapons Project Officer's Groups and weapons modification programs as required.
 Continued development of an integrated reporting system for automated reporting of NBC activity and hazard predictions.
 Provided support to the CINC planning staffs on NBC capability and impacts on warfighting capability.

Developed mission and consequence analysis for HQ Air Combat Command's (ACC) Agent Defeat Weapon phase studies and Analysis of Alternatives (AOAs).
 Education/Training to Maintain Core Competencies (\$1,037K)
 Provided nuclear operational training support to CINCs, Services, and OSD.

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Project AE - Weapon Safety and Operational Support (cont'd)

Continued the safety assessment of the B-52H aircraft.

Began B-2 Weapon System Safety Assessment (WSSA) at the request of the Air Force Safety Center.

Analyzed and quantified DOE Nuclear Detonation Safety Exceptions (NDSEs).

Conducted Fuel Fire Modeling and Testing to support ongoing WSSAs.

Developed a WSSA data base to archive completed WSSAs.

Began storage vault blast effects testing and analysis at the request of the Air Force Safety Center.

Began development of portable, mobile, and rapidly deployable radiation detection and measurement system comprised of remote sensor linked to central receiving/processing station via Radio Frequency (RF) signals.

Conducted Forces Support nuclear and WMD technical analyses as required by CINCs, Services, Joint Staff, OSD, and Nuclear Weapons Council (NWC) on force structure, weapons safety and security, theater missile defense, counterproliferation, planning, and international military and political security issues.

Completed WMD Threat Analyses for Aerial and Sea Ports of Debarkation for Strategic Air and Sea Lift.

Delivered the NATO Nuclear Planning Systems Training System prototype to Supreme Headquarters Allied Powers Europe (SHAPE).

Completed DTRA role in the development of the Air Vehicle Planning System project with transfer of the program to STRATCOM.

Completed the DTRA initial support effort for the Nuclear Target Data Feed project of NATO targeting support.

Completed deterrence framework analyses (China, INDO-PAK, Non-State Actors, Iraq) in support of requirements from STRATCOM, USFK/PACOM, CENTCOM, Assistant Secretary of Defense (ASD) (Strategy & Threat Reduction), ASD (Special Operations & Low-Intensity Conflict) (SOLIC), and Director, Counterproliferation Policy.

Completed coordination of and planning for USAFE Force-on-Force (FoF) exercise.

Completed planning support and asset allocation in support of AFSPACECOM/20th AF for ICBM Security engineering test plan.

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Project AE - Weapon Safety and Operational Support (cont'd)

Established a Weapons Effects Federation Object Model to allow interaction between SOMs and to effect the passing of weapons effects data between simulations.

FY 2000 Plans

Nuclear Operations (\$20,682K)

Complete the safety assessment for the dual capable fighter aircraft in Europe.
Complete the safety assessment of the B-52H aircraft.
Continue B-2 WSSA.

Continue to analyze and quantify DOE NDSEs.

Conduct modeling and testing to support ongoing WSSAs.

Continue the development and population of the WSSA database to archive completed WSSAs.
Begin the C-17 Aircraft Transportation Study.

Continue Storage Vault Blast Effects Testing and Analysis.

Continue development of portable, mobile, and rapidly deployable radiation detection and measurement system, comprised of remote sensor linked to central receiving/processing station via Radio Frequency (RF) signals.

Continue to conduct Forces Support nuclear and WMD technical analyses as required by OSD, Services, Joint Staff, and NWC on force structure, weapons safety and security, theater missile defense, counterproliferation, planning and international military and political security issues.

Continue to conduct technical analyses to support CINCs, concerning nuclear and WMD operational force planning, counterproliferation, nuclear forces, command and control, and regional security issues in light of the changing international security environment.

Continue to provide deterrence framework analyses as requested by CINCs and OSD.

Continue to provide workshops and area focus reports, examining the future international context as it impacts nuclear and WMD options, planning requirements and deterrence.

Continue to support NATO nuclear planning, especially analyses of future C4I and planning systems for nuclear operations and WMD threat analyses.

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Project AE - Weapon Safety and Operational Support (cont'd)

Continue to support European Theater issues (Joint Theater Surety Management Group, High Level Group, dual capable aircraft operations, NATO WS3 vaults, Replacement Training Weapon (RTW)) → Type 3E

Continue to provide nuclear support for PACOM operational issues/nuclear options.

Continue to provide PdCALC system support and integration with U.S. Army Nuclear and Chemical Agency (USANCA) nuclear effects model.

Continue to provide SIOP support for STRATCOM J-5.

Continue to provide WMD threat analysis for CENTCOM/USFK/TRANSCOM, focused on the chemical threat to air and infrastructure operations.

Maintain support to NATO nuclear exercises Able Staff, Able Ally and Able Crystal.

Provide analytical support in assessing STRATCOM's capability to effectively meet national objectives involving the SIOP, based on potential changes to the threat, national policy, and force structure.

Conduct an annual force-on-force (FoF) exercise to evaluate and validate policy standards as designated by the Security Policy Verification Committee (SPVC). Conduct FoF exercise in coordination with AFSpaceCOM and 20th AF for ICBM security. Complete SHAPE Survive to Operate (STO) analysis for NATO out-of-area operations.

Continue to provide quick-turn analysis on WMD consequences issues for OSD, Services, and Joint Staff and provide weapons effects analysis to weapons Project Officer's Groups and weapons modification reporting system for automated reporting of NBC activity and hazard predictions.

Continue development of an integrated reporting system for automated reporting of NBC activity and hazard predictions.

Continue to provide support to the CINC planning staffs on NBC capability and impacts on warfighting capability.

Continue to develop mission and consequence analysis for HQ ACC Agent Defeat Weapon phase studies and AOA's.

Continue to provide analysis to the CINCs in support of their counterproliferation development missions.

Education/Training to Maintain Core Competencies (\$646K)

Continue to provide nuclear operational training support to CINCS, Services, and OSD.

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