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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2)					February 2003			
OPERATIONAL TEST AND EVALUATION, DEFENSE (0460) BUDGET ACTIVITY SIX			DEVELOPMENT TEST AND EVALUATION (DT&E) PROGRAM ELEMENT (PE) 0605804D8Z					
\$'s in Millions	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
PE 0605804D	63.884	64.140	103.245*	104.679*	106.548*	108.925*	110.995*	113.064*

*Includes transfer of funds for JT&E transferred from PE 0605804D8Z in the RDT&E Defense-Wide Appropriation 0400 to PE 0605804D8Z in the OT&E,D Appropriation 0460.

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION

This program element consists of two programs: Test and Evaluation (T&E) Programs and T&E Independent Activities.

T&E Programs now consist of five activities: Threat Systems (TS); Center for Countermeasures (CCM); Joint Aircraft Survivability Program (JASP) (formerly the Joint Technical Coordinating Group on Aircraft Survivability (JTTCG/AS)), Joint Technical Coordinating Group on Munitions Effectiveness (JTTCG/ME) and Joint Test and Evaluation (JT&E). The JT&E program was transferred by the Department from the Under Secretary of Defense (Acquisition, Technology and Logistics) to the DOT&E effective 9 December 2002. Funding for JT&E will remain in Appropriation 0400 through FY 2003 and move to Appropriation 0460 starting in FY 2004.

The T&E programs are continuing efforts that provide management and oversight of Department of Defense (DoD) T&E functions and T&E expertise to the DoD. TS provides Office of the Secretary of Defense (OSD) policy and oversight to component threat systems and target developments to ensure increased commonality, minimize duplications and provide consistent threat representation validation for T&E. TS funds the management and oversight functions for development of common use threat specifications for threat simulators, threat representative targets and digital threat models used for T&E; integration of T&E requirements for Foreign Material Acquisition (FMA); DoD validation of threat simulators, threat representative targets, and digital threat models; analysis of advanced threat technology applications for simulators and targets; and investigation of new approaches and methods for conducting operational testing of systems and their interoperability in a realistic threat environment. CCM, a Joint Service Countermeasure (CM) T&E Center, conducts analysis, T&E, and assessment of U.S. and Foreign Electro-Optical (EO), Infrared (IR), and Millimeterwave (MMW) precision guided weapons (PGW) and systems, countermeasures (CM), counter-countermeasures, and warning devices for the Services, T&E Agencies, and the Intelligence Community. CCMs staff and the CM knowledge base developed over 30 years provide the DoD acquisition community and Warfighting Combatant Commanders with the information and expertise necessary to ensure the survival of U.S. forces on the increasingly hostile modern battlefield. The JASP was originally chartered by the

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Joint Logistics Commanders (JLC) in 1971 to serve as DoD's focal point for the joint service community to enhance the non-nuclear combat survivability of aircraft. The Tri-Service Joint Aeronautical Commanders Group (JACG) rechartered this program which acts as the DoD focal point for aircraft susceptibility and vulnerability reduction research as well as survivability modeling and simulation (M&S) methodology. The JASP is the Executive Agent for the Joint Live Fire Aircraft Program managed by the Live Fire Test office of the Director, Operational Test & Evaluation (DOT&E). The JASP also develops and standardizes methodologies for the evaluation of aircraft survivability (susceptibility and vulnerability) to threat weapons. The JTTCG/ME was chartered by the Joint Logistics Commanders (JLC) over 30 years ago to serve as DoD's focal point for authenticated non-nuclear munitions effectiveness information (Joint Munitions Effectiveness Manuals (JMEMs)) on all US major non-nuclear weapons. The JTTCG/ME, under the auspices of the JLCs, authenticates weapons effectiveness data for use in training, systems acquisition, weaponeering, procurement, and combat modeling. JMEMs are used by the Armed Forces of the United States, NATO and other allies to plan operational missions, support training and tactics development, and support force-level analyses. The JTTCG/ME also develops and standardizes methodologies for evaluation of munitions effectiveness and maintains databases for target vulnerability, munitions lethality and weapon system accuracy. JASP and JTTCG/ME co-chair the Survivability/Vulnerability Information Analysis Center (SURVIAC) Technical Coordinating Group (TCG). JT&E programs are process, rather than product, focused T&E activities conducted in a joint military environment. These multi-Service programs, chartered by OSD and coordinated with the Joint Staff and Services, provide improvements in interoperability of Service systems, improvements in technical and operational concepts, solutions to joint operational issues, development and validation of joint test methodologies, and data for validating models, simulations and test beds. JT&E programs solve relevant Warfighter issues in a joint T&E environment, develop and improve Joint Test Capabilities and Methodologies. The Defense Test and Evaluation Professional Institute (DTEPI) provides computer-based training and on-line web-based training to the DoD T&E community in technical T&E subjects.

T&E Independent Activities is the only source of funding for the DOT&E for studies, analyses, management and technical support, on a continuing basis, in support of policy development, decision-making, management and oversight of the DoD T&E infrastructure, including stewardship of the Major Range and Test Facility Base (MRTFB). Studies and analyses examine the implications and consequences of current and proposed policy, plans, operations, strategies, and budgets and are essential for the oversight and management of the DOT&E mission. Funds are used to perform official travel related to the activities within this program element. *Due to the volume of work in this category, examples of the accomplishments and plans are listed in Program Accomplishments and Plans.*

This Research Category 6.5 PE supports management activities for the DOT&E oversight responsibility for T&E and the MRTFB.

Program Accomplishments and Plans:

FY 2002 Accomplishments:

T & E Programs

- Threat Systems:

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- Simulators
 - Provided oversight of Service activities in support of the DoD validation program for Service threat simulators and threat digital models
 - Initiated test cases to implement the process to effectively utilize threat simulators as true distributed test resources in support of multi-Service interoperability testing in a realistic threat environment
 - Designed tool sets, created methodologies, and produced operational standards for measures of effectiveness and interoperability testing of the test cases
 - Executed the DoD validation program for threat simulators and threat digital models
 - Updated the Automated Threat Systems Handbook to maintain inventory of threat representative assets available for the T&E community
 - Continued threat support to T&E through investigations of current scientific and technical intelligence information for insertion in Service threat representation modeling programs (e.g., Standard Ultraviolet (UV) Plume Model, Integration of Laser Beam Rider Simulator Integration, Advanced Threat Algorithm Analysis, Testing of Electro-Optical Infrared (EO/IR) Surface to Air Missile (SAM) Hardware-in the-Loop (HWITL) Flyout Models, PC Based Infrared Scene Generator, and Advanced Threat System)
 - Continued cooperative technical research and test bed projects to ensure threat representation (e.g., Seeker Aided Ground Guidance (SAGG) SAM ECM Operational Testing Capability, RT SAM Models w/Digital Integrated Air Defense System (DIADS), UV Calibration and Verification System Distribution Study, and 4 Dimensional Portable and Reconfigurable Holographic System Study) adequacy for T&E.
 - Continued management oversight of Service threat simulators and threat digital models
 - Continued to provide the tools to exchange the latest scientific and technological information between test and evaluation and intelligence communities (e.g., Playback of Western Test Range (WTR) Data into the Threat System Acquisition Facility (TSAF), Distributed Threat Environment Operational Testing Capability Study)
 - Continued to manage a collaborative effort to provide support for interoperability testing in a realistic threat environment
- Targets
 - Initiated test cases to implement the process to effectively utilize threat representative targets as true distributed test resources in support of multi-Service interoperability testing in a realistic threat environment
 - Designed tool sets, planned methodologies, and produced operational standards for measures of effectiveness and interoperability testing of the test cases
 - Provided oversight of the Service activities in support of the DoD validation program for Service threat representative targets
 - Provided OSD seed funds to prototype solution to highest priority deficiencies in current target systems (e.g., Low Earth Orbit Satellite Target Control System (LEOS TCS), Urban Target Complex, Rocket Assisted Take Off (RATO) Technology, Smokey SAM Missile Warning Stimulator, and Mobile Acoustic Source)

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- Supported the design/prototyping of new target M&S capabilities/tools that meet multi-Service T&E needs within common/DoD standard architectures (e.g., Decoy Countermeasures System, Subscale IR Signature Augmentation, Advanced Off-Board Countermeasures, and Radar Variations)
- Continued management oversight of Service threat representative targets
- Continued to manage a collaborative effort to provide support for interoperability testing in a realistic threat environment
- Center for Countermeasures:
 - CCM tested, analyzed, reported, or otherwise supported over 30 US and foreign PGW systems/components in a countermeasure environment, as well as CM and threat-warning systems and other activities and programs, as listed below:
 - Air Force:
 - Joint Air-Surface Standoff Missile (JASSM), Enhanced Paveway, Joint Direct Attack Munition (JDAM), C-17, Lightning, CM Red Team, AGM-65 Maverick, HH-60G Self Protection System, Sensor Fuzed Weapon (SFW)-P3I, Air National Guard Air Force Reserve Test Center (AATC) Comet, Advanced Strategic and Tactical Expendables (ASTE), A-10/F-16 Force Development Evaluation (FDE), Agent Defeat Weapon (ADW), Small Diameter Bomb, CV-22, LAZARUS/BLADES
 - Army:
 - Comanche, Modernized HELLFIRE, Future Scout Vehicle, XM-982 Excalibur, TOW Fire & Forget, AN/AVR-2A ECP, AN/VVR-3A, Longbow Hellfire, Longbow Apache, and Bat P3I, Common Missile, Advanced Infra-red CM munition (AIRCMM)
 - Navy/Marines:
 - Ship-Based Laser Acquisition System (SBLAS), Extended Range Guided Munition (ERGM), Integrated Electronic Warfare System (IEWS)/MATES, Joint Standoff Weapon (JSOW), Standoff Land Attack Missile - Expanded Response (SLAM-ER) Advanced Target Acquisition (ATA), F-18 Advanced Targeting Forward Looking Infrared (ATFLIR), Vertical Take-Off Unmanned Aerial Vehicle (VTUAV), Advanced 6" Expendable (A6E) DT
 - Foreign:
 - Foreign Rangefinder Exploitation Evaluation-G series, Night Attack Vision Exploitation G series, Foreign Global Positioning System (FGPS), Foreign Laser Adjunct Program-B (B series), Foreign Integrated Night Sights (FINS), and Foreign Active Protection System (FAPS) Phase II
 - M&S:
 - CV-22 Tiltrotor Development Test/Operational Test (DT/OT), Airborne Laser (ABL) Susceptibility Study, Direct View Optics (DVO) tests, JSOW, Foreign Laser Beam Rider (FLBR)
 - Evaluation of the new Laser Beam Rider Digital Simulation for Countermeasure Development
 - Other:

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- The Technical Cooperation Program (TTCP), North Atlantic Treaty Organization (NATO) Panels TG-17 and SWG-4,
- Provided CM inputs for evolving programs, identified by the Service Acquisition PEOs/PMs
- CM Warfare Initiative:
 - Coordinated CM Warfare Initiative at the Combatant Command and MAJCOM levels, Marine Aviation Weapons and Tactics and 1st Cavalry, 4 Brigade Live-Fire
 - Directed plans for participation in operational warfighting exercises and simulations, Combatant Commander Joint Training (Millennium Challenge 2002)
 - Briefed efforts to establish capability for a Warfighter organization capable of deploying CM in conflict
 - Continued efforts to promote software modifications to warfighting models and simulations to reflect EO/IR countermeasures scenarios at the Joint and Component Service level
 - Established EO/IR CM training and equipment requirements and objectives for operational exercises and simulations
- Provided technical and analytical expertise in support of DOT&E M&S efforts
- Reviewed and analyzed technical M&S software for use in DOT&E testing environment
- Initiated support of the Test Simulation Program, which provided tools for better test planning and post test analysis
- JASP:
 - Completed the very wideband accurate direction finding project
 - Completed the M&S support for acquisition programs project
 - Completed the passive fire mitigation project
 - Completed work on the weapons bay ablative characterization project
 - Completed work on the advanced survivable Rotorcraft project
 - Completed Air System Performance Evaluation Model (ASPEM) and BRAWLER, tactical air combat simulation configuration control board
 - Completed the Advanced Joint Effectiveness Model (AJEM) test cases project
 - Completed the Radar Directed Gun Systems Simulation (RADGUNS) maintenance project
 - Completed the Reduced Aircraft Vulnerability to MANPADS project
 - Continued the Fuze Simulation & Phenomenology Investigation project
 - Continued the bonded wing survivability project
 - Continued the dynamic loading methodology project
 - Continued the Survivable Engine Control Demonstration (SECAD) Project
 - Continued the Improved Air Countermeasure with Ultra-fine Aluminum project
 - Continued the Man Portable Air Defense Weapon System (MANPADS) Impact Point assessment project
 - Continued the Advanced Low Altitude Radar Model (ALARM) maintenance project
 - Continued the Engine Damage Detection project

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- Continued the proof of concept for weapons bay process
- Continued the Aerogels for retrofitted increases in aircraft survivability project
- Continued the Joint Service Surrogate seeker project
- Continued the miniaturized countermeasures for Unmanned Aerial Vehicle (UAVs)
- Continued the Tier II/III laser susceptibility project
- Continue the Solid State Laser Pointer project
- Continued the methodology to assess helicopter susceptibility to mines project
- Continued the Surface-to-Air missile credibility assessment project
- Continued the WINFIRE/ULLEX project
- Continued follow-on modeling requirements for AJEM
- Continued to support the SURVIAC Model Manager and Model Accreditation
- Continued Computation of Vulnerable Repair Time (COVART)/FASTGEN shotline prediction model configuration control board
- Continued the Component Vulnerability Analysis Archive Project
- Continue the Aerogels for retrofitted increases in aircraft survivability project
- Continue the Extended Survivable Engine Control Demonstration (SECAD) Project
- Initiated the Advanced Survivable Rotorcraft Validation project
- Initiated the Integrated Survivability Analysis project
- Initiated the Ionomer Fuel Containment project
- Initiated the UAV Active Acoustic Cancellation project
- Initiated the Imaging seeker Aim Point project
- Initiated the Dry Bay Fire Model (DBFM) Ignition Phase Validation Data Assessment
- JTCG/ME:
 - Converted and updated existing JMEMs to CD-ROM format
 - JMEM Air-to-Surface Weaponing System (JAWS) v2.2, 2.2.1, 2.2.2
 - Joint Anti-air Combat Effectiveness – Air Defense (J-ACE: AD) v2.0
 - Joint Anti-air Combat Effectiveness – Air Superiority (J-ACE: AS) v2.0
 - JMEM/Surface-to-Surface Weapons Effectiveness System (JWES) v2.0/v2.1
 - Target Manual v2.2 on JAWS
 - Conducted Configuration Management/Verification, Validation and Accreditation (VV&A) efforts on specific JTCG/ME models (i.e., Joint Service Endgame Model (JSEM), Advanced Joint Effectiveness Model (AJEM), Modular Effectiveness and Vulnerability Assessment - Ground Fixed (MEVA-GF), Modular UNIX-based Vulnerability Estimation Suite (MUVES-S2), Blast Effectiveness Against Mobile Systems/Air Blast Effects Library (BEAMS/ABEL), Penetration Curvilinear 3-Dimensional Model (PENCURV3D), Component Vulnerability Analysis Archive (CVAA),

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- Joint Anti-Air Model (JAAM), Operational Requirements-based Casualty Assessment (ORCA), Joint Mean Area Effectiveness (JMAE), and Advanced Survivability Assessment Program (ASAP))
- Released JAWS 2.2 Attackversion in support of planning and operations
- Distributed products and incremental updates (JAWS v2.2.1,v2.2.2 and JWES v2.1) via the classified internet with the Joint Product and Information Access System (JPIAS) v2.0 (Books-on-line, Automated products, Models, Tri-Service Data, and Support service)
- Expanded existing databases to incorporate effectiveness data for newly fielded weapons (i.e., Air-to-Surface Basic Manual – Revision, and Surface-to-Surface Direct/Indirect Fire)
- Executed Target Vulnerability data generation (e.g., industrial targets, Non-nuclear Consumable Annual Analysis (NCAA) targets, small boats, building structures, satellite communications and Tactical Ballistic Missile (TBMs)) and methodology improvements (e.g., counter proliferation, titanium fragment penetration/equation standardization, ORCA extension, Directed Energy Weapons, Information Operations, and target model generation)
- Together with the JASP, initiated formal VV&A and released Advanced Joint Effectiveness Model (AJEM) v2.03 (HEI Deterministic Method and BETA LINUX Capability), and Joint Component Vulnerability Archive v1.0
- Developed consolidated Combatant Commands priority list and continued Combatant Commands data calls in support of FY 2003 program build requirements
- Finalized development of National Disclosure Policy and classification review for the JAWS CD-ROM to address requirements for coalition operations
- Continued the development of standardized models and methodology for Air-to-Surface, Surface-to-Surface and Anitair effectiveness calculations
 - Collateral damage module, hardened targets module
 - Building analysis module
 - JAAM
 - JAWS target acquisition
 - Joint Smart Weapons Module (JSWM)
 - GPS accuracy and multiple weapon types
- Initiated pilot programs for compliance with near-term acquisition programs to facilitate compliance with DOD 5000.2R (Brilliant Anti-Tank (BAT)/P3I, Patriot PAC III, Tactical Tomahawk (TACTOM), Evolved Sea Sparrow, JSOW SFW/SFW P3I, Joint Air to Surface Standoff Missile (JASSM), and AIM-9X)
- JT&E:
 - The JT&E discussion of work completed during FY 2002 is located in the RDT&E Defense-Wide Appropriation 0400 justification under Developmental Test and Evaluation PE 0605804D8Z.

T&E Independent Activities

- MRTFB Support:

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- Analyzed MRTFB institutional and customer data in support of policy decisions regarding the composition and management of the MRTFBs
- Monitored and evaluated the MRTFB to ensure adequacy to meet requirements and to prevent unnecessary duplication of capabilities
- Developed and issued a summary and database of MRTFB capabilities in coordination with the Military Departments for use in assessing future capability requirements
- Analyzed MRTFB data and proposed issues for the Annual MRTFB Review. Prepared a Summary Report and follow-up to ensure implementation of DOT&E solutions to issues
- Analyzed T&E PPBS information for identification and resolution of potential shortfalls during POM and budget reviews
- Spectrum Support:
 - Analyzed and reported on alternative options for telemetry operations in higher frequency bands
 - Developed technical alternatives on issues affecting T&E infrastructure
 - Provided technical support to Range Spectrum Requirements Working Group on spectrum issues
- Telemetry Support:
 - Developed technical approach for Real Time Telemetry Network (RTTN)
 - Performed and conducted special studies on MRTFB radio spectrum issues
 - Continued to support DOT&E participation in International Consortium for Telemetry Secretary
- Special Studies (Examples):
 - Assessed the requirements for space range test capability
 - Expanded T&E Assets Identification and Monitoring Process data to include all DoD assets
 - Reviewed Service T&E modernization plans
 - Developed new planning process and data collection tools to support it
 - Initiated 15 to 20 year planning process for MRTFB modernization
- DTEPI:
 - Developed and updated T&E course and training materials for the DoD T&E community to include computer based and WEB based training. Following are examples of projects:
 - Developed WEB-based Just-in-Time Information on:
Interoperability Test & Evaluation
 - Updated Probability and Statistics course
 - Drafted DOT&E Action Officer Training Course Narrative
- T&E M&S:
 - Reviewed and analyze technical M&S software for use in DOT&E testing environment

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- Provided M&S assessments on key programs such as: Joint Modeling and Simulation System (JMASS), Joint Analytical Model and Instrumentation Program (JAMIP), Joint Distribution & Engineering Plan (JDEP) and Joint Warfare System (JWARS)
- Prepared final report on the study of military technology trends, and their impact on future M&S requirement, in support of T&E
- Initiated support of the Test Simulation Program, which will provide tools for better test planning and post test analysis
- Director, Operational Test and Evaluation Enterprise Knowledge Management System (DEKMS):
 - Completed and delivered the DEKMs. The system has been extended to the majority of the DOT&E enterprise and includes Test and Evaluation templates, guidelines and best practices for DoD personnel. This completes this effort
- Official Travel and Administrative Support:
 - Performed official travel in support of the DOT&E oversight of T&E infrastructure
 - Procured administrative support to carry out oversight of DOT&E programs
- Accounting and Financial Management Support:
 - Provided accounting and financial management support to the DOT&E

FY 2003 Plans:

T & E Programs:

- Threat Systems:
 - Simulators
 - Continue threat support to T&E through investigations of current scientific and technical intelligence information for insertion in Service threat representation modeling programs (e.g., Laser Beam Rider Simulator Integration, IR SAM Design of Experiments, High Fidelity Early Warning Sensor Modeling, and Infrared Missile Plume Signature)
 - Continue the cooperative technical research and test bed projects to ensure threat representation (e.g., UV Calibration and Verification System Distribution Study, IR MANPADS Endgame Methodology, Dynamic Clutter Modeling for Radar Environment Simulator, and End-to-End Requirements Study (E2E)) adequacy for T&E.
 - Continue to provide the tools to exchange the latest scientific and technological information between T&E and intelligence communities (e.g., Project Lusty - MiG Live Fire Evaluation , and Tests Event Model (TEM))
 - Update the Automated Threat Systems Handbook to maintain inventory of threat representative assets available for the T&E community
 - Complete initiation of test cases to implement the process to effectively utilize threat simulators as true distributed test resources in support of multi-Service interoperability testing in a realistic threat environment
 - Continue oversight of Service threat simulators and threat digital models
 - Complete collaborative effort to provide support for interoperability testing in a realistic threat environment

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- Complete tool set design, methodology creation, and production of operational standards for measures of effectiveness and interoperability testing of the test cases
- Execute the DoD validation program for threat simulators and threat digital models
- Provide oversight of Service activities in support of the DoD validation program for Service threat simulators and threat digital models
- Provide threat assessment for DOT&E planning and evaluation
- Initiate technical investigations to identify solutions for effectively representing asymmetric threats to include Chemical, Biological, Radiological, and Nuclear (CBRN); Information Warfare (IW); and terrorism-related threats to Homeland Defense in testing of U.S. weapons systems
- Targets
 - Continue oversight of Service threat representative target programs
 - Complete initiation of test cases to implement the process to effectively utilize threat representative targets as true distributed test resources in support of multi-Service interoperability testing in a realistic threat environment
 - Complete the design of tool sets, creation of methodologies, and production operational standards for measures of effectiveness and interoperability testing of the test cases
 - Complete collaborative efforts to provide support for interoperability testing in a realistic threat environment
 - Provide oversight of the Service activities in support of the DoD validation program for Service threat representative targets
 - Provide OSD seed funds to prototype solutions to highest priority deficiencies in current target systems (e.g., Threat 'D' Study, Interferometric Inverse Synthetic Aperture Radar (IFISAR) --3-D Radar, Low Earth Orbit Satellite Target Control System (LEOS TCS)), and Rocket Assisted Take Off (RATO) Technology
 - Support the implementation of new target modeling and simulation capabilities /tools that meet multi-Service T&E needs within common/DoD standard architectures (e.g., Subscale Aerial Target (SSAT) IR Countermeasures, Mobile Acoustic Source, Advanced Off Board Countermeasures, Subscale Aerial Target (SSAT) IR Signature Augmentation, Derived Radar Altitude Penetration Enhancement (DRAPE), and Decoy and Countermeasures)
- Center for Countermeasures:
 - CCM will test, analyze, report, and otherwise support over 30 US and foreign PGW systems/components in a countermeasure environment, as well as CM and threat-warning systems and other activities and programs, as listed below:
 - Air Force:
 - JASSM, HH-60G SPS, AATC Comet, ASTE, A-10/F-16 FDE, Small Diameter Bomb, CV-22, Agent Defeat Weapon, LAZARUS/BLADES, and Joint Precision Autonomous Landing System (JPALS)
 - Army:

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- Comanche Passive Defensive Suite, Comanche Laser Warning Set, Modernized Hellfire, Future Scout Vehicle, XM-982 Excalibur, Common Missile, Longbow Hellfire, Longbow Apache, Bat P3I, VVR-3A, and AVR-2 ECP
- Navy/Marines:
 - VTUAV, ATFLIR, IEWS/MATES, ERGM, Tactical Aircraft Directed IR CM (TADIRCM), F/A-18 Kinematic Flare development, MV-22, A6E, SBLAS, and STARLIGHT flash expendable
- Foreign:
 - Foreign Rangefinder Exploitation Evaluation H series, Night Attack Vision Exploitation H series, Foreign Laser Beamrider, Foreign Laser Guided Projectiles, WHEAT SPEAR, FAPS-II, and FGPS
- M&S:
 - MV/CV-22 Tiltrotor and Direct View Optics (DVO) tests. Incorporate multimode sensor guidance and Focal Plane Array technology
 - Assess initial applications of the new laser beamrider digital simulation
- Other:
 - TTCP (Trials Dic-Dic and Blackbear), NATO Panels TG-17 and SWG-4
 - Provide CM inputs for evolving programs, identified by the Service Acquisition PEOs/PMs
 - CM Warfare Initiative:
 - Coordinate CM Warfare Initiative at the Combatant Command and MAJCOM levels, MAWTS-1 and 1st Cavalry, 4th Brigade Live-Fire
 - Continue efforts establishing capability for a Warfighter organization capable of deploying CM in conflict
 - Continue to provide inputs for EO/IR CM training and equipment and Joint Interoperability Tasks to establish requirements and objectives for operational exercises and simulations
 - Continue to develop software modifications to warfighting models and simulations to reflect EO/IR countermeasures scenarios at the Joint and Component Service level (JCATS, JSIMS, and CASTFOREM)
 - Direct plans for participation in operational warfighting exercises and simulations (Ulchi Focus Lens, Roving Sands 2003, and NTC Rotations), Joint Red Flag 2003 and JTFEX 2003
 - Observe Victory Strike II
 - Continue to provide technical and analytical expertise in support of DOT&E M&S efforts
 - Develop demonstrator Test Simulation Program, which will provide tools for better test planning and post test analysis
 - Review and analyze technical M&S software for use in DOT&E testing environment
- JASP:
 - Complete the bonded wing survivability project
 - Complete the dynamic loading methodology project
 - Complete the Improved Air Countermeasure with Ultra-fine Aluminum project

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- Complete the Man Portable Air Defense Weapon System (MANPADS) Impact Point assessment project
- Complete the ALARM Maintenance Project
- Complete the Engine Damage Detection project
- Complete the MANPADS Impact Point Assessment
- Complete the proof of concept for weapons bay process
- Complete the Instant Firewalls project
- Complete the Joint Service Surrogate seeker project
- Complete the miniaturized countermeasures for UAVs
- Complete the Tier II/III laser susceptibility project
- Complete the Solid State Laser Pointer project
- Complete the Susceptibility/Vulnerability to anti-helicopter mines project
- Complete the Surface to Air missile credibility assessment project
- Complete the WINFIRE/ULLEX project
- Continue AJEM Model Maintenance
- Continue to support the SURVIAC Model Manager and Model Accreditation
- Continue to participate on the COVART/FASTGEN and air-to-air (BRAWLER) CCBs
- Continued the Component Vulnerability Analysis Archive Project
- Continue the Ionomer Fuel Containment project
- Continue the UAV Active Acoustic Cancellation project
- Continue the Imaging Seeker Aim Point project.
- Complete the DBFM Ignition Phase Validation Data Assessment
- Complete the Aerogels for retrofitted increases in aircraft survivability project
- Complete the Extended Survivable Engine Control Demonstration (SECAD) Project
- Initiate the advanced survivable Rotorcraft Validation project
- Initiate the Integrated Survivability Analysis project
- Initiate MANPADS Damage Effects Modeling
- Initiate Armor Attachment Techniques Project
- Initiate and complete Simple Passive Extinguisher (SPEX) Project
- Initiate Laser-Focal Plane Array Effects Modeling for Laser Countermeasures Optimization
- Initiate High Power Wideband Array Project
- Initiate Special Material Urban Decoy
- Initiate and complete Simulink ADA Model Requirements
- Initiate DREAM V & V into SURVIAC
- Initiate the Fire & Explosion Project
- Initiate the Imaging Infrared (IIR) Sensor and Laser Effects Model Development

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- Initiate UAV Survivability Study Initiate ABDR Effectiveness & Durability project
- JTCG/ME:
 - Develop JMEM data for most critical Combatant Command identified systems
 - Continue conversion/updates of existing JMEMs to CD-ROM format (i.e., JMEM Air-to-Surface Weaponing System (JAWS) v2.3, Joint Anti-air Combat Effectiveness – Air Defense (J-ACE: AD) v2.0/3.0, Joint Anti-Air Combat Effectiveness - Air Superiority (J-ACE: AS) v3.0, JMEM/Surface-to-Surface Weapons Effectiveness System (JWES) v3.0, and Target Vulnerability Data Management System (TVDMS) v2.0
 - Work to reduce CD-ROM update cycles to a maximum of 14 months, and develop strategy for target-oriented JMEMs
 - Distribute products and incremental updates via the classified internet with the Joint Product and Information Access System (JPIAS) (Books-on-line, Automated products, Models, Tri-Service Data, and Support service)
 - Reduce major methodology shortcomings (vulnerability/lethality, lethal areas/effectiveness indices, etc.)
 - Continue the development of standardized models and methodology for Air-to-Surface, Surface-to-Surface and Anti-air effectiveness calculations (i.e., collateral damage, hardened targets, bridges, buildings, multiple weapon types, real time delivery accuracy/TLE, and dual stage warheads, helicopter-delivered munitions, and small boat weaponing)
 - Conduct Configuration Management/VV&A efforts on specific JTCG/ME models (i.e., JSEM, AJEM, MEVA-GF, JMAE, ORCA, MUVES, and ASAP)
 - Together with the JASP, release Advanced Joint Effectiveness Model (AJEM) v3.0 (BRL-CAD 6.0, Updated GUI, improved penetration equations, New Encounter-V/L Interface, Improved MANPADS, and LINUX port), and Joint Component Vulnerability Archive
 - Conduct Ad-hoc Working Group to develop JMEM strategy/plan in support of the DoD High Energy Laser (HEL) program and the Joint Technology Office (JTO)
 - Continue to work on red-on-blue effectiveness data and methodology with focus on STRATCOM requirements
 - Continue to develop/sanitize JMEM products for foreign customers and coalition operations
 - Continue execution and technical coordination efforts to address Target Vulnerability data generation (e.g., Special Operations) and methodology improvements (e.g., counter proliferation, fragment penetration, Information Operations, Non-lethal weapons, blast effects, personnel casualty/ORCA extension, and target model generation)
 - Continue Combatant Command data calls in support of FY 2004 program build requirements
 - Continue to expand pilot programs for compliance with near-term acquisition programs to support JMEM production at system IOC.
 - Maintain JTCG/ME intelligence requirements account through Defense Intelligence Agency COLISEUM system
 - Assess ability of JTCG/ME Program to support training requirements of operational users for weaponing applications
- JT&E:
 - The JT&E discussion of work to be accomplished during FY 2003 is located in the RDT&E Defense-Wide Appropriation 0400 justification under Developmental Test and Evaluation PE 0605804D8Z.

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T&E Independent Activities

- Major Range and Test Facility Base (MRTFB) Support:
 - Complete development of 15 to 20 year plan for modernization of MRTFB test capabilities
 - Analyze MRTFB institutional and customer data in support of policy decisions regarding the composition and management of the MRTFBs
 - Monitor and evaluate the MRTFB to ensure adequacy to meet requirements and to prevent unnecessary duplication of capabilities
 - Develop and issue a summary and database of MRTFB capabilities in coordination with the Military Departments for use in assessing future capability requirements
 - Analyze MRTFB data and propose issues for the Annual MRTFB Review. Prepare a Summary Report and follow-up to ensure implementation of DOT&E solutions to issues
 - Analyze T&E PPBS information for identification and resolution of potential shortfalls during POM and budget reviews
- Spectrum Support:
 - Analyze and report on alternative options for telemetry operations in higher frequency bands
 - Develop technical alternatives on issues affecting T&E infrastructure
 - Provide technical support to Range Spectrum Requirements Working Group on spectrum issues
- Telemetry Support:
 - Continue to support DOT&E participation in International Consortium for Telemetry Secretary
 - Develop technical approach for Real Time Telemetry Network (RTTN)
 - Perform and conduct special studies on MRTFB radio spectrum issues
- Special Studies (Examples):
 - Assess the requirements for space range test capability
 - Expand T&E Assets Identification and Monitoring Process data to include all DoD assets
- DTEPI:
 - Develop and updates T&E course and training materials for the DoD T&E community to include computer based and WEB based training. Following are examples of projects:
 - Develop computer based training course for the following topics:
 - DOT&E Action Officer Training Course
 - Update CTEIP course
- T&E M&S:
 - Provide technical and analytical expertise in support of DOT&E M&S efforts
 - Review and analyze technical M&S software for use in DOT&E testing environment
 - Provide M&S assessments on key programs such as: Joint Modeling and Simulation System (JMASS), Joint Analytical Model and Instrumentation Program (JAMIP), Joint Distribution & Engineering Plan (JDEP) and Joint Warfare System (JWARS)

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- Prepare final report on the study of military technology trends, and their impact on future M&S requirement, in support of T&E
- Continue support of the Test Simulation Program, which will provide tools for better test planning and post test analysis
- Official Travel and Administrative Support:
 - Perform official travel in support of the DOT&E oversight of T&E infrastructure
 - Procure administrative support to carry out oversight of DOT&E programs
- Accounting and Financial Management Support:
 - Provide accounting and financial management support to the DOT&E

FY 2004 Plans:

T & E Programs:

- Threat Systems:
 - Simulators
 - Update the Automated Threat Systems Handbook to maintain inventory of threat representative assets available for the T&E community
 - Provide oversight of Service activities in support of the DoD validation program for Service threat simulators and threat digital models
 - Execute the DoD validation program for threat simulators and threat digital models
 - Provide threat assessment for DOT&E planning and evaluation
 - Continue threat support to T&E through investigations of current scientific and technical intelligence information for insertion in Service threat representation modeling programs (e.g., IR Air-to-Air Missile Engineering Analysis, Foreign SAM Software Analysis, and Threat Vector Model (TVM)).
 - Continue the cooperative technical research and test bed projects to ensure threat representation (e.g., Test Events Model Analysis) adequacy for T&E.
 - Continue to provide the tools to exchange the latest scientific and technological information between T&E and intelligence communities (e.g., High Speed Multi-Spectral Dual Color IR Ultra Violet Scene Projector (DCIR/UV/DUSP) for Stimulation of Installed IR/UV Missile Warning System (MWS) Sensors, and Dynamic High Speed Multi-Spectral Rendering Capability (MSRC) for IRCM Testing)
 - Continue oversight of Service threat simulators and threat digital models
 - Continue technical investigations to identify solutions for effectively representing asymmetric threats to include Chemical, Biological, Radiological, and Nuclear (CBRN); Information Warfare (IW); and terrorism-related threats to Homeland Defense in testing of U.S. weapons systems
- Targets
 - Provide oversight of the Service activities in support of the DoD validation program for Service threat representative targets

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- Provide OSD seed funds to prototype solution to highest priority deficiencies in current target systems (e.g., Underwater Tracking System, Simultaneous Short Range Air Launch Target, ECM Miniaturization, and Camouflage, Concealment, Deception (CCD) Acquisition and Signature Characterization)
- Support the implementation of new target modeling and simulation capabilities/tools that meet multi-Service T&E needs within common/DoD standard architectures (e.g., Subscale IR Countermeasures, Foreign Threat Countermeasures, Advanced Threat Receiver, Airborne Electronically Steered Antenna (AESA) and Advanced Offboard Countermeasures).
- Continue oversight of Service threat representative targets
- Center for Countermeasures:
 - CCM will test, analyze, report, and otherwise support over 30 US and foreign PGW systems/components in a countermeasure environment, as well as CM and threat-warning systems and other activities and programs, as listed below:
 - Air Force:
 - JASSM, HH-60G SPS, AATC Comet, ASTE, A-10/F-16 FDE, Small Diameter Bomb, CV-22, Agent Defeat Weapon, Wide Area Search Autonomous Attack Miniature Munition (WASAAMM), and LAZARUS/BLADES
 - Army:
 - Future Combat Systems, BAT P3I, Line of Sight Anti-tank (LOSAT), Tactical UAV, Wide Area Munition, Comanche Passive Defensive Suite, Comanche Laser Warning Set, Modernized Hellfire, Future Scout Vehicle, XM-982 Excalibur, Common Missile, Longbow Hellfire, Longbow Apache, and Bat P3I
 - Navy/Marines:
 - VTUAV, ATFLIR, IEWS/MATES, ERGM, TADIRCM, and F/A-18 Kinematic Flare development, Advanced Amphibious Assault Vehicle, Advanced Land Attack Missile, AN/AAR-47 Upgrade Missile/Laser Warning, F/A-18 E/F Super Hornet, IDECM, and MV-22
 - Foreign:
 - WHEAT SPEAR, Foreign Hand-Held Thermal Sight, and Foreign Laser Adjunct Program B series, Foreign Active Protection System-II
 - M&S:
 - MV/CV-22 Tiltrotor and DVO tests, incorporate IR flare and IR threat missiles, as required, JASSM, Small Diameter Bomb
 - Other:
 - TTCP (Trials Dic-Dic and Blackbear), NATO Panels TG-17 and SWG-4
 - Provide CM inputs for evolving programs, identified by the Service Acquisition PEOs/PMs
 - CM Warfare Initiative:
 - Coordinate CM Warfare Initiative at the Combatant Command and MAJCOM levels, MAWTS-1 and 1st Cavalry, 4th Brigade Live-Fire

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- Direct plans for participation in operational warfighting exercises and simulations (Ulchi Focus Lens, and NTC, JRTC and CMTC Rotations, MEGA GOLD), Joint Red Flag 2004 and JTFEX 2004 Victory Strike
- Continue efforts establishing capability for a Warfighter organization capable of deploying CM in conflict
- Continue to provide inputs for EO/IR CM training and equipment and Joint Interoperability Tasks to establish requirements and objectives for operational exercises and simulations
- Continue to develop software modifications to warfighting models and simulations to reflect EO/IR countermeasures scenarios at the Joint and Component Service level (JCATS, JSIMS, and CASTFOREM)
- Develop demonstrator Test Simulation Program, which will provide tools for better test planning and post test analysis
- Review and analyze technical M&S software for use in DOT&E testing environment
- Continue to provide technical and analytical expertise in support of DOT&E M&S efforts
- JASP:
 - Complete participation on COVART/FASTGEN CCB
 - Complete Fuze Simulation & Phenominology Investigation project
 - Complete M&S support for acquisition programs
 - Complete Surface-to-Air missile credibility assessment project
 - Complete RADGUNS Maintenance Project
 - Complete Integrated Survivability Project
 - Complete Advanced Survivable Rotorcraft Validation Project
 - Complete UAV Active Acoustic Cancellation Project
 - Complete Imaging Seeker Aim Point Project
 - Complete Survivability Handbook rewrite
 - Complete ALARM Model Maintenance
 - Continue AJEM Model Maintenance
 - Continue SURVIAC Model Verification and Validation and Model Accreditation
 - Continue SURVIAC Model Manager Support
 - Continue Air to Air CCB for ASPEM and BRAWLER
 - Continue Component Vulnerability Analysis Archive Project
 - Continue MANPADS Damage Effects Modeling
 - Continue Imaging Seeker Countermeasures Susceptibility Study
 - Continue Laser-Focal Plane Array Effects Modeling for Laser Countermeasures Optimization
 - Continue Single Point Emitter Location (SPEL)
 - Continue ECM Waveform Profiler

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- Continue High Power Wideband Array Project
- Continue Susceptibility Reduction T&E Fidelity
- Continue the Imaging Infrared (IIR) Sensor
- Initiate Rod Warhead Damage Assessment & Analysis
- Initiate projects to counter advanced threats
- Initiate projects to develop survivability enhancements in fire & explosion protection
- Initiate projects to develop survivability enhancements in flight systems
- Initiate projects to develop survivability enhancements in platform & crew protection
- Initiate projects to develop survivability enhancements in propulsion systems
- Initiate projects to develop survivability enhancements in structural design
- Initiate projects to improve survivability analysis and design tools for Model management
- Initiate projects to improve survivability analysis and design tools for M&S credibility
- Initiate projects to reduce the MANPADS threat to aircraft
- JTCG/ME:
 - Develop JMEM data for most critical Combatant Commander identified systems. Continue conversion/updates of existing JMEMs to CD-ROM format (i.e., JMEM Air-to-Surface Weaponing System (JAWS) v3.0, Joint Anti-air Combat Effectiveness – Air Defense (J-ACE-AD) v3.0, Joint Anti-Air Combat Effectiveness - Air Superiority (J-ACE: AS) v3.0, JMEM/Surface-to-Surface Weaponing Effectiveness System (JWES) v3.0/4.0, and Target Vulnerability Data Management System (TVDMS) v2.0). CD-ROM update cycles will be reduced
 - Develop tri-service vulnerability/lethality methodology for the HEL program
 - Distribute products via the classified internet with the Joint Product and Information Access System (JPIAS) (Books-on-line, Automated products, Models, Tri-Service Data, and Support service)
 - Reduce major methodology shortcomings
 - Conduct Configuration Management/VV&A efforts on specific JTCG/ME models (i.e., JSEM, AJEM, MEVA, MUVES, and ASAP)
 - Continue the development of standardized models and methodology for Air-to-Surface, Surface-to-Surface and Anti-air effectiveness calculations (i.e., collateral damage, hardened targets, mean area of effectiveness (MAE) and dual stage warheads)
 - Continue expansion of existing databases to incorporate data for newly fielded weapons (i.e., Air-to-Surface Basic Manual – Revision 4, and Surface-to-Surface Direct/Indirect Fire)
 - Continue execution and technical coordination efforts to address Target Vulnerability data generation (e.g., Special Operations) and methodology improvements (e.g., counter proliferation, fragment penetration, ORCA extension, and target model generation)
 - Together with the JASP, release AJEM v3.x (Fire/Dry Bay Fire Module, TBM body-to-body, ullage explosion, Ground-mobile documentation, Supporting ASP documentation on CD, Fault Tree and Damage Assessment List, Common

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AJEM/MUVES GUI, ORCA Integration, Fire Prediction Model Integration, and BEAMS/ABEL Integration – Blast Load), and Joint Component Vulnerability Archive.

- Continue Combatant Commander data calls in support of FY 2005 program build requirements
- Continue to expand pilot programs for compliance with near-term acquisition programs to support JMEM production at system IOC
- Continue to develop/sanitize JMEM products for foreign customers and coalition operations
- JT&E:
 - Oversight of the JT&E programs.
 - Complete JGPSCE, conduct outbriefings, distribute the final reports, and transition legacy products.
 - Continue JCMD, JBDA, JC2ISR, JUAV-TSO, JMACA, JLOG-PE and SAC-prioritized FY 2003 joint tests.
 - Charter the SAC prioritized FY 2003 Feasibility Studies as Joint Tests and commence testing activities.
 - Conduct JT&E annual review of nominations for potential feasibility studies for conduct in FY 2005.
 - Determine through SAC prioritization the FY 2004 Feasibility Studies.

T&E Independent Activities

- Major Range and Test Facility Base (MRTFB) Support:
 - Analyze MRTFB institutional and customer data in support of policy decisions regarding the composition and management of the MRTFBs
 - Monitor and evaluate the MRTFB to ensure adequacy to meet requirements and to prevent unnecessary duplication of capabilities
 - Develop and issue a summary and database of MRTFB capabilities in coordination with the Military Departments for use in assessing future capability requirements
 - Analyze MRTFB data and propose issues for the Annual MRTFB Review. Prepare a Summary Report and follow-up to ensure implementation of DOT&E solutions to issues
 - Analyze T&E PPBS information for identification and resolution of potential shortfalls during POM and budget reviews
- Spectrum Support:
 - Analyze and report on alternative options for telemetry operations in higher frequency bands
 - Develop technical alternatives on issues affecting T&E infrastructure
 - Provide technical support to Range Spectrum Requirements Working Group on spectrum issues
- Telemetry Support:
 - Develop technical approach for Real Time Telemetry Network (RTTN)
 - Perform and conduct special studies on MRTFB radio spectrum issues
 - Continue to support DOT&E participation in International Consortium for Telemetry Secretary
- Special Studies (Examples):
 - Develop Space range plan
 - Review and revise MRTFB funding policy directives

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- Refine Hypersonics test capabilities modernization plan
- DTEPI:
 - Develop and update T&E course and training materials for the DoD T&E community to include computer based and WEB based training. Following are examples of projects:
 - Develop computer based training course for the following topics:
 - Range Safety Training Course
 - Test & Evaluation Overview
- T&E M&S:
 - Provide technical and analytical expertise in support of DOT&E M&S efforts
 - Review and analyze technical M&S software for use in DOT&E testing environment
 - Provide M&S assessments on key programs such as: Joint Modeling and Simulation System (JMASS), Joint Analytical Model and Instrumentation Program (JAMIP), Joint Distribution & Engineering Plan (JDEP) and Joint Warfare System (JWARS)
 - Prepare final report on the study of military technology trends, and their impact on future M&S requirement, in support of T&E
 - Continue support of the Test Simulation Program, which will provide tools for better test planning and post test analysis
- Official Travel and Administrative Support:
 - Perform official travel in support of the DOT&E oversight of T&E infrastructure
 - Procure administrative support to carry out oversight of DOT&E programs
- Accounting and Financial Management Support:
 - Provide accounting and financial management support to the DOT&E

FY 2005 Plans:

T & E Programs:

- Threat Systems:
 - Simulators
 - Provide oversight of Service activities in support of the DoD validation program for Service threat simulators and threat digital models
 - Execute the DoD validation program for threat simulators and threat digital models
 - Provide threat assessment for DOT&E planning and evaluation
 - Update the Automated Threat Systems Handbook to maintain inventory of threat representative assets available for the T&E community
 - Implement common threat missile fly-out models used for test and evaluation
 - Conduct technical investigations and identify improvements to threat representations to ensure threat adequacy for multi-spectral sensor fusion T&E environments

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- Continue improvements to threat missile representations used in end-to-end testing of missile warning and countermeasures effectiveness
- Continue oversight of Service threat simulators and threat digital models
- Continue technical investigations to identify solutions for effectively representing asymmetric threats to include Chemical, Biological, Radiological, and Nuclear (CBRN); Information Warfare (IW); and terrorism-related threats to Homeland Defense in testing of U.S. weapons systems
- Continue threat support to T&E through investigations of current scientific and technical intelligence information for insertion in Service threat representation modeling programs
- Continue the cooperative technical research and test bed projects to ensure threat representation adequacy in T&E
- Continue to provide the tools to exchange the latest scientific and technological information between T&E and intelligence communities
- Targets
 - Provide oversight of the Service activities in support of the DoD validation program for Service threat representative targets
 - Provide OSD seed funds to prototype solution to highest priority deficiencies in current target systems (e.g., Underwater Tracking System, Subscale Target Electronic Countermeasures (ECM) / Infrared (IR) Threat Realism, and Electronic Control Countermeasures (ECM) Miniaturization)
 - Support the implementation of new target modeling and simulation capabilities/tools that meet multi-Service T&E needs within common/DoD standard architectures (e.g., Subscale IR Countermeasures, and Advanced Off-Board Countermeasures)
 - Continue oversight of Service threat representative targets
- Center for Countermeasures:
 - CCM will test, analyze, report, and otherwise support over 30 US and foreign PGW systems/components in a countermeasure environment, as well as CM and threat-warning systems and other activities and programs, as listed below:
 - Air Force:
 - F-22 Raptor (AA - SA Static Seeker Test), JASSM, HH-60G SPS, AATC Comet, ASTE, A-10/F-16 FDE, Small Diameter Bomb, CV-22, Agent Defeat Weapon and WASAAMM
 - Army:
 - Comanche, Future Combat Systems, BAT P3I, LOSAT, Tactical UAV, Wide Area Munition, Comanche Passive Defensive Suite, Comanche Laser Warning Set, Modernized Hellfire, Future Scout Vehicle/Calvert System, Excalibur XM-982 Common Missile, Longbow Hellfire, Longbow Apache, and Bat P3I
 - Navy/Marines:

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- Evolved Sea Sparrow, Joint Strike Fighter, Rolling Airframe Missile, VTUAV, ATFLIR, IEWS/MATES, ERGM, TADIRCM, F/A-18 Kinematic Flare development, Advanced Amphibious Assault Vehicle, Advanced Land Attack Missile, AN/AAR-47 Upgrade Missile/Laser Warning, F/A-18 E/F Super Hornet, IDECM, and MV-22
- Foreign:
 - WHEAT SPEAR, Foreign Hand-Held Thermal Sight, Foreign Active Protection System-II, Foreign Laser Beamrider Live-Fire, Foreign Precision Guided Munition B series, Foreign False Target Generator, Foreign Laser Guided Projectile
- M&S:
 - MV/CV-22 Tiltrotor and DVO tests, incorporate IR flare and IR threat missiles, as required, JASSM, Small Diameter Bomb
- Other:
 - TTCP, NATO Panels TG-17 and SWG-4
 - Provide CM inputs for evolving programs, identified by the Service Acquisition PEOs/PMs
 - CM Warfare Initiative:
 - Coordinate CM Warfare Initiative at the Combatant Command and MAJCOM levels, MAWTS-1 and 1st Cavalry, 4th Brigade Live-Fire
 - Direct plans for participation in operational warfighting exercises and simulations (Ulchi Focus Lens, and NTC,JRTC and CMTC Rotations, MEGA GOLD), Joint Red Flag 2005 and JTFEX 2005, Roving Sands 2005 Victory Strike
 - Continue efforts establishing capability for a Warfighter organization capable of deploying CM in conflict
 - Continue to provide inputs for EO/IR CM training and equipment and Joint Interoperability Tasks to establish requirements and objectives for operational exercises and simulations
 - Continue to develop software modifications to warfighting models and simulations to reflect EO/IR countermeasures scenarios at the Joint and Component Service level (JCATS, JSIMS, and CASTFOREM)
- Develop demonstrator Test Simulation Program, which will provide tools for better test planning and post test analysis
- Review and analyze technical M&S software for use in DOT&E testing environment
- Continue to provide technical and analytical expertise in support of DOT&E M&S efforts
- JASP:
 - Complete Armor Attachment Techniques Project
 - Complete Rod Warhead Damage Assessment & Analysis
 - Complete Imaging Seeker Countermeasures Susceptibility Study
 - Complete Laser-Focal Plane Array (FPA) Effects Modeling for Laser Countermeasures Optimization

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- Complete High Power Wideband Array Project
- Continue AJEM Model Maintenance
- Continue SURVIAC Model Verification and Validation and Model Accreditation
- Continue SURVIAC Model Manager Support
- Continue ALARM Model Maintenance
- Continue Component Vulnerability Analysis Archive Project
- Initiate projects to counter advanced threats
- Initiate projects to develop survivability enhancements in fire & explosion protection
- Initiate projects to develop survivability enhancements in flight systems
- Initiate projects to develop survivability enhancements in platform & crew protection
- Initiate projects to develop survivability enhancements in propulsion systems
- Initiate projects to develop survivability enhancements in structural design
- Initiate projects to improve survivability analysis and design tools for Model management
- Initiate projects to improve survivability analysis and design tools for M&S credibility
- Initiate projects to reduce the MANPADS threat to aircraft
- JTCG/ME:
 - Develop JMEM data for most critical Combatant Commander identified systems. Continue updates of existing JMEMs CD-ROMs (i.e., JMEM Air-to-Surface Weaponing System (JAWS) v3.x, Joint Anti-air Combat Effectiveness – Air Defense (J-ACE-AD) v3.x, Joint Anti-Air Combat Effectiveness - Air Superiority (J-ACE: AS) v4.0, JMEM/Surface-to-Surface Weaponing Effectiveness System (JWES) v4.0, and Target Vulnerability Data Management System (TVDMMS) v3.0). Continue to reduce CD-ROM update cycles through incremental updates. Transition to Target Oriented JMEMs
 - Together with the JASP, release AJEM v3.x and Joint Component Vulnerability Archive.
 - Develop tri-service vulnerability/lethality methodology for the DEW program
 - Distribute products via the classified internet with the Joint Product and Information Access System (JPIAS) (Books-online, Automated products, Models, Tri-Service Data, and Support service)
 - Conduct Configuration Management/VV&A efforts on specific JTCG/ME models
 - Continue the development of standardized models and methodology for Air-to-Surface, Surface-to-Surface and Anti-Air effectiveness calculations
 - Continue expansion of existing databases to incorporate data for newly fielded weapons (i.e., Air-to-Surface, Surface-to-Surface Direct/Indirect Fire and Anti-Air)
 - Continue execution and technical coordination efforts to address Target Vulnerability data generation and methodology improvements)
 - Continue Combatant Commander data calls in support of FY 2006 program build requirements

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- Continue to engage near-term acquisition programs to support JMEM production at system IOC (i.e., bring critical developmental systems into the JMEM process)
- Continue to work National Disclosure Policy issues relative to JMEM product release for foreign customers and coalition operations
- T&E:
 - Oversight of the JT&E programs.
 - Complete JCMD, JBDA, JC2ISR, JUAV-TSO, and JMACA conduct outbriefings, distribute the final reports, and transition legacy products.
 - Continue JLOG-PE and SAC-prioritized FY 2003, and FY2004 joint tests.
 - Charter the SAC prioritized FY 2004 Feasibility Studies as Joint Tests and commence testing activities.
 - Conduct JT&E annual review of nominations for potential feasibility studies for conduct in FY 2006.
 - Determine through SAC prioritization the FY 2005 Feasibility Studies.

T&E Independent Activities

- Major Range and Test Facility Base (MRTFB) Support:
 - Analyze MRTFB institutional and customer data in support of policy decisions regarding the composition and management of the MRTFBs
 - Monitor and evaluate the MRTFB to ensure adequacy to meet requirements and to prevent unnecessary duplication of capabilities
 - Develop and issue a summary and database of MRTFB capabilities in coordination with the Military Departments for use in assessing future capability requirements
 - Analyze MRTFB data and propose issues for the Annual MRTFB Review. Prepare a Summary Report and follow-up to ensure implementation of DOT&E solutions to issues
 - Analyze T&E PPBS information for identification and resolution of potential shortfalls during POM and budget reviews
- Spectrum Support:
 - Analyze and report on alternative options for telemetry operations in higher frequency bands
 - Develop technical alternatives on issues affecting T&E infrastructure
 - Provide technical support to Range Spectrum Requirements Working Group on spectrum issues
- Telemetry Support:
 - Continue to support DOT&E participation in International Consortium for Telemetry Secretary
 - Develop technical approach for Real Time Telemetry Network (RTTN)
 - Perform and conduct special studies on MRTFB radio spectrum issues
- Special Studies (Examples):
 - Develop process for and initiate MRTFB modernization planning with industry
 - Update MRTFB 15 to 20 year modernization plan
 - Develop integrated test and training range plan

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- DTEPI:
 - Develop and updates T&E course and training materials for the DoD T&E community to include computer based and WEB based training. Following are examples of projects:
 - Develop computer based training course for the following topics:
 - A Guide to Targets and their Capabilities
- T&E M&S:
 - Provide technical and analytical expertise in support of DOT&E M&S efforts
 - Review and analyze technical M&S software for use in DOT&E testing environment
 - Provide M&S assessments on key programs such as: Joint Modeling and Simulation System (JMASS), Joint Analytical Model and Instrumentation Program (JAMIP), Joint Distribution & Engineering Plan (JDEP) and Joint Warfare System (JWARS)
 - Prepare final report on the study of military technology trends, and their impact on future M&S requirement, in support of T&E
 - Continue support of the Test Simulation Program, which will provide tools for better test planning and post test analysis
- Official Travel and Administrative Support:
 - Perform official travel in support of the DOT&E oversight of T&E infrastructure
 - Procure administrative support to carry out oversight of DOT&E programs
- Accounting and Financial Management Support:
 - Provide accounting and financial management support to the DOT&E

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B. (U) PROGRAM CHANGE SUMMARY

(\$ in Millions)	<u>FY 2002</u> <u>Appropriation</u>	<u>FY 2003</u> <u>President's</u> <u>Budget</u>	<u>FY 2004</u> <u>President's</u> <u>Budget</u>	<u>FY 2005</u> <u>President's</u> <u>Budget</u>
FY 2003 President's Budget	60.525	62.941	64.798	66.269
Current Budget Submit	63.884	64.140	103.245	104.679
Total Adjustments	3.359	1.199	38.447	38.410
Congressional Program Reductions		(1.808)		
Congressional Rescissions	(0.301)			
Congressional Increases				
Big Crow		3.500		
Reprogramming	3.660 ¹			
Program Adjustment			40.183 ²	40.496 ²
Inflation Adjustment		(0.493)	(1.736)	(2.086)

Notes:

1. Reprogramming of Big Crow from PE 0605941D to 060580D4 (4.000) and reprogrammin of (0.340) from 060580D4 to PE 0605118D
2. Reflects the transfer of the JT&E program from USD(AT&L) Appropriation 0400 to DOT&E and Appropriation 0460

C. (U) OTHER PROGRAM FUNDING SUMMARY: NA