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Exhibit R-2, RDT&E Project Justification							May 2009	
OPERATIONAL TEST AND EVALUATION, DEFENSE (0460) BUDGET ACTIVITY 6 (RDT&E MANAGEMENT SUPPORT)				OPERATIONAL TEST ACTIVITIES AND ANALYSES (OT&A) PROGRAM ELEMENT (PE) 0605814OTE				
Cost (\$ In Millions)	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
PE 0605814OTE	118.787	122.429	119.838					

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**.

The Test and Evaluation programs are continuing efforts that provide management and oversight of test and evaluation functions and expertise to the Department of Defense (DoD). The T&E programs consist of five activities: Joint Test and Evaluation (JT&E); Threat Systems (TS); Center for Countermeasures (CCM); Joint Technical Coordinating Group for Munitions Effectiveness (JTTCG/ME); and Joint Aircraft Survivability Program (JASP).

Joint Test and Evaluation projects are test and evaluation activities conducted in a joint military environment that develop process improvements. These multi-Service projects, chartered by the Office of the Secretary of Defense and coordinated with the Joint Staff, appropriate combatant commanders, and the Services, provide non-materiel solutions that improve: joint interoperability of Service systems, technical and operational concepts, joint operational issues, development and validation of joint test methodologies, and test data for validating models, simulations, and test beds. The JT&E projects address relevant joint war fighting issues in a joint test and evaluation environment by developing and providing new tactics, techniques, and procedures to improve joint test capabilities and methodologies.

Threat Systems, based on a memorandum of agreement between the Director, Operational Test and Evaluation (DOT&E) and the Defense Intelligence Agency, provides DOT&E support in the areas of threat resource analysis, intelligence support and threat systems investments. Threat Systems provides threat resource analyses on the availability, capabilities and limitations of threat

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representations (threat simulators, targets, models, U.S. surrogates and foreign materiel) and analysis of test resources used for operational testing to support DOT&E's assessment of the adequacy of testing for those programs designated for oversight by DOT&E and the Office of the Under Secretary of Defense for Acquisition, Technology and Logistics (OUSD(AT&L)). Threat Systems provides DOT&E assessment officers with program specific threat intelligence support. Threat Systems also funds management, oversight, and development of common-use threat specifications for threat simulators, threat representative targets, and digital threat models used for test and evaluation.

The **Center, a Joint Service Countermeasure (CM) Test and Evaluation Center**, serves as DoD's independent tester for CM assessments of U.S. and foreign precision guided weapons (PGWs) and sensor systems, CMs, counter-countermeasures (CCMs), and warning devices. The Center provides assessments, including test activities, analysis of test results, and consulting expertise, that benefit the Services, joint activities, T&E Agencies, the Intelligence Community, Homeland Defense, Operation Iraqi Freedom and Operation Enduring Freedom (quick reaction response). The Center identifies current weaknesses and limitations of systems and, through carefully developed test and assessment methodologies, provides the basis for understanding how systems might be affected by CMs in the battlefield. The Center's staff and CM knowledge base, developed for more than 35 years, provides the DoD acquisition community and the Combatant Commanders with the information and expertise necessary for survival of U.S. forces on the modern battlefield.

The Joint Logistics Commanders **Joint Technical Coordinating Group for Munitions Effectiveness (JTTCG/ME)** was chartered more than 30 years ago to serve as DoD's focal point for munitions effectiveness information Joint Munitions Effectiveness Manuals (JMEmS) on all major non-nuclear U.S. weapons. JTTCG/ME authenticates weapons effectiveness data for use in training, systems acquisition, weapon procurement, and combat modeling and simulation. JMEmS are used by the Armed Forces of the U.S., NATO, and other allies to plan operational missions, support training and tactics development, and support force-level analyses. JTTCG/ME also develops and standardizes methodologies for evaluation of munitions effectiveness and maintains databases for target vulnerability, munitions lethality, and weapon system accuracy. Operational lessons learned (Enduring Freedom and Iraqi Freedom), Combatant Commands, Services, Military Targeting Committee, and Operational Users Working Groups input for specific weapon-target pairings and methodologies continue to drive JMEmS requirements and development processes.

The **Joint Aircraft Survivability Program** is the DoD's focal point for joint service enhancement of military aircraft non-nuclear survivability. The JASP is chartered by the commanders of the USN Naval Air Systems Command, USA Aviation and Missile Command and USAF Aeronautical Systems Center to coordinate and conduct RDT&E to improve military aircraft survivability, develop and standardize aircraft survivability modeling and simulation (M&S), facilitate information exchange on aircraft survivability and support aircraft survivability education for the DoD and U.S. aircraft community. Each chartering command

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provides a senior aircraft survivability expert for the JASP Principal Members Steering Group (PMSG), which guides the program and approves projects for funding. The JASP assesses and reports on combat damage incidents through the Joint Combat Assessment Team (JCAT), is the Executive Agent for the Joint Live Fire Aircraft Systems Program managed by the Live Fire Test office of DOT&E and is also an Executive Agent for the Survivability Vulnerability Information Analysis Center (SURVIAC), the repository for aircraft survivability information.

The **Test and Evaluation Independent Activities** program is the only source of funding for DOT&E studies, analyses, and management to provide continuing support of policy development oversight of the DoD test and evaluation practices, infrastructure and resources; and transformation of test methods and infrastructure to ensure future defense systems provide necessary joint warfighting capabilities. Studies and analyses examine the implications and consequences of current and proposed policy, plans, operations, strategies, and budgets and are essential for the accomplishment of the DOT&E mission. This program element funds travel in support of its activities.

This program element is budgeted in Budget Activity 6, RDT&E Management Support, to support management activities for the DOT&E oversight responsibility for test and evaluation and test and evaluation resources.

Note: Starting in FY 2010, funding for DOT&E Administrative Support and Financial Services has been realigned to Operation Test and Evaluation program element (0605118OTE). These functions are in direct support of the Director, Operational Test and Evaluation and are more appropriately funded under the Operational Test and Evaluation program.

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ACCOMPLISHMENTS/PLANNED PROGRAM

FY 2008 Accomplishments

Joint Test and Evaluation (JT&E)

During FY 2008 the JT&E program had ten on-going projects and additional new projects as approved by its Senior Advisory Council and Executive Steering Group. Three of these ten projects have or will close in FY 2008. One of these projects is the Joint Fires Coordination Measures Joint Test which produced new tactics, techniques and procedures to standardize the establishment of joint fires area using current command and control systems. This project provided input into various joint fires area publications. Another project scheduled to close is the Joint Integrated (Interagency and International) Command and Control for Maritime Homeland Defense Joint Test which assesses joint command and control processes at the combatant command level to facilitate improved decision-making and operational employment of joint, intergovernmental, and multinational assets against identified maritime threats to the continental U.S. The third project to close, Joint Command and Control for War on Terror Activities Joint Test, achieved its goals under budget and three months early. This project tested and evaluated tactics, techniques, and procedures that integrate special operations forces on cruise missile submarines. On a continual basis, the office of Joint Test and Evaluation reviews nominations for new projects, manages on-going projects, ensures that closing projects are debriefed, distributes final reports, and transitions to Service organizations as appropriate.

Threat Systems

Provided analytical support for test adequacy issues for those programs designated for oversight by DOT&E and OUSD(AT&L). This includes oversight of Service threat representation developments and acquisitions; oversight and analysis of service prepared threat representation validation reports; participation in technical and programmatic reviews; and, documenting threat resource descriptions and technical characteristics in the Automated Joint Threat Systems Handbook.

Threat Systems provided DOT&E assessment officers with program specific threat intelligence support by sponsoring threat analysis briefings in response to program technical issues; initiating DOT&E intelligence production requirements; and conducting liaison with the intelligence community. It also provided focused investments to apply new technologies and innovations for increased threat realism for T&E including hardware/software development of threat simulators, targets, digital threat models, threat surrogates, foreign materiel and hardware-in-the-loop simulations.

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In FY 2008, Threat Systems concluded its efforts to define the infrared test and evaluation infrastructure necessary to test missile warning and countermeasures equipment; conducted design studies for testing against advanced surface-to-air missile systems; initiated threat modeling and simulation efforts to standardize threat models used for test and evaluation; completed a four year effort to improve the availability of threat representative multi-spectral mobile ground targets; continued to sponsor the joint OSD and Services Target Control Study Group efforts to gain target control system interoperability; co-chaired a combined Service and OSD 5th generation full scale aerial target study that examined future test requirements, conceptual designs, and improvements to the current government cost models. In addition, the Threat Systems activity continued test planning working group participation, conducted special studies and provided current intelligence support tailored to specific U.S. weapon systems acquisition. These activities helped DOT&E carry out its Title 10 responsibilities to assess test adequacy and determine whether testing is realistic and suitable, and promoted common solutions to Service threat representation needs.

Center for Countermeasures (the Center)

The Center tested, analyzed, and reported on more than 25 U.S. and foreign PGW systems components in a CM environment as well as CM and threat-warning systems and other programs. Each program supported receives an independent assessment of findings and test support for CM/CCM evaluations. Approximately 50 percent of the programs that received support are under DOT&E oversight; 25 percent are smaller programs that do not meet oversight criteria; 8 percent are foreign systems; and 17 percent were training and exercise support. Fifty percent of the Center's efforts were directly tied to the Global War on Terror. The Center's support was distributed across all the Services as well as intelligence agencies and government technology developers.

The Center provided expertise to many organizations and was actively involved in the following panels: the Technical Cooperation Program, Foreign Material Exploitation Working Group, Air Force Directed Energy Task Force – Laser, Joint Expendable Countermeasures Working Group, Future Combat Systems Integrated Product Team, JCTG/ME Working Group, UJTL (Universal Joint Task List)/JTRAT (Joint Training Requirements Analysis Team) Working Group, Infrared Countermeasures Test Resources and Requirements Study, Infrared Countermeasures Multi Sensing Symposia Working Group, International Test and Evaluation Test & Technology Panel, and the Joint Aircraft Survivability Program.

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Joint Technical Coordinating Group for Munitions Effectiveness (JTCG/ME)

In support of operational commanders, DoD targeteers, weaponeers, and planners, the office of JTCG/ME developed and released a beta version of JMEM Weaponeering System (JWS) v2.0 in August 2008 and Joint-Antiair Combat Effectiveness System (J-ACE) Air Superiority (AS) v3.2.1 beta version in September 2008.

JWS v2.0 is a combined product of the JMEM Air-to-Surface (JMEM/AS) and JMEM Surface-to-Surface (JMEM/SS) communities. It represents a combination of the formerly separate JMEM/AS Weaponeering System (JAWS) and JMEM/SS Weapons Effectiveness (JWES) products. It includes target vulnerability for approximately 200 calculated/surrogated targets; descriptive information, data, and graphics in the Browse section; computer programs and methods needed to accomplish weaponeering in the Weaponeering section; step-by-step guides to weaponeering in the Training Checklists and Wizards; and Help files. JWS v2.0 provides the capability to evaluate the effectiveness of any number of combinations for various Air-to-Surface and Surface-to-Surface weapons against a variety of target types in real-time or in the form of quick, pre-calculated data.

J-ACE: AS v3.2.1 contains Joint Antiair Model (JAAM) v3.2.2 which can read Eglin P5-format Time and Space Position Information (TSPI) data files, new TMAP models for red and grey air-to-air missiles, Missile and Space Intelligence Center (MSIC) Threat Modeling and Analysis Program (TMAP) Surface-to-Air missiles and logic checks for maximum off-bore sight launch angle limits.

Joint Aircraft Survivability Program (JASP)

In FY 2008 the JASP office continued to work on 26 multi-year RDT&E projects and initiated 32 new projects as approved by the JASP Principal Members Steering Group and OSD/DOT&E. In the area of susceptibility reduction, the JASP addressed improving directed energy infrared countermeasures, electronic countermeasures technology and techniques, aircrew situational awareness and immediate warfighter needs. In the area of vulnerability reduction, the JASP continued to address requirements for lighter and more effective armor, fuel containment and fire suppression, and initiate new efforts investigating vulnerability reduction techniques and technologies for aircraft flare systems and aircrew/passenger protection. In aircraft survivability modeling and simulation (M&S), the JASP continued to improve survivability M&S credibility, refine warfighter requirements for aircraft survivability and develop methodology and processes to satisfy those requirements, integrate DIA threat missile models into threat engagement codes, initiate new efforts to improve the assessment of aircraft crew and passenger injury, and address M&S requirements identified by the joint aircraft survivability community.

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The JCAT continued to support the USMC, Army and Air Force by assessing combat damage incidents as required, training warfighters on threat effects and combat damage assessment and reporting their findings to combatant commanders and the DoD science and technology and acquisition communities. The JASP will continue supporting aircraft survivability education and information exchange through internet sites (restricted access and classified), by publishing the Aircraft Survivability Newsletter, developing educational materials and conducting training for the DoD and their contractors. The JASP office will initiate, continue and complete other projects as approved by the JASP Principal Members Steering Group and OSD/DOT&E.

Test and Evaluation Independent Activities

FY 2008 funds were used to provide continuing support of policy development oversight of the DoD test and evaluation practices, infrastructure and resources; and transformation of test methods and infrastructure to ensure future defense systems provide necessary joint warfighting capabilities. Funding was used to support the development of technical alternatives on issues affecting test and evaluation resources and infrastructure. Also funded administrative support to carry out oversight of DOT&E programs as well as provide accounting and financial management capability to DOT&E. This program element funds travel in support of its activities.

This program element is budgeted in Budget Activity 6, RDT&E Management Support, to support management activities for the DOT&E oversight responsibility for test and evaluation and test and evaluation resources.

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FY 2009 Plans

Joint Test and Evaluation (JT&E)

In FY 2009 JT&E will have four projects closing down, all of which started in FY 2006. The projects closing in this fiscal year work on a broad range of issues, from joint test methods and processes to command and control of network enabled weapons. By the time it closes in FY 2009, the Joint Test and Evaluation Methodology project will have produced the guidelines and procedures for conducting live, virtual, and constructive operational testing simulating joint military operations. This will allow the Services to test like they fight. Another project that will close in FY 2009 is the Joint Mobile Network Operations project. It will have helped the Services integrate their mobile networks so that any Service member can cross through any Service mobile network and have access to his data and services. One of the on-going projects, the Joint Electronic Protection for Air Combat Joint Test, is developing the systems architecture and processes that will allow a pilot to receive information from joint military assets when the pilot's electronic equipment is being jammed. On a continual basis, JT&E reviews nominations for new projects, manages on-going projects, and ensures that closing projects are debriefed, distributes final reports and transitions to Service organizations as appropriate.

Threat Systems

In FY 2009, Threat Systems will initiate development of standard, DIA-validated airborne jammer models for use throughout the Department to evaluate jamming effects on U.S. aircraft; continue to address testing against advanced threats that may be encountered in such countries as Iran and China; continue test planning working group participation to identify threat shortfalls early in the acquisition process; conduct special studies and provide current intelligence support tailored to specific U.S. weapon systems acquisition; design experiments to demonstrate test facility connectivity for enhanced weapons systems testing and improve end-to-end testing of U.S. threat warning and countermeasures systems; continue with the second year of a four-year project to integrate current intelligence community-based missile models into all DoD Hardware-In-The-Loop countermeasure test facilities; investigate how to develop and implement a more robust open-air threat environment to make operational testing more realistic; initiate efforts to develop threat test assets that can be used for testing in a joint test environment; investigate new cost effective target scoring technologies, apply and demonstrate the newly developed target control interface standards, and continue efforts to ensure the adequacy of full scale aerial target testing. These activities help DOT&E carry out its Title 10 responsibilities to assess test adequacy and determine whether testing is realistic and suitable and promotes common solutions to Service threat representation needs.

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Center for Countermeasures (the Center)

The Center will test, analyze, and report on more than 25 U.S. and foreign PGW systems/components in a CM environment as well as CM and threat-warning systems and other programs. Each program supported will receive an independent assessment of our findings and test support for CM/CCM evaluations. Approximately 55 percent of the programs that are anticipated to receive support are under DOT&E oversight; 17 percent are smaller programs that do not meet oversight criteria; 11 percent are foreign systems; and 17 percent are projected to be training and exercise support. We anticipate 50% of the Center's efforts will be directly tied to the Global War on Terror. Our support is distributed across all the Services as well as intelligence agencies and government technology developers.

The Center will provide expertise to many organizations and will be actively involved in the following panels: the Technical Cooperation Program, Foreign Material Exploitation Working Group, Precision Strike Association, Air Force Directed Energy Task Force – Laser, Joint Expendable Countermeasures Working Group, Future Combat Systems Integrated Product Team, JCTG/ME Working Group, UJTL/JTRAT Working Group, Infrared Countermeasures Test Resources and Requirements Study, Infrared Countermeasures Multi Sensing Symposia Working Group, International Test and Evaluation Test & Technology Panel and the Joint Aircraft Survivability Program.

Joint Technical Coordinating Group for Munitions Effectiveness (JTCEG/ME)

In support of operational commanders, DoD targeteers, weaponeers, and planners, the JTCEG/ME will develop and release: (i) JMEM Weaponeering System (JWS) v2.0 in March 2009; (ii) JWS v2.0.1 in September 2009; and Joint-Antiair Combat Effectiveness System (J-ACE) Air Superiority (AS) v3.2.1 in December 2008 and v4.0 in June 2009.

JWS v2.0, a capabilities-based JMEM, provides a single weaponeering process (“one-stop shop” weaponeering) by integrating air-to-surface and surface-to-surface methods; provides the capability to “sanitize” for easy release to foreign customers and coalition partners; and, improves external interfaces for Mission Planning Systems and other external JMEM users. JWS v2.0.1 will include an additional 150 target surrogates with associated effectiveness data.

J-ACE: AS v4.0 contains Joint Antiair Model (JAAM) v4.0 and additional AIM-9M/X, AIM-120C effectiveness data and architectural/modularity/GUI improvements.

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During FY 2009, JTCG/ME will continue to: (i) implement a capabilities-based JMEM, accounting for newly fielded systems employing traditional and non-traditional damage mechanisms; (ii) expand existing databases to incorporate newly fielded weapons (i.e., Air-to-Surface, Surface-to-Surface Direct/Indirect Fire, and Anti-air); (iii) enhance collateral damage methods; and, improve methods for estimating weapons effects against above/below ground hardened target to include MOUT structures; (iv) improve connectivity to real time planning systems assessing time sensitive targets; and, (v) develop JMEM data for most critical Combatant Commander identified systems, reduce CD-ROM update cycles through incremental updates; and develop tri-Service JMEM operation tools for JMEM/FX and IO programs.

Joint Aircraft Survivability Program (JASP)

In FY 2009 the JASP will continue work on at least 30 multi-year RDT&E projects and initiate 15 new projects approved by the JASP Principal Members Steering Group and OSD/DOT&E. In the area of susceptibility reduction, the JASP will address improving directed energy infrared countermeasures, electronic countermeasures technology and techniques, aircrew situational awareness and immediate warfighter needs. In the area of vulnerability reduction, the JASP will continue to address requirements for lighter and more effective armor, fuel containment, fire suppression; aircraft flare systems and aircrew and passenger protection. In aircraft survivability M&S, the JASP will continue to improve survivability M&S credibility, address warfighter requirements for survivability data, integrate DIA threat missile models into threat engagement codes, improve the assessment of aircrew and passenger injuries, and address M&S requirements identified by the joint aircraft survivability community.

The JCAT will continue to support the USMC, Army and Air Force by assessing combat damage incidents as required, training warfighters on threat effects and combat damage assessment and reporting their findings to combatant commanders and the DoD science and technology and acquisition communities. The JASP will continue supporting aircraft survivability education and information exchange through internet sites (restricted access and classified), by publishing the Aircraft Survivability Newsletter, developing educational materials and conducting training for the DoD and their contractors. The JASP will initiate, continue and complete other projects as approved by the JASP Principal Members Steering Group and OSD/DOT&E.

Test and Evaluation Independent Activities

During FY 2009 funding will provide continuing analysis and analytical support for the Director, Operational Test and Evaluation, Title 10, United States Code, roles and responsibilities with regard to operational and live fire test and evaluation as the principal adviser to the Secretary of Defense and the USD(AT&L) and as the principal test and evaluation official within the senior management of the DoD. Funding also supports the Director's operational and live fire test resource requirements for the statutory

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strategic plan. This plan reflects the needs of the Department with respect to test and evaluation facilities and resources, as well as developing technical alternatives on issues affecting test and evaluation resources and infrastructure. Procure administrative support to carry out oversight of DOT&E programs as well as provide accounting and financial management capability to DOT&E. This program element also funds travel in support of its activities.

FY 2010 Plans

Joint Test and Evaluation (JT&E)

In FY 2010 JT&E has three projects slated for closing and an estimated four projects on-going from FY 2008 and 2009. Joint Non-Kinetic Effects Integration Joint Test, scheduled to close in FY 2010, is developing the tactics, techniques, and procedures to integrate electronic, computer network attacks, and space control during time sensitive planning activities against adversary control systems and associated infrastructures and processes. Another project scheduled to close in FY 2010 is Joint Air Defense Operations-Homeland. This project concentrates on two aspects of planning the use of deployable air and cruise missile defense assets: the effective use of combined (U.S. and Canadian) air and cruise missile defense capabilities to defeat asymmetric aerial threats; and, the interagency portion of planning to incorporate the air and cruise missile defense capabilities. On a continual basis, JT&E reviews nominations for new projects, manages on-going projects, and ensures that closing projects are debriefed, distributes final reports and transitions to Service organizations as appropriate.

Threat Systems

In FY 2010, Threat Systems will complete development of standard, DIA-validated airborne jammer models for use throughout the Department to evaluate effects on U.S. aircraft; evaluate proposals to develop and implement a more robust open-air threat environment to make operational testing more realistic; continue to address testing against advanced threats that may be encountered in such countries as Iran and China; continue test planning working group participation to identify threat shortfalls; conduct special studies and provide current intelligence support tailored to specific U.S. weapon systems acquisition; demonstrate test facility connectivity for enhanced weapons systems testing and improving end-to-end testing of U.S. threat warning and countermeasures systems; continue efforts to develop threat test assets that can be used for testing in a joint test environment; continue with the third year of a four-year project to integrate current intelligence community-based missile models into all DoD Hardware-In-The-Loop countermeasure test facilities; demonstrate the use of commercial rotary wing aircraft as future full scale rotary wing targets, expand the use of standard target control interfaces and architectures, and continue efforts to ensure the adequacy of full scale

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aerial target testing. These activities help DOT&E carry out its Title 10 responsibilities to assess test adequacy and determine whether testing is realistic and suitable and promotes common solutions to Service threat representation needs.

Center for Countermeasures (CCM)

The Center will test, analyze, and report on more than 25 U.S. and foreign PGW systems/components in a CM environment as well as CM and threat-warning systems and other programs. Each program supported will receive an independent assessment of our findings and test support for CM/CCM evaluations. Approximately 50 percent of the programs that are anticipated to receive support are under DOT&E oversight; 20 percent are smaller programs that do not meet oversight criteria; 15 percent are foreign systems; and 15 percent are projected to be training and exercise support. We will continue to support the warfighter as needed. Our support is distributed across all the Services as well as intelligence agencies and government technology developers.

The Center will provide expertise to many organizations and will be actively involved in the following panels: the Technical Cooperation Program, Foreign Material Exploitation Working Group, Precision Strike Association, Air Force Directed Energy Task Force – Laser, Joint Expendable Countermeasures Working Group, Future Combat Systems Integrated Product Team, JCTG/ME Working Group, UJTL/JTRAT Working Group, Infrared Countermeasures Test Resources and Requirements Study, Infrared Countermeasures Multi Sensing Symposia Working Group, International Test and Evaluation Test & Technology Panel and the Joint Aircraft Survivability Program.

Joint Technical Coordinating Group for Munitions Effectiveness (JTTCG/ME):

In support of operational commanders, DoD targeteers, weaponeers, and planners, the JTTCG/ME will develop and release JMEM Weaponeering System (JWS) v2.1 in October 2010 and Joint Antiair Model (JAAM) v4.1 in June 2010.

JMEM will add fielded and emerging Information Operations (IO), Directed Energy (DE) and Non-lethal (NL) weapons to create an Effects Based Operations (EBO) evaluation capability. The scope will include weapon characterization, coordinating test data development and providing operational tools for the IO elements of Computer Network Attack and Electronic Warfare; Laser and Radio Frequency DE; and, NL systems against materiel and personnel targets. This weapon effectiveness and associated confidence level data are critical enablers for application of these weapons as it will provide senior leaders and warfighters with information to develop policy and concepts of operations for their use. JMEM information has been a requirement to support conventional weapon system fielding; this expansion will support IO, DE and NL weapon fielding. The end state is targeting cycle selection of the best weapon to precisely achieve desired effect while minimizing collateral damage.

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JTCG/ME will continue to: (i) develop JMEM data for most critical Combatant Commander identified systems; (ii) reduce CD-ROM update cycles through incremental updates; (iii) develop tri-Service JMEM operational tools for JMEM/FX and IO programs; (iv) implement a capabilities-based JMEM, accounting for newly fielded systems employing traditional and non-traditional damage mechanisms; (v) expand existing databases to incorporate newly fielded weapons (i.e., Air-to-Surface, Surface-to-Surface Direct/Indirect Fire, and Anti-air); (vi) enhance collateral damage and hardened target structure methodology; and, (vii) provide connectivity to real time planning systems assessing time sensitive targets.

Joint Aircraft Survivability Program (JASP)

In FY 2010 the JASP will continue work on at least 26 multi-year RDT&E projects and initiate new projects approved by the JASP Principal Members Steering Group and OSD/DOT&E. In the area of susceptibility reduction, the JASP will address improving directed energy infrared countermeasures, electronic countermeasures technology and techniques, aircrew situational awareness and immediate warfighter needs. In the area of vulnerability reduction, the JASP will continue to address requirements for lighter and more effective vulnerability reduction technology (e.g., armor, fuel containment, fire suppression, and aircrew and passenger protection). In aircraft survivability M&S, the JASP will continue to improve survivability M&S credibility, address warfighter requirements for survivability data, integrate DIA threat missile models into threat engagement codes, improve the assessment of aircrew and passenger injuries, and address M&S requirements identified by the joint aircraft survivability community.

The JCAT will continue to support the USMC, Army and Air Force by assessing combat damage incidents as required, training warfighters on threat effects and combat damage assessment and reporting their findings to combatant commanders and the DoD science and technology and acquisition communities. The JASP will continue supporting aircraft survivability education and information exchange through internet sites (restricted access and classified), by publishing the Aircraft Survivability Newsletter, developing educational materials and conducting training for the DoD and their contractors. The JASP will initiate, continue and complete other projects as approved by the JASP Principal Members Steering Group and OSD/DOT&E.

Test and Evaluation Independent Activities

Funding will provide continuing analysis and analytical support for the Director, Operational Test and Evaluation, Title 10, United States Code, roles and responsibilities with regard to operational and live fire test and evaluation as the principal adviser to the Secretary of Defense and the USD(AT&L) and as the principal test and evaluation official within the senior management of the DoD. Funding will also support the Director's operational and live fire test resource requirements for the statutory strategic plan. This plan

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reflects the needs of the Department with respect to test and evaluation facilities and resources, as well as developing technical alternatives on issues affecting test and evaluation resources and infrastructure. This program element funds travel in support of its activities. Starting in FY 2010, funding for administrative and financial services is realigned from the Operational Test Activities and Analyses program to Operational Test and Evaluation (0605118OTE).

B. (U) PROGRAM CHANGE SUMMARY

(\$ in Millions)	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
FY 2009 President's Budget	118.887	124.004	126.661
Current Budget Submit	118.787	122.429	119.838
Total Adjustments	-.100	-1.575	-6.823
Congressional general reductions	-	-1.575	-
Economic Adjustments	-	-	-1.756
Reprogramming	-.100	-	-
Other Realignments	-	-	-3.422
Program Adjustments	-	-	-1.645

C. (U) OTHER PROGRAM FUNDING: NA

D. (U) ACQUISITION STRATEGY: NA

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E. (U) PERFORMANCE METRICS:

Performance Measure: Percentage of required products, such as test planning documents, munitions effectiveness manuals, tactics-techniques-procedures, threat characteristics, assessments, and reports that are developed and delivered to program managers and customers on time.

Actual Performance and Goals

Operational Test Activities and Analyses	FY 2008 Act.	FY 2009 Goal	FY 2010 Goal
On-Time Completion Rate	92%	94%	95%

The on-time completion rate was computed on the basis of the number of required products that were submitted within established time standards relative to the total number of such products that fell due during the fiscal year. DOT&E plans to achieve its goals for FY 2009 and FY 2010 through increased management emphasis on timely delivery of required products to customer activities.