

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Operational Test and Evaluation, Defense **Date:** March 2014

Appropriation/Budget Activity 0460: <i>Operational Test and Evaluation, Defense / BA 6: RDT&E Management Support</i>	R-1 Program Element (Number/Name) PE 0605814OTE / <i>Operational Test Activities and Analyses</i>
--	---

COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	113.467	73.317	121.948	48.013	-	48.013	47.754	48.538	49.506	50.462	Continuing	Continuing
0605814OTE: OTA&A	113.467	73.317	121.948	48.013	-	48.013	47.754	48.538	49.506	50.462	Continuing	Continuing

The FY 2015 OCO Request will be submitted at a later date.

Note

Starting in FY 2013 the Joint Technical Coordinating Group for Munitions Effectiveness (JTTCG/ME) and the Joint Aircraft Survivability Program (JASP) initiatives were realigned from the Operational Test Activities and Analyses program element (0605814OTE) to the Live Fire Test and Evaluation program element (0605131OTE). Since the JTTCG/ME and JASP programs focus on the survivability of currently fielded systems the two programs are more appropriately funded within the Live Fire Test and Evaluation program element.

A. Mission Description and Budget Item Justification

The Operational Test Activities and Analyses (OTA&A) programs are continuing efforts that provide management and oversight of test and evaluation functions and expertise to the Department of Defense (DoD). The OTA&A programs consist of three activities: Joint Test and Evaluation (JT&E); Threat Systems (TS); and Center for Countermeasures (CCM).

Joint Test and Evaluation complements the DoD Acquisition System by developing new tactics, techniques, and procedures (TTPs) to improve the effectiveness of existing fielded systems. JT&E 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 nonmaterial 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 TTPs 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 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 and other DOT&E activities 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 for Countermeasures (The Center), a Joint Service Countermeasure (CM) Test and Evaluation Center, serves as DoD's independent evaluator for electro-optical systems with emphasis on rotary wing survivability, precision guided weapons (PGWs), CMCs/counter-countermeasures (CCMs) employment, and warning

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Operational Test and Evaluation, Defense	Date: March 2014
---	-------------------------

Appropriation/Budget Activity 0460: <i>Operational Test and Evaluation, Defense I</i> BA 6: <i>RDT&E Management Support</i>	R-1 Program Element (Number/Name) PE 0605814OTE / <i>Operational Test Activities and Analyses</i>
---	---

devices. The Center conducts tests, analyzes test results and provides CM expertise that benefits the Services, Joint activities, T&E Agencies, DoD Acquisition Community, the Intelligence Community, Homeland Defense and Overseas Contingency Operations (OCO). Data collected during Center test activities provides valuable information to OSD assessment officers for select oversight programs. The Center assesses current and developing systems, using carefully developed test and evaluation methodologies to provide the basis for understanding how CMs might affect systems used in current and future battlefields. Additionally, the Center develops CM specific test equipment that can be used for both Title 10 Acquisition Systems and OCO urgent operational needs.

This Program Element is budgeted in Budget Activity 6, RDT&E Management Support, to support management activities for the DOTE oversight responsibilities of test and evaluation functions.

B. Program Change Summary (\$ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	63.566	62.157	63.545	-	63.545
Current President's Budget	73.317	121.948	48.013	-	48.013
Total Adjustments	9.751	59.791	-15.532	-	-15.532
• Congressional General Reductions	-0.110	-			
• Congressional Directed Reductions	-5.641	-0.709			
• Congressional Rescissions	-	-			
• Congressional Adds	19.500	60.500			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-3.998	-			
• SBIR/STTR Transfer	-	-			
• Budget Control Act	-	-	-15.434	-	-15.434
• Travel Efficiencies	-	-	-0.098	-	-0.098

Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: 0605814OTE: OTA&A

Congressional Add: *Unjustified reduction*

Congressional Add: *Electronic Warfare Test Capability*

Congressional Add Subtotals for Project: 0605814OTE

Congressional Add Totals for all Projects

FY 2013	FY 2014
19.500	-
-	60.500
19.500	60.500
19.500	60.500

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2015 Operational Test and Evaluation, Defense										Date: March 2014		
Appropriation/Budget Activity 0460 / 6					R-1 Program Element (Number/Name) PE 0605814OTE / <i>Operational Test Activities and Analyses</i>				Project (Number/Name) 0605814OTE / OTA&A			
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
0605814OTE: OTA&A	113.467	73.317	121.948	48.013	-	48.013	47.754	48.538	49.506	50.462	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
# The FY 2015 OCO Request will be submitted at a later date.												
A. Mission Description and Budget Item Justification												
The Operational Test Activities and Analyses (OTA&A) programs are continuing efforts that provide management and oversight of test and evaluation functions and expertise to the Department of Defense (DoD). The OTA&A programs consist of three activities: Joint Test and Evaluation (JT&E); Threat Systems (TS); and the Center for Countermeasures (CCM). Starting in FY 2013 the JTCG/ME and JASP programs were realigned from the Operational Test Activities and Analyses program element (0605814OTE) to the Live Fire Test and Evaluation program element (0605131OTE). Since the JTCG/ME and JASP programs focus on the survivability of currently fielded systems the two programs are more appropriately funded within the Live Fire Test and Evaluation program element.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2013	FY 2014	FY 2015	
Title: Operational Test Activities and Analyses									53.817	61.448	48.013	
FY 2013 Accomplishments: Joint Test and Evaluation (JT&E) In FY 2013 the JT&E Program leadership implemented changes to the program's business processes due to a 43 percent budget reduction starting this fiscal year. The JT&E staff and the program's stakeholders developed a concept of operations (CONOPS) in FY 2012 that provided the details of the new business model, based on the revised budget. The most significant changes in the new model are shorter timelines for project development and execution, as well as the designation of permanent facilities to house test teams. These two changes will allow test teams to share resources, as well as staff and execute new projects quickly. Additionally, the selection cycles of the program's quick reaction tests and joint tests will be aligned so that the program's governing bodies will meet concurrently to maximize effectiveness and minimize travel costs. The program had three joint tests close and four joint tests continue in the fiscal year. One of the three tests to close was the Joint Integration of Maritime Domain Awareness for Homeland Defense Joint Test, which developed joint tactics, techniques, and procedures to synchronize information concerning the maritime domain for key decision markers across operations centers for homeland defense, completed in October 2012. The next test to close, Joint Cyber Operations Joint Test, developed and evaluated tactics, techniques, and procedures to enable the use of an adaptive cyber defense strategy for critical C2 services against cyber threats across the DoD Global Information Grid. The third test that closed at the end of the fiscal year was the Joint Unmanned Aircraft Systems (UAS) Digital Information Exchange Joint Test, which developed joint tactics, techniques, and procedures to standardize the information exchange methods and dissemination paths to integrate UAS-derived information across the Services to support both deliberate and dynamic targeting requirements.												

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2015 Operational Test and Evaluation, Defense		Date: March 2014	
Appropriation/Budget Activity 0460 / 6	R-1 Program Element (Number/Name) PE 0605814OTE / <i>Operational Test Activities and Analyses</i>	Project (Number/Name) 0605814OTE / OTA&A	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2013	FY 2014
<p>The program did not start any new joint tests in FY 2013 due to the lack of nominations that met the new submission guidelines. The program did initiate ten quick reaction tests, which are short term projects directed to work on problems of limited scope. The program also initiated one special project. Four feasibility studies will be conducted in the second half of the fiscal year instead of the programmed two studies. Out of the four studies, two will be selected to conduct joint tests to place the program on track for project execution in FY 2014.</p> <p>Threat Systems</p> <p>Threat Systems continued test planning working group participation to identify threat shortfalls; conducted special studies and provided current intelligence support tailored to specific U.S. weapon systems acquisitions; continued the development of Global Positioning Satellite jamming capabilities to increase threat realism at our test ranges, and continued the development of an ammunition and rocket propelled grenade signature model for use in hostile fire indicator systems.</p> <p>In FY 2013, Threat Systems became the lead for implementing the threat M&S roadmap to ensure threats to US and Allied infrared countermeasure systems are available for testing. Threat Systems established a formal configuration management system for the development, maintenance, anomaly resolution and distribution of threat performance models with tri-Service and Allied representation. Threat Systems also initiated an investigation of ballistic missile related threats; began development of the follow-on next generation threat GPS jammer; and identified representative cyber warfare threats for testing. In addition, Threat Systems managed a series of technical analyses of WESTPAC threats by each of the Intelligence Production Centers to determine characteristics the test community needs to adequately emulate current threats and their densities in potential engagements.</p> <p>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.</p> <p>The Center</p> <p>The Center completed over 50 T&E activities and analyzed and reported on more than 40 different systems, with special emphasis on rotary wing survivability, CM/CCM employment, warning and targeting systems, and PGWs. Most programs supported received an independent assessment of our data/findings and test support for their CM/CCM evaluations. Approximately 49% of the Center's efforts were spent on aircraft survivability equipment (ASE) testing; with the majority of these efforts in support of rotary wing aircraft. About 11% of the Center's efforts were spent on PGW, foreign systems, and other types of field testing not related to ASE. Approximately 6% of the Center's efforts were dedicated to OCO support, with</p>			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2015 Operational Test and Evaluation, Defense			Date: March 2014		
Appropriation/Budget Activity 0460 / 6		R-1 Program Element (Number/Name) PE 0605814OTE / <i>Operational Test Activities and Analyses</i>		Project (Number/Name) 0605814OTE / OTA&A	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2013	FY 2014	FY 2015
<p>emphasis on CM-based, pre-deployment training for rotary wing units. Thirty two percent of the Center's efforts were spent on internal programs to improve test capabilities and to develop test methodologies for new types of T&E activities, much of which was accomplished in concert with the Central Test and Evaluation Investment Program (CTEIP). Programs include the CTEIP-sponsored, Joint Mobile Infrared Countermeasure Test System (JMITS), Towed Aerial Plume Simulator (TAPS) and Multi-Spectral Sea and Land Target Simulator (MSALTS). The Center is expanding in the electronic warfare (EW) realm with a new internally funded Portable Range Threat Simulator (PRTS) capability. These systems, as well as the new remote launch systems (RLS) and the Hostile Fire Signature (HSIG) Models, will be used in support of testing for both Title 10 programs and OCO ASE urgent operational needs. Our support was distributed across all the Services, as well as intelligence agencies and research and development activities.</p> <p>About 2% of the Center's efforts consisted of providing subject matter expertise and other support not directly related to scheduled test activities. The Center provided expertise to many organizations and was actively involved in the following panels: Joint Expendable Countermeasures (JECM) Integrated Product Team, Joint Infrared Countermeasures Multi Sensing Symposia Working Group (MSS IRCM WG), Joint Aircraft Survivability Program (JASP), Foreign Material Exploitation Working Group, Foreign Material Program T&E Subcommittee, Joint Project Mallari Working Group, Joint Countermeasures T&E Working Group (JCMT&E WG), and JCMT&E WG Hostile Fire Indicator (HFI) subgroup lead.</p> <p>FY 2014 Plans: Joint Test and Evaluation (JT&E)</p> <p>By FY 2014, the program will be on the nomination-selection-execution cycle developed in FY 2012, but will continually adjust the business model to improve the process.</p> <p>In FY 2014 JT&E has two joint test projects slated to close out of the four joint test projects ongoing from FY 2013. The Joint Advanced Capability Employment Joint Test, anticipated to close in August 2014, will to develop and test tactics, techniques, and procedures to enable the joint task force commander to employ advanced capabilities to overcome complex targeting challenges. The Joint Deployable Integrated Air and Missile Defense Joint Test, scheduled to close in June 2014, will develop, test, and evaluate tactics, techniques, and procedures to enable the joint task force commander to employ integrated deployable air, cruise missile, and theater ballistic missile defense capabilities.</p> <p>Four new feasibility studies will be conducted in FY 2014, two of which will be selected to conduct joint tests.</p> <p>Threat Systems</p>					

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2015 Operational Test and Evaluation, Defense		Date: March 2014	
Appropriation/Budget Activity 0460 / 6	R-1 Program Element (Number/Name) PE 0605814OTE / <i>Operational Test Activities and Analyses</i>	Project (Number/Name) 0605814OTE / OTA&A	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2013	FY 2014
<p>Beginning in FY 2014, Threat Systems will re-scope its DOT&E-funded investment program. This action will eliminate the technical threat analyses needed for the development of modern and advanced threat test assets which are currently test limitations for electronic warfare and advanced avionics programs. All other Threat Systems support will continue.</p> <p>Threat Systems will continue test planning working group participation and perform technical analyses to identify threat shortfalls; conduct special studies and provide current intelligence support tailored to specific U.S. weapon systems acquisitions; continue managing intelligence “deep dives” to produce intelligence in sufficient detail to develop new threat test assets; operate and maintain the modeling and simulation configuration control board for threat models and simulation used in test facilities; and continue the development and implementation of a tri-Service and Allied threat M&S roadmap to ensure infrared countermeasure systems have sufficient threat test assets. Threat Systems will propose, manage and oversee threat test assets that support DOT&E-identified threat shortfalls, identifying candidate threat systems from the various intelligence agencies for possible development of models for use in test and evaluation. Threat Systems will also continue efforts to maintain a standard set of threat performance models and incorporate the initial hostile fire indicator model for small arms and RPGs for use in test and evaluation facilities and continue investigating ballistic missile related threats.</p> <p>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.</p> <p>The Center</p> <p>The Center will test, analyze, and report on more than 30 systems, with emphasis on rotary wing survivability, CMs/CCMs employment, warning and targeting systems, and PGWs. Each program supported will receive an independent assessment of our data/findings and test support for CM/CCM evaluations. The Center will continue to emphasize support of the DOT&E enterprise, with a clear focus on Title 10 weapons systems, aircraft survivability and hostile fire initiatives. It will continue to conduct ongoing investigations towards determining and filling the gaps in EW and multimode system testing. In addition to these test activities, the Center will continue to provide CM expertise in pre-deployment events and training, as well as CM/CCM-focused tactics, techniques and procedures (TTP) development. The Center will complete the initial development of the CTEIP-sponsored MSALTS, which will be used in support of testing for both Title 10 programs and ASE urgent operational needs. The Center will work with CTEIP and AEDC on the development of JSIS to add enhanced data collection for radiometric events. The Center will complete the development of a new RLS capable of launching larger diameter missiles. The Center plans to complete development of the PRTS, expanding its output power and our capability to support multimode guidance T&E. The Center will continue working with the Threat Simulator Working Group (TSWG)-sponsored HSI&G model. Our support will be distributed across all the Services, as well as intelligence agencies and research and development activities.</p>			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2015 Operational Test and Evaluation, Defense		Date: March 2014	
Appropriation/Budget Activity 0460 / 6	R-1 Program Element (Number/Name) PE 0605814OTE / <i>Operational Test Activities and Analyses</i>	Project (Number/Name) 0605814OTE / OTA&A	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2013	FY 2014
<p>The Center will provide expertise to many organizations and will continue to be actively involved in the following panels: JECM Integrated Product Team, Joint Infrared Countermeasures Multi Sensing Symposia Working Group (MSS IRCM WG), JASP, Foreign Material Exploitation Working Group, Foreign Material Program T&E Subcommittee, Joint Project Mallari Working Group, JCMT&E WG, and JCMT&E WG HFI subgroup lead.</p> <p>FY 2015 Plans: In FY 2015 JT&E has two projects slated to close and an estimated four projects ongoing from FY 2014. The Joint Counter Low, Slow, Small UAS Joint Test, anticipated to close in April 2015, will develop and test integrated air and missile defense operator procedures to increase their ability to detect, track, and identify low, slow, and small UASs and provide timely notification to the area air defense commander. The Unmanned Aircraft Systems Airspace Integration Joint Test, scheduled to close in July 2015, will develop, test, and evaluate standardized DoD UAS procedures to support effective UAS flight operations in the National Airspace System.</p> <p>Four new feasibility studies will be conducted in FY 2015, two of which will be selected to conduct joint tests.</p> <p>Threat Systems</p> <p>In FY 2015, Threat Systems will continue test planning working group participation and perform technical analyses to identify threat shortfalls; conduct special studies and provide current intelligence support tailored to specific U.S. weapon systems acquisitions. Threat Systems will:</p> <ul style="list-style-type: none"> - Provide intelligence support to DOT&E staff to address specific questions on threat systems affecting programs on the OSD T&E Oversight list and provide briefings and special intelligence reports when necessary - Sustain and manage threat M&S to support test and evaluation by overseeing and coordinating intelligence community developed threat models, performing threat model anomaly resolution resolving differences from live fire testing, integrating threat models into T&E facilities and distributing performance and signature models to T&E users. - Manage Integrated Technical Evaluation and Analysis of Multiple Sources (ITEAMS) efforts supporting F-35 and other EW programs by conducting intelligence “deep dives” to produce intelligence in sufficient detail to develop new threat test assets. - Represent DOT&E at foreign material exchanges, inter-agency coordinating groups, and non-proliferation groups to raise awareness of T&E needs for foreign material, coordinate service requirements, and de-conflict and prioritize foreign material requirements for T&E. - Represent DOT&E at the Intelligence Mission Data Oversight Board responsible for development, production and sharing issues affecting the intelligence data supporting weapons systems acquisition. - Oversee new and legacy threat system investments. 			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2015 Operational Test and Evaluation, Defense		Date: March 2014	
Appropriation/Budget Activity 0460 / 6	R-1 Program Element (Number/Name) PE 0605814OTE / <i>Operational Test Activities and Analyses</i>	Project (Number/Name) 0605814OTE / OTA&A	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2013	FY 2014
<p>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.</p> <p>The Center</p> <p>The Center will test, analyze, and report on more than 30 systems, with special emphasis on aircraft survivability, CMs/CCMs employment, warning and targeting systems, and PGWs. Each program supported will receive an independent assessment of our data/findings and test support for CM/ CCM evaluations. The Center will continue to emphasize support of the DOT&E enterprise, with a clear focus on Title 10 weapons systems, aircraft survivability and hostile fire initiatives. Furthermore, the Center will continue to provide CM expertise in pre-deployment events and training, as well as CM/CCM-focused TTP development. The Center will continue Improvement and Modernization (I&M) efforts to improve our T&E capabilities. The Center will continue to work with the TSWG-sponsored HSI&G model. Our support will be distributed across all the Services, as well as intelligence agencies and research and development activities.</p> <p>The Center will provide expertise to many organizations and will continue to be actively involved in the following panels: JECM Integrated Product Team, Joint Infrared Countermeasures Multi Sensing Symposia Working Group (MSS IRCM WG), JASP, Foreign Material Exploitation Working Group, Foreign Material Program T&E Subcommittee, Joint Project Mallari Working Group, JCMT&E WG, and JCMT&E WG HFI subgroup lead.</p>			
Accomplishments/Planned Programs Subtotals		53.817	61.448
		FY 2013	FY 2014
Congressional Add: Unjustified reduction		19.500	-
<p>FY 2013 Accomplishments: JT&E started several new projects in August 2013: 1) four Joint Feasibility Studies (JFS), an increase of two JFSs over the baseline budget, and 2) eight Quick Reaction Tests (QRTs), an increase of four over the baseline budget. Ultimately, seven QRTs were directed because the Miniature Air Launched Decoy Support to Stand-off Weapons QRT candidate was not technically supportable.</p> <p>FY 2014 Plans: Rather than the normally planned six QRTs, JT&E is planning to select 10 QRTs. The 26 February 14 SAC will select two Joint Tests and two new JFSs, resulting in an increase of one Joint Test.</p>			
Congressional Add: Electronic WarfareTest Capability		-	60.500
<p>FY 2014 Plans: In FY14 \$60.5M was transferred to DOT&E to rapidly develop and procure open loop emitter systems for open-air range testing of F-35 and other air warfare weapon systems. These systems will be utilized</p>			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2015 Operational Test and Evaluation, Defense		Date: March 2014
Appropriation/Budget Activity 0460 / 6	R-1 Program Element (Number/Name) PE 0605814OTE / <i>Operational Test Activities and Analyses</i>	Project (Number/Name) 0605814OTE / OTA&A

	FY 2013	FY 2014
by developmental and operational testing, and eventually for training scenarios. They will provide realistic density and emulate behavior of numerous advanced threat systems.		
Congressional Adds Subtotals	19.500	60.500

C. Other Program Funding Summary (\$ in Millions)
 N/A

Remarks

D. Acquisition Strategy
 Not Applicable

E. Performance Metrics
 (U) PERFORMANCE METRICS:

Performance Measure: Percentage of required products, such as test planning documents, 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 2013 (Actual)	FY 2014 (Goal)	FY 2015 (Goal)
On-Time Completion Rate	94%	95%	96%

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 maintain its on-time completion rates for FY 2014 and FY 2015 through increased management emphasis on timely delivery of required products to customer activities.