Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Office of Secretary Of Defense										DATE: February 2011	
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 3: *Advanced Technology Development (ATD)*				R-1 ITEM NOMENCLATURE PE 0603618D8Z: *Joint Electronic Advanced Technology*							
COST ($ in Millions)	**FY 2010**	**FY 2011**	**FY 2012 Base**	**FY 2012 OCO**	**FY 2012 Total**	**FY 2013**	**FY 2014**	**FY 2015**	**FY 2016**	**Cost To Complete**	**Total Cost**
Total Program Element	25.576	8.386	7.287	-	7.287	7.179	7.846	8.535	8.821	Continuing	Continuing
P619: *Joint Electronic Advanced Technology*	25.576	8.386	7.287	-	7.287	7.179	7.846	8.535	8.821	Continuing	Continuing

A. Mission Description and Budget Item Justification

In Overseas Contingency Operations (OCO), the United States must be ready to meet the widespread and growing threat of asymmetric weapons such as Man Portable Air Defense Systems (ManPADS), unguided hostile fire and portable small weapons improvised from commercially available electronic sensors, computer modules, navigation and control components coupled with various disruptive payloads. Such devices provide terrorists and foreign military units the novel means to rapidly construct a wide range of weapons capable of disruptive actions against civilian and military forces alike. The U.S. must be ready to counter such weapons on short notice.

The asymmetric nature of such devices is already well understood by terrorists. ManPADS and mortars have been used to attack both air and ground forces, and pose a threat in any region due to their portability. Digital processors, analog-to-digital converters and digital optical sensors give terrorists the means to deploy unexpected threats on short notice. Conventional kinetic defenses against these devices can be impractical in urban settings. Because the speed of appearance of these disruptive devices can be short, such threats are asymmetric in comparison with the long development cycles that are typical of U.S. military defensive systems. Together these asymmetries highlight the need to rapidly evolve alternative Electronic Warfare, Information Operations and Counter Terrorism capabilities suitable for neutralizing such threats in a timescale that is commensurate with their appearance. This program element investigates novel means to detect and neutralize asymmetric threats, as well as special mission and other methods to employ asymmetric principles against our adversaries.

This program element seeks to identify rapidly deployable solutions (outside of service programs of record) that can effectively mitigate asymmetric threats by integrating advanced commercial or military off-the-shelf technology in innovative ways that augment and/or reduce risk when inserted into service programs of record.

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B. Program Change Summary ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	10.838	8.386	8.479	-	8.479
Current President's Budget	25.576	8.386	7.287	-	7.287
Total Adjustments	14.738	-	-1.192	-	-1.192
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	14.970	-			
• SBIR/STTR Transfer	-0.129	-			
• Other Program Adjustments	-0.103	-	-	-	-
• Defense Efficiency - Reports, Studies, Boards, and Commissions	-	-	-0.713	-	-0.713
• Defense Efficiency - Contractor Staff Support	-	-	-0.468	-	-0.468
• Economic Assumptions	-	-	-0.011	-	-0.011

Change Summary Explanation

Defense Efficiency – Report, Studies, Boards and Commissions. As part of the Department of Defense reform agenda, reflects a reduction in the number and cost of reports, studies, DoD Boards and DoD Commissions below the aggregate level reported in the previous budget submission.

Defense Efficiency – Contractor Staff Support. As part of the Department of Defense reform agenda, reduces funds below the aggregate level reported in the previous budget submission for contracts that augment staff functions.

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COST ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
P619: *Joint Electronic Advanced Technology*	25.576	8.386	7.287	-	7.287	7.179	7.846	8.535	8.821	Continuing	Continuing

A. Mission Description and Budget Item Justification

The widespread and growing availability of sophisticated, commercially available electronic sensors, computer modules, navigation and control components coupled with widely proliferated Man Portable Air Defense Systems (ManPADS), portable explosives, mortars, rockets provide terrorists and foreign military units with the novel means to rapidly construct a wide range of weapons capable of disruptive actions against military forces. In Overseas Contingency Operations (OCO), the United States must be ready to counter such weapons on short notice. The asymmetric nature of such devices is already well understood by terrorists. ManPADS, man portable weapons and mortars have been used to attack both air and ground forces, and pose a threat to any region due to their portability. Digital processors, analog-to-digital converters and digital optical sensors give terrorists the means to deploy unexpected threats on short notice. Because conventional kinetic defenses against these devices can be impractical in urban settings and because the speed of appearance of such devices can be short, such threats are disruptive and asymmetric in comparison with the typically long development cycles associated with U.S. military defensive systems. These asymmetries highlight the need to rapidly evolve alternative Electronic Warfare, Information Operations and Counter Terrorism capabilities suitable for neutralizing such threats. This program element will investigate novel means to detect and neutralize these asymmetric threats, as well as special mission and other methods to employ asymmetric principles against our adversaries.

This program element seeks to identify rapidly deployable solutions (outside of service programs of record) that can effectively mitigate asymmetric threats by integrating advanced commercial or military off-the-shelf technology in innovative ways that augment and/or reduce risk when inserted into service programs of record. Laboratory and field testing will be used to evaluate the feasibility and military utility of resultant low cost, near term capabilities. FY 2012 efforts will investigate, integrate, test and demonstrate elements of the following technologies:

1. Integrated Situational Awareness and Countermeasures

DoD helicopters currently use a federated architecture of sensors and countermeasures to protect themselves against guided and unguided hostile threats while simultaneously avoiding collisions with the ground and other obstacles. These sensors typically provide the pilot with a separate display of radar, radar warning, missile warning or off-board communications to guide the pilot in selecting automatic or manual countermeasures against radar, laser, or radio frequency guided threats. These un-fused sensors create a serial information stream which can induce an inadequate response to the threat. These federated systems consume weight, space, and power which are at a premium in small platforms. The initial goal of this project is to fuse multiple functions such as missile detection and countermeasures, hostile fire detection, navigation in visually degraded environments, and active search using optical detection into a one or two aperture device with a single integrated display to produce improved situational awareness. Subsequent efforts of this joint service government/contractor team will assess integration of multi-platform sensor fusion using Radio Frequency (RF) and laser data-links to create cross-platform shared situation awareness among a section or division of helicopters or Unmanned Aerial Vehicles (UAVs) which is more complete than a single platform warning/tracking system. Such efforts will be proven in a series of Rotary Wing Aircraft Survivability Experiments (RASE), bringing sensors and shooters together in a collaborative learning environment using live fire with a variety of weapons and environments.

2. Low Cost/Near Term Counter Asymmetric Systems

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Investigate low cost, near term technologies solutions to allow aircraft to fly in medium to high ManPADS threat airspace in support of OCO. Emphasis is on threats, aircraft and system approaches that are not covered by existing programs of record including but not limited to: innovative threat warning, advanced pyrophoric decoys, miniature high reliability lasers, magnetically steered high reliability pointer-trackers, higher powered and higher duty cycle lasers, preemptive countermeasures systems.

Three specific tasks leading to a rapid technology transition will be completed by FY 2011:

Distributed Ground-based Threat Detection System (DGTDS) is a passive electro-optic technology that can detect an airborne ManPADS threat and declare it to aircraft in the vicinity so that active or passive countermeasures can be employed to defeat the incoming missile. DGTDS provides the technology for a ground based regional aircraft missile warning system that can protect a large airspace using passive optical sensors. This warning system has an extremely high probability of detection and a very low false alarm rate. This technology will augment current missile warning systems in urban environments. The technology also can protect Civil Reserve Aircraft Fleet (CRAF) when they are retrofitted with Infrared Countermeasures (IRCM). CENTCOM, SOCOM, and TRANSCOM have all expressed interest.

Aircraft ManPADS Protection System (AMPS) was created to provide ground based missile launch detection notification to participating aircraft via ground to air data link and release of pyrotechnic or pyrophoric countermeasure to defeat missiles. Development of AMPS was a contracted effort. It will supplement current installed Ultra Violet (UV) missile launch detection systems to improve aircraft survivability against both long range and minimum range ManPADS engagements. SOCOM and TRANSCOM have all expressed interest.

Special Materials Aero Urban Decoy (SMAUD) is an advanced multi-part IRCM decoy which is non-pyrotechnic, safe, covert, and effective. The contractor is the advanced special materials developer and decoy designer. Decoy will provide effective IRCM using small (1x1 inch) decoys with minimal expenditure of payload (two decoys). SOCOM and Army have funded part of the work and expressed interest.

3. Disruptive Technology Defeat and Utilization
Emerging and disruptive technologies analysis; rapid prototyping of technologies required to adapt counter-terrorism techniques to threats in OCO. Primary payoff is an assessment of current system capabilities and limitations against the threat and capture of baseline system performance against the threat set for developing technologies. Joint Electronic Advanced Technology (JEAT) will demonstrate rapid prototyping of technologies required to combat adaptive threats in the OCO. Emphasis will be on demonstrating an end-to-end kill chain and techniques which minimize or eliminate collateral damage. Starting in FY 2011 and FY 2012, the efforts of this mostly-government team will include novel techniques to detect and locate the signatures of terrorist activities using electronic means. Trident Spectre provides a venue for various members of Special Forces, Conventional Forces and Intelligence Community to collaborate on and evaluate technologies and techniques related to “Tactical Intelligence” in a technical, operational, and safe environment. Trident Spectre provides an opportunity for capability developers (scientists, engineers, designers) to interact directly with tactical operators, collectors and analysts; and a process that correctly and efficiently reviews potential tactical Intelligence technologies and techniques that will enhance the operational capability of the DoD activities in OCO. Primary payoff is improved connectivity and more efficient collection and dissemination of Tactical Intelligence. Customers include CENTCOM, SOCOM, DDR&E, DoD Conventional/Special Forces, and members of the Intelligence Community. Products include an after action report and a transition plan moving management activities to SOCOM.

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Title: Integrated Situation Awareness and Countermeasures	5.685	1.623	2.640

Description: DoD helicopters currently use a federated architecture of sensors and countermeasures to protect themselves against guided and unguided hostile threats while simultaneously avoiding collisions with the ground and other obstacles. These sensors typically provide the pilot with a separate display of radar, radar warning, missile warning or off-board communications to guide the pilot in selecting automatic or manual countermeasures against radar, laser, or radio frequency guided threats. These un-fused sensors create a serial information stream which can induce an inadequate response to the threat. These federated systems consume weight, space, and power which are at a premium in small platforms. The initial goal of this project is to fuse multiple functions such as missile detection and countermeasures, hostile fire detection, navigation in visually degraded environments, and active search using optical detection into a one or two aperture device with a single integrated display to produce improved situational awareness. Subsequent efforts of this joint service government/contractor team will assess integration of multi-platform sensor fusion using RF and laser data-links to create cross-platform shared situation awareness among a section or division of helicopters or UAV's which is more complete than a single platform warning/tracking systems. Such efforts will be proven in a series of RASE, bringing sensors and shooters together in a collaborative learning environment using live fire with a variety of weapons and environments.

FY 2010 Accomplishments:
This project integrated missile warning, hostile fire warning, radar, radar warning, or off-board communications in a single integrated architecture adaptable to single or multiple platforms. By combining high-speed, high-resolution tracking mechanisms with either on-board decoys or on-/off-board directed-energy devices, it demonstrated the end-to-end capability to detect, track, and defeat shoulder-fired ManPADS and unguided weapons known to be in the hands of terrorists in OCO. FY 2010 accomplishments included creation of a prototype IRCM beam director that contains only one moving part which is a magnetically actuated mirror, and will significantly improve reliability of IRCM systems while supporting an expandable architecture. Feasibility of integrated hostile fire detection and geolocation was proven through experimentation. Deliverables included a report on feasibility of Hostile Fire Indication (HFI) detection, geolocation and countermeasures. Planned and executed the first RASE. High quality dynamic, live fire data was obtained by participants and a final report specifying results was provided to DDR&E.

FY 2011 Plans:
FY 2011 efforts include integration of a high speed optical detector (position sensing detector array) with the high speed magnetic mirror in a single unit to demonstrate a breadboard capability for hostile fire detection, geo-location and non-lethal countermeasures. Efforts to integrate features to navigate in degraded visual environments will be started. Follow-on testing will continue under RASE. Deliverables include a report on feasibility of combined IRCM/HFI/Degraded Visual Environment functionality.

FY 2012 Plans:

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Complete efforts to demonstrate the feasibility of a hostile fire detection and non-lethal countermeasures capability using unique high speed detectors and magnetically actuated optics. Demonstrate capability to use magnetically actuated mirror technology to provide situational awareness in degraded visual environments. Begin efforts to integrate free space laser communications capability based upon magnetically actuated optics and study/begin to demonstrate feasibility of combining design elements with IRCM, Hostile Fire Detection/Countermeasures and obstacle avoidance systems into an integrated package.			
Title: Low Cost/Near Term Counter Asymmetric Systems	16.513	2.177	1.144
Description: Investigate low cost, near term technologies solutions to allow aircraft to fly in medium to high ManPADS threat airspace in support of OCO. Emphasis is on threats, aircraft and system approaches that are not covered by existing programs of record including but not limited to: innovative threat warning, advanced pyrophoric decoys, miniature high reliability lasers, magnetically steered high reliability pointer-trackers, higher powered and higher duty cycle lasers, preemptive countermeasures systems. Three specific tasks leading to a rapid technology transition will be completed by FY 2011: DGTDS is a passive electro-optic technology that can detect an airborne ManPADS threat and declare it to aircraft in the vicinity so that active or passive countermeasures can be employed to defeat the incoming missile. DGTDS provides the technology for a ground based regional aircraft missile warning system that can protect a large airspace using passive optical sensors. This warning system has an extremely high probability of detection and a very low false alarm rate. The intellectual property, which is protected by multiple patents, was developed by the government. This technology will augment current missile warning systems in urban environments. The technology also can protect CRAF when they are retrofitted with IRCM. CENTCOM, SOCOM, and TRANSCOM have all expressed interest. AMPS was created to provide ground based missile launch detection notification to participating aircraft via ground to air data link and release of pyrotechnic or pyrophoric countermeasure to defeat missiles. Development of AMPS was a contracted effort. It will supplement current installed UV missile launch detection systems to improve aircraft survivability against both long range and minimum range ManPADS engagements. SOCOM and TRANSCOM have all expressed interest. SMAUD is an advanced multi-part IRCM decoy which is non-pyrotechnic, safe, covert, and effective. The contractor is the advanced special materials developer and decoy designer. Decoy will provide effective IRCM using small (1x1 inch) decoys with minimal expenditure of payload (two decoys). SOCOM and Army have funded part of the work and expressed interest. ***FY 2010 Accomplishments:***			

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
DGTDS, AMPS and SMAUD are designed to work together. Work in FY 2010 was directed toward allowing the basic technology to be implemented with tactically deployable COTS technology. The following hardware and software deliverables enabled the system to be configured into a tactically deployable package that will support the ongoing OCO. DGTDS algorithms were developed and tested for enhanced filtering at optical nodes to reduce data-link throughput requirements, to increase the probability of detection, to decrease the false alarm rate. The operating system was upgraded to LINUX based OS to create a deployable system architecture. The calibration system was completed to increase accuracy of missile track rate and shooter location determination. All obsolete COTS PC hardware replaced with Field Programmable Gate Array system to allow for implementation of anti-tamper protocols and implementation of core video processing algorithms in VHDL software. In conjunction with AMPS, DGTDS completed end to end, live-fire, system evaluation of all new hardware and software elements. AMPS completed testing of ground based prototype system, exceeding contract performance requirements; completed re-hosting of ground based control software to compatible operating system for integration into the DGTDS processor; completed final design of airborne hardware, completed manufacture of initial copies of airborne hardware; base-lined airborne hardware design for inclusion in final delivery of project documentation; delivered airborne hardware to environmental qualification and contractor test activities; and completed and published ground based closeout briefing and documentation. SMAUD continued development of a special materials decoy to provide protection for H-60 suppressed signature aircraft, and tested the ASC-1224 and ASC-1292 decoys in Dec 2009. In this government/contractor joint effort, test coordination, data handling and reporting was managed by JEAT. The resulting test data was distributed to Navy and Air Force modeling and simulation labs for analysis and further modeling, which resulted in the development of a modified decoy design. A report of the effectiveness results was provided to Army, Navy and Air Force IRCM program managers. The modified decoy, the ASC-1292D, was tested in May 2010. The test data was distributed to Navy and Air Force modeling and simulation labs for analysis, and a final decoy design was developed. A report of very promising effectiveness results was provided to Army, Navy and Air Force IRCM program managers. Mini Scanning Mirror (MSM) technology advancement was accomplished under this project in FY 2010. The team completed design and laboratory evaluation of IRCM scan mirror design to achieve TRL-5, completed a live fire and field evaluation of MSM at Tonopah and White Sands; conducted a feasibility demonstration of the MSM and Position Sensing Detector Array (PSD-A) to show feasibility and possible utility for hostile fire detection; and continued efforts to enable technology for integration into CIRCM increment 2. This project transitions to JEAT Integrated Situation Awareness and Countermeasures in FY 2011.			

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Defensive Systems Data Recorder (DSDR) was developed for Special Operations aircraft that will simultaneously record multiple Aircraft Survivability Equipment (ASE) systems' message traffic on their respective data line, have no effect on ASE performance, and be transparent to aircrew operations. Developed software tools for timely evaluation of DSDR downloads. Evaluated DSDR contributions to mission planning, intelligence analysis, and real-time situational awareness.			
FY 2011 Plans: DGTDS will focus on finalizing all system documents and hardware drawing to allow for a smooth transition of the technology to the customer. When completed, this technology will allow any large urban airfield to provide an exceptionally high quality of missile warning to any aircraft in the area. It can be coupled with either an air or ground based countermeasure system. System documentation will be completed to enable seamless technology transfer to limited production/industry. AMPS will complete aircraft hardware prototype creation, qualify hardware for prototype installation in aircraft, integrate into AH-1Z System Integration Lab at Naval Air Warfare Center, Weapons Division, China Lake, CA for system performance testing in Dec 2010, perform end-to-end live fire missile firing test at China Lake to demonstrate system performance in Dec 2010, close out project with final delivery of all system design documentation, hardware, and software code in Feb 2011. System design/ hardware will be available for near term integration/implementation for contingency operations. SMAUD will conduct effectiveness flight testing for the final decoy design for H-60 aircraft. Funding will be provided to DoD components for test planning, test aircraft and vans, and range costs in third quarter 2011. Conduct modeling and simulation of the potential effectiveness of this decoy concept for the CV-22. Funding will be provided to DoD Modeling and Simulation laboratories for analysis and transition. Estimate completion in second quarter 2011. Begin efforts to investigate novel means of detecting and locating signatures of terrorist activity, differentiating between terrorist and indigenous activities and providing timely, actionable intelligence enabling disruption of terrorist kill chains.			
FY 2012 Plans: Continue efforts to investigate novel means of detecting and locating signatures of terrorist activity, differentiating between terrorist and indigenous activities and providing timely, actionable intelligence enabling disruption of terrorist kill chains. Based upon the OSD Advanced Threat study, completed in FY 2010, JEAT will continue efforts to implement and demonstrations solutions to emerging threats. JEAT will begin efforts to evaluate techniques to rapidly develop countermeasures to advanced, fourth and fifth generation IR missiles. This will include signature measurements, modeling, technique development and			

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
evaluation as well as laboratory trials. Create and populate data into the countermeasures database available for broad joint service use.			
Title: Disruptive Technology Defeat and Utilization	3.378	4.586	3.503

Description: Emerging and disruptive technologies analysis; rapid prototyping of technologies required to adapt counter-terrorism techniques to threats in OCO. Primary payoff is an assessment of current system capabilities and limitations against the threat and capture of baseline system performance against the threat set for developing technologies. JEAT will demonstrate rapid prototyping of technologies required to combat adaptive threats in the OCO. Emphasis will be on demonstrating an end-to-end kill chain and techniques which minimize or eliminate collateral damage. In FY 2011 and FY 2012, the efforts of this mostly-government team will include novel techniques to detect and locate the signatures of terrorist activities using electronic means. Trident Spectre provides a venue for various members of Special Forces, Conventional Forces and Intelligence Community to collaborate on and evaluate technologies and techniques related to “Tactical Intelligence” in a technical, operational, and safe environment. Trident Spectre provides an opportunity for capability developers (scientists, engineers, designers) to interact directly with tactical operators, collectors and analysts; and a process that correctly and efficiently reviews potential tactical Intelligence technologies and techniques that will enhance the operational capability of the DoD activities in OCO. Primary payoff is improved connectivity and more efficient collection and dissemination of Tactical Intelligence. Customers include CENTCOM, SOCOM, DDR&E, DoD Conventional/Special Forces, and members of the Intelligence Community. Products include an after action report and a transition plan moving management activities from DDR&E.

FY 2010 Accomplishments:
This project provided expertise to Joint Integrated Air and Missile Defense Organization (JIAMDO), jointly with United States Northern Command (USNORTHCOM), for a variety of U.S. defense systems demonstrated and evaluated in the May 2010 timeframe and to demonstrate an end-to-end kill chain of UAVs via the Black Dart Capability Evaluation. Black Dart completed and published Black Dart VI Final Report; transitioned Black Dart sponsorship from OSD, AT&L to JIAMDO; Provided bridge expertise to JIAMDO for the planning and execution of Black Dart 2010; successfully executed Black Dart 2010, May 2010; Provided JIAMDO with detailed statistical data on UAV sorties and mission profiles flown; Provided JIAMDO detailed Lessons Learned documentation for future planning requirements; and Initiated Black Dart 2011 Maritime venue planning and coordination. JEAT was a full partner in Trident Spectre management activities and developed a transition plan for Trident Spectre FY2011 activities and responsibilities.

FY 2011 Plans:
FY 2011 efforts will be developed in coordination with the defense research community and Defense Intelligence Agency (DIA) elements seeking ways to avoid technological surprise. Further efforts will investigate novel means of detecting and locating signatures of terrorist activity, differentiating between terrorist and indigenous activities and providing timely, actionable

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
intelligence that allows asymmetric disruption of terrorist kill chains. JEAT will be working with the U.S. SOCOM, NSOC, and other members of the Special Forces, Conventional Forces, and Intelligence Community in planning, executing, and reporting on Trident Spectre. This activity will provide a venue for various members of the DoD and Intelligence Community to collaborate on and evaluate technologies and techniques in a technical, operational, and safe environment, as well a technical out-brief to DDR&E leadership and report on the experiment's results. The payoff of this activity will be a process that correctly and efficiently reviews potential technologies and techniques that will enhance the operational capability of the war-fighter in OCO. This project will provide expertise to JIAMDO, jointly with USNORTHCOM, for a variety of U.S. defense systems to be demonstrated and evaluated in the Aug 2011 timeframe and to demonstrate an end-to-end kill chain of UAVs in the maritime environment. ***FY 2012 Plans:*** Continue efforts to investigate novel means of detecting and locating signatures of terrorist activity, differentiating between terrorist and indigenous activities and providing timely, actionable intelligence enabling disruption of terrorist kill chains. JEAT will be working with the U.S. SOCOM, NSOC, and other members of the Special Operations and Intelligence Community in planning, executing, and reporting on Trident Spectre. This activity will provide a venue for various members of the DoD and Intelligence Community to collaborate on and evaluate technologies and techniques in a technical, operational, and safe environment, as well a technical out-brief to DDR&E leadership and report on the experiment's results. The payoff of this activity will be a process that correctly and efficiently reviews potential technologies and techniques that will enhance the operational capability of the warfighter in OCO.			
Accomplishments/Planned Programs Subtotals	25.576	8.386	7.287

C. Other Program Funding Summary ($ in Millions)

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

N/A