Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Office of Secretary Of Defense										DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 3: *Advanced Technology Development (ATD)*				R-1 ITEM NOMENCLATURE PE 0603648D8Z: *Joint Capability Technology Demonstration (JCTD)*							
COST ($ in Millions)	**FY 2011**	**FY 2012**	**FY 2013 Base**	**FY 2013 OCO**	**FY 2013 Total**	**FY 2014**	**FY 2015**	**FY 2016**	**FY 2017**	**Cost To Complete**	**Total Cost**
Total Program Element	185.591	171.807	158.263	-	158.263	155.198	163.896	166.677	169.738	Continuing	Continuing
P648: *Joint Capability Technology Demonstration (JCTD)*	185.591	171.807	158.263	-	158.263	155.198	163.896	166.677	169.738	Continuing	Continuing

Note

In FY 2011 funding was transferred from the Joint Capability Technology Demonstration (JCTD) BA4 PE 0604648D8Z and Defense Aquisition Executive (DAE) Pilot program BA 5 PE 605648D8Z into the JCTD BA3 PE. The JCTD BA-4 PE and DAE BA-5 Pilot Program PEs ended.

Today's operations require even faster delivery of new capabilities. Therefore, the JCTD Program was revised to accelerate project selection, encourage capability demonstration of more short projects (one year or less) and fewer long projects (two to three years), and increase the delivery rate of new capabilities. This new process includes: streamlined project approval and initiation; clear one-year deliverables and decision points for projects greater than a year in duration; and annual reviews of ongoing JCTDs to assess deliverables and continuation of the project.

A. Mission Description and Budget Item Justification

The Joint Capability Technology Demonstration (JCTD) Program directly addresses Joint, Coalition, and/or Interagency capability needs expressed by Combatant Commands (COCOMs). Due to significant successes since inception of the program (initially the Advanced Capability Technology Demonstration (ACTD) Program), the JCTD Program is now viewed by COCOMs as a primary means to rapidly develop, assess, and transition needed capabilities into operations. Through partnering with other solution providers and resource sponsors, the JCTD Program typically leverages $2 in partner funding for every $1 in the JCTD budget. Thus, the value and impact of JCTDs to the COCOMs is significantly greater than a typical Research and Development program.

Key values demonstrated by the JCTD program are:
- The program has a long history of providing enduring capabilities. To date, over 90 percent of completed JCTDs have successfully transitioned capabilities to warfighters. 70 percent of completed ACTD projects successfully transitioned their products. (See “Section D. Acquisition Strategy” for transition discussion).
- The program delivers capabilities rapidly. Projects execute within the Department of Defense (DoD) Planning, Programming, Budgeting, and Execution (PPBE) process. In other words, when a new capability need is identified, a JCTD project can be started and completed before funding can start in the traditional PPBE cycle. The result is that 74 JCTD/ACTD projects delivered capabilities used in Operation Iraqi Freedom, and 57 projects delivered capabilities to Operation ENDURING FREEDOM. Most of those capabilities would not have been delivered - or would have been significantly delayed – without the JCTD program. A recent example is the Persistent Ground Surveillance System (PGSS) JCTD, which quickly (several months) demonstrated and assessed aerostat and integrated sensor technologies to provide wide area surveillance for forward operating bases. Success has led to procurement of over 30 PGSS systems providing 24 hour protection to bases in Afghanistan.
- The program enables Coalition cooperative development by leveraging partner nation expertise and resources. More than one quarter of JCTD projects involve some coalition participation. As a result of successful past collaborations, the program now enjoys routine interactions with the United Kingdom, Canada, Australia, the Republic of Korea, and the Republic of Singapore.

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- The program enables development and execution of interdepartmental cooperation projects, such as projects with the Department of Homeland Security, Department of State, and Department of Transportation. Recent examples are interdepartmental collaborations for maritime awareness, air domain information sharing, tunnel detection and characterization, and Arctic awareness.
- The program enables rapid response to new DoD priorities before Service PPBE cycles can respond. For example, the Department has recently established priorities for Building Partner Capacity, understanding human terrain, and nuclear forensics. The JCTD Program quickly responded and is providing initial capabilities that are transitioning to Service efforts.

MEASURABLE OUTCOMES: Metrics include: all JCTDs will have deliverables within 12 months to enable assessment for project continuation; 50 percent of JCTDs will provide an operationally-relevant prototype within 12 months; and 75 percent will complete final demonstration within 24 months of receiving funding. JCTDs will spiral products and deliverables during the demonstration. At least 75 percent of JCTD projects will transition products to a Program of Record (POR), residual operations, or availability for procurement from the General Services Administration (GSA) Schedule.

Transition Achievement: The JCTD program has been achieving actual transition rates in excess of the stated goal. The JCTD Program defines transition as a project's product(s) going to new or existing POR, providing residual capabilities sustained by non-JCTD funds in direct support of operations, or commodity-type capabilities entered onto GSA schedule for procurement by Department users. 14 of 18 completions in FY 2011 successfully transitioned.

B. Program Change Summary ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	206.917	187.707	199.262	-	199.262
Current President's Budget	185.591	171.807	158.263	-	158.263
Total Adjustments	-21.326	-15.900	-40.999	-	-40.999
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-3.856	-3.884			
• Baseline Adjustment	-	-	-40.999	-	-40.999
• Congressional Adjustments	-15.000	-11.000	-	-	-
• Economic Assumptions	-0.975	-	-	-	-
• FFRDC	-0.691	-1.016	-	-	-
• Other Program Adjustments	-0.804	-	-	-	-

Change Summary Explanation

This budget submission combines the three JCTD Program Elements (transfers BA4 and Defense Acquisition Executive Pilot programs back to JCTD BA3 0603648D8Z).

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Baseline Adjustment. ASD(R&E) baseline adjustments reflective of Department of Defense priorities and requirements.

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
Title: Adaptive Planning Pilot (APP)	1.900	-	-
Description: APP provides Combatant Commanders with needed dynamic and agile force planning capabilities as outlined in the Adaptive Planning Road Map II. APP provides global force management tools to Adaptive Planning and Execution users. It provides early capability to planners and force providers by providing services that were not present in the Global Command and Control System Family of Systems. APP's output is the ability of COCOMs, Joint Staff planners, and the military Services, to conduct streamlined operations with the Global Force Provider and with members of the Joint Planning and Execution Community. The primary metric is accurate and timely global force management during planning and execution. ***FY 2011 Accomplishments:*** Completed Logical Data Model of Adaptive Planning data elements. Completed Spiral Two technical demonstration. Completed web enabled exchange capability between Joint and Services' Force Sourcing Data Bases. Transitioned Adaptive Planning functionality and data models to Defense Information Systems Agency's (DISA) Forge.mil repository for use in future Adaptive Planning and Execution projects. Completed the JCTD.			
Title: Airborne Weapons Surveillance System (AWSS)	1.400	-	-
Description: AWSS will demonstrate a capability to detect enemy artillery, rocket, and mortar fires, classify those fires, and relay locations of enemy firing units to coalition counter-fire systems. AWSS will use advanced staring non-imaging infra-red wide field-of-view detectors, together with electro-optic video, aboard unmanned air vehicles. The efficiencies of the AWSS system will be			

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
the detections of artillery fires at ranges of up to 20 kilometers; the location accuracy of hostile firing units; and the transmission time of hostile fires and hostile firing locations to coalition counter fire units, in efficient machine readable formats. Technical demonstrations will be conducted in Korea using Republic of Korea unmanned air vehicles. ***FY 2011 Accomplishments:*** Supported residual operations by Combined Forces Korea and minor improvements to the sensor technology. Completed the JCTD.			
Title: Collaborative On-line Reconnaissance Provider Operationally Responsive Attach Link (CORPORAL) ***Description:*** CORPORAL provides ground-based, deployed Marines and Soldiers with the capability to take full advantage of tactically relevant sensor data, command and control (C2), and electronic attack in near real time. The capabilities include Non-Traditional Intelligence Surveillance and Recognizance "on-demand" to the ground unit and beyond line-of-sight connectivity maximizing opportunity for collaboration or synchronization. CORPORAL decentralizes data to share openly across systems allowing airborne and ground-based tactical systems to be connected. The result is a greatly improved / expanded communications range and the ability to share critical data and information with other warfighters and higher authorities. CORPORAL provides a collaborative distributed data and information exchange framework based on existing and planned warfighters' communication waveforms. ***FY 2011 Accomplishments:*** Completed Technical Demonstrations 2 and 3, and the Military Utility Assessment. Transitioned CORPORAL residuals to PMA-234.	1.300	-	-
Title: Communications Air-Borne Layer Expansion (CABLE) ***Description:*** CABLE demonstrates airborne networking for tactical Joint, Interagency, Intergovernmental and Multi-National (JIIM) users who lack mobile and dynamic connectivity throughout the full range of operations. CABLE will enable interoperability between air, land, and maritime domain communication systems; enable robust information sharing; and provide strategic communications reach back in an austere or over-subscribed Satellite Communications (SATCOM) environment. CABLE provides seamless interconnection of multiple air, maritime, and land network coverage areas supporting voice and data; cross-band and multi-routing-domain connectivity within and between coverage areas through internet protocol (IP) routing; the extension of command and control connectivity throughout the full range of operations; and enhanced network services for voice, video, and data communications over a common IP network. ***FY 2011 Accomplishments:*** Completed Operational User Evaluation and finalized technical documentation for transition partners. Supported transition of CABLE demonstrated technologies. Transferred final documentation and concept of operations to COCOM sponsors and Service	1.200	-	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
command elements. Completed transition to the Services. Supported Joint Aerial Layer Networking Analysis of Alternatives. Completed the JCTD.			
Title: Common Ground (CG) ***Description:*** CG provides the capability to interoperate on common ground geospatial data and to have shared awareness to achieve unity of adaptive planning, execution and effects within C2 enclaves. Common Ground is built upon existing DoD net-centric data and Service Oriented Architecture standards and guidance, as well as international standards adopted by the U.S. to address information exchange. CG enables the sharing of digital orders and plans across C2 systems and a reduction of errors and misunderstanding among distributed systems. All CG capabilities have been incorporated as commercial software under a DoD Enterprise License. ***FY 2011 Accomplishments:*** Conducted final operational assessment. Initiated Doctrine, Operations, Training, Materials, Leadership and education, Personnel, and Facilities (DOTMLPF) activities. Completed documentation for enterprise licensing of functionality in National Geospatial Agency's Commercial Joint Mapping Toolkit (CJMTK). Transitioned over 25 common ground tools to CJMTK and to the NATO Consultation, Command and Control Agency. Completed the JCTD.	5.500	-	-
Title: Riverine & Intercoastal Operations (RIO) ***Description:*** RIO will demonstrate and transition technologies and operational concepts for persistent situational awareness in the Intercoastal and Riverine areas. RIO will demonstrate the value of remotely monitoring maritime areas of interest with U.S. Navy and international (Colombia) partners. RIO will enable situational and Maritime Domain Awareness through unattended surveillance and advanced reconnaissance of the riverine environment from a Mobile Operating Base, supporting the Battlespace Awareness and Force Protection capability areas. Persistent detection and monitoring of riverine activities will be accomplished through networked Unattended Ground Sensors and sensor data used to enhance localized situational awareness. The first operational demonstration will be held at Stennis Space Center and will focus on the non-jungle element of RIO which is of interest to both the U.S. Navy and the Department of Homeland Security. This demonstration will be observed by U.S. Navy Operational Test and Evaluation Force (OPTEVFOR). The second RIO increment will focus on the jungle environment with a Technical Demonstration in Belize for Colombia and Belize. This Technical Demonstration will culminate with a Letter of Observation provided by OPTEVFOR. ***FY 2011 Accomplishments:***	1.800	-	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
Conducted Operational Demonstration One at Stennis Space Center, Mississippi and conducted system integration discussions with Colombia. Conducted Technical Demonstrations of RIO in Belize with observers from Belize and Colombia. Spiral delivery of the capability to the U.S. Navy and U.S. Southern Command (USSOUTHCOM). Completed the JCTD.			
Title: National Senior Leadership Decision Support Service (NSLDSS) ***Description:*** NSLDSS provides senior decision-makers a method to develop rapid situational awareness to support response planning and execution to time-critical events of national significance. NSLDSS is a combined hardware and software system consisting of DoD and commercial databases, search engines, source repositories, network enterprise services, visualization tools, and web 2.0 capabilities. NSLDSS improves global situational awareness for senior leadership; improves course of action options; and improves the quality of information for senior leader decision-making in a collaborative environment. ***FY 2011 Accomplishments:*** Conducted Operational Demonstrations and completed the Operational Utility Assessment. Completed the transition to DISA. NSLDSS is in use by the Joint Staff and selected COCOMs. Reference implementations of the Attribute Based Access Control, XML repository, Common Data Mediation Service and Joint User Messaging are maintained by DISA on Forge.mil. Completed the JCTD.	2.650	-	-
Title: Global Observer (GO) ***Description:*** The GO is a transformational program to demonstrate a liquid hydrogen powered unmanned aerial vehicle, using a modified, internal combustion engine, capable of flying extremely long endurance (objective of six days on station) with a moderately sized payload capacity (380 pounds) at an altitude of 55-65,000 feet above mean sea level. GO will provide low-cost persistent surveillance and communications relay. GO will deliver a long endurance capability that supports placing a system into theater from garrisoned locations, reducing the number of forward bases required for world-wide operations, and relieving the operational tempo from other over stressed assets. ***FY 2011 Accomplishments:*** Completed hydrogen powered test flights achieving 18 hours duration at altitudes up to 30,000 feet, including carriage of the Air Force tactical communications suite payload. During flight test, the aircraft departed controlled flight and was a total loss. The project is under consideration for return to tech base.	2.400	-	-
Title: Medusa ***Description:*** Medusa demonstrates the employment of the Low Cost Guided Imaging Rocket aboard the U.S. Navy MH-60S helicopter against a multi-axis simultaneous attack from Fast Attack Craft and Fast Inshore Attack Craft. In this manner, U.S. and coalition surface ship formations can protect themselves against coordinated asymmetric threats in a maritime environment. This capability will provide a leap ahead of current ship self-protection options, and contribute to a multi-layered, scalable maritime	3.400	1.065	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
defense strategy. Additionally, the technology is readily adaptable for use against land-based targets. The COCOM sponsor is U.S. Central Command (USCENTCOM) and lead Service is the U.S. Navy. ***FY 2011 Accomplishments:*** Completed critical design review of rocket launcher. Completed systems integration lab testing of H-60 software configuration. Completed rocket and launcher integration and initial flight test. Completed Milestone B documentation and system development and demonstration contract package to support transition of Medusa rocket and launcher designs, software, concept of operations (CONOPS), and Tactics, Techniques, and Procedures (TTPs) to PMA-242 and PMA-299. ***FY 2012 Plans:*** Complete Military Utility Assessment and transition residuals to Programs of Record. Complete the JCTD.			
Title: Transnational Information Sharing - Cooperation (TISC) ***Description:*** TISC provides software tools for a non-classified portal for collaboration, planning, and assessment by external partners and interagency organizations. TISC allows disadvantaged users to use the portal at low or no cost in austere and minimal network infrastructure environments. TISC provides collaborative chat, identity management, translation and multi-lingual text chat, and Web 2.0 social networking tools. Outputs and efficiencies include improved planning and response to theater security cooperation challenges and stability and reconstruction operations. Technologies were demonstrated in the Haiti and Japan earthquakes and reduced the time and increased the effectiveness of disaster relief, humanitarian assistance, and stability operations. The TISC capability is scheduled to transition to the Unclassified Information System Program of Record in FY 2012. The lead agency is DISA. ***FY 2011 Accomplishments:*** TISC is in daily operational use at USSOUTHCOM, U.S. African Command (USAFRICOM), U.S. European Command (USEUCOM), and U.S. Pacific Command (USPACOM). Transitioned TISC portal to DISA Enterprise Computing Center Pacific 4Q FY 2011. Completed the JCTD.	1.100	-	-
Title: One Box One Wire (OB1) ***Description:*** OB1 provides secure operating systems hardware multiple independent level of security (HwMILS), and encrypted network communications path to enable a user to access multiple computer networks and information services operating at different levels of security from Top Secret to Unclassified from a single computer workstation. OB1 consolidates the network infrastructure from multiple terminals and network cabling at individual workstations to a single box housing multiple terminals connected to multiple data centers via one wire (network cable) — one box, one wire, multiple network and security domain access. OB1 will complete certification and accreditation testing of a secure operating systems in an HwMILS box and	1.650	-	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
certification and accreditation testing of an encrypted network cable for multiple computer networks at different security levels at USCENTCOM. ***FY 2011 Accomplishments:*** Completed technical demonstrations of the integrated product of test cases and evaluate artifacts. Completed test articles that attempt to address the full range of USCENTCOM requirements. Documented test concepts and plans for the test articles that may accelerate certification and accreditation (C&A) activities. Completed C&A documentation package. Provided a report that summarizes the technical results, identifies alternative ways forward, and makes technical recommendations. Completed the JCTD.			
Title: Mission Assurance Decision Support System (MADSS) ***Description:*** MADSS provides an integrated Command, Control and Communications (C3) operational and critical infrastructure relationships understanding by correlating data from different data sources, using web-based services, and secure netwok and automated data transformation services. MADSS provides improved responsiveness and predictive capability, rapid event analysis, and Warfighter analysis of alternatives development for network and critical infrastructure outages. ***FY 2011 Accomplishments:*** Conducted final technical and operational demonstration in 4Q FY 2011. Conducted technical demonstrations at selected COCOMs in 2Q and 3Q FY 2011. Finalized documentation for transition of MADSS functionality to DISA program of record in Program Executive Office – Mission Assurance. Transition scheduled for FY 2012. Completed the JCTD.	1.100	-	-
Title: Joint Recovery and Distribution System (JRaDS) ***Description:*** JRaDS developed and demonstrated military utility of a new family of transportation trailers. JRaDS provides a trailer Family of Systems (FoS) which enables execution of multiple missions via a small number of trailer variants versus the large inventory of distinct trailer systems currently in DoD inventory. The goal of this FoS is high reliability and parts commonality and modularity design to reduce Service logistics and maintenance requirements and associated costs of ownership. Additionally, supporting personnel may be reduced due to the semi-autonomous operating capability of JRaDS, and reduced need for supplementary materiel handling equipment. These aspects will expedite cargo movement from Sea Ports of Debarkation, Aerial Ports of Debarkation, and Theater Supply Depots to front-line users, while reducing costs associated with movement of cargo within theater. JRaDS will also afford an expeditious and efficient method of recovering disabled and catastrophically damaged Tactical Wheeled Vehicles and light to medium weight Rotary Wing aircraft. Residual trailers from the JCTD will be used by field units, thereby placing the JRaDS capability into forces sooner than waiting for production of trailers. ***FY 2011 Accomplishments:***	1.400	-	-

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Completed the military utility assessment. Conducted final Operational Assessment and submitted final Operational Utility Assessment Report. The Army 101st Sustainment Brigade used the 40 Ton JRaDS during operations in Afghanistan and the Army retains and sustains both the 40 Ton JRaDs and 34 Ton JRaDs trailer residuals. The JRaDS capability is scheduled to transition to Program Executive Office (PEO) Combat Support and Combat Service Support. Completed the JCTD.			
Title: Cooperative Security Engagement (CSE) ***Description:*** CSE demonstrates operational concepts and tools for enabling joint, interagency, multi-national planning, coordination, and synchronization. CSE provides a framework for: inter-agency adaptive planning; regional and multinational/ event based information sharing; and integrated event assessment, operation, monitoring and evaluation. The JCTD sponsor is USSOUTHCOM and USEUCOM. The U.S. Agency for International Development (USAID) provides key technical and operational input. Transition will incorporate CSE capabilities and operational concepts into COCOM stability operations. Program Outputs and Efficiencies: (1) interagency adaptive planning process and tool; (2) streamlined regional and inter-agency assessments; (3) regional and muti-national information sharing; (4) repeatable and reusable frameworks; (5) mutually visible situation/event assessment and planning; and (6) collaborative implementation, monitoring, and evaluation tools. ***FY 2011 Accomplishments:*** Completed technical demonstration two within an operational context involving the cooperative security “community of interest” from USSOUTHCOM / USEUCOM / USAID areas of responsibility. Completed the operational demonstration and utility assessment in 4Q FY 2011 ***FY 2012 Plans:*** Final Operational demonstration and user evaluations. Transition to Defense Information Systems Agency Unclassified Information Sharing Architecture and USAID. Complete the JCTD.	2.200	2.455	-
Title: Precision Acquisition Weaponized System (PAWS) ***Description:*** PAWS integrates multiple precision weapons aboard organic tactical Intelligence, Surveillance, and Reconnaissance (ISR) platforms, and demonstrates the neutralization of threats. The weapon designs will allow multiple kills per sortie and engagement in environments where collateral damage and fratricide are unacceptable. PAWS resolves the inability of Special Operating Forces (SOF) ISR platforms to prosecute targets and significantly reduces risk to SOF compared to current missions which required direct target engagement. ***FY 2011 Accomplishments:*** Completed unmanned air systems (UAS) integration. Completed low collateral damage testing, certification, and integration with host UAS. Conducted end-to-end system testing, and two operational demonstrations. ***FY 2012 Plans:***	1.200	-	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
Deliver residual units to U.S. Special Operations (USSOCOM). Complete JCTD.			
Title: Counter-Electronics High Powered Microwave System Advanced Missile Project (CHAMP)	5.200	3.834	-
Description: CHAMP demonstrates and assesses a multi-shot and multi-target aerial High Power Microwave (HPM) platform that is capable of degrading, damaging, or destroying electronic systems. A compact HPM payload will be integrated into an aerial vehicle to create the aerial HPM platform demonstrator. CHAMP is a multi-year project under sponsorship of U.S. Pacific Command for transition to an Air Combat Command program of record. The primary outputs and efficiencies to be demonstrated are: (1) delivery of the HPM aerial system to the target; (2) minimum effectiveness HPM range; (3) stand-off distance from launch to target; (4) multiple geographically separated targets; and (5) navigation, orientation, and fuzing accuracy. ***FY 2011 Accomplishments:*** Completed component integration and ground testing. Completed operator training. Refined CONOPS and TTPs. Completed first operational demonstration. Demonstrated the ability to accurately navigate to a target building and illuminate the building to ensure effects on the internal electronic components at a distance from the target to be a viable military option. Developed requirements and documentation to support transition. ***FY 2012 Plans:*** Complete flight test, Military Utility Assessment, and documentation for transition to a program of record. Complete the JCTD.			
Title: Joint Multi-Effects Warhead System (JMEWS)	5.100	0.532	-
Description: JMEWS demonstrates an updated multi-effect warhead system aboard the Tomahawk Land Attack Missile (TLAM). This warhead technology provides a leap-ahead capability against a widely varied target set, which includes hard and soft targets. In concert with this warhead, a Third-Party In-Flight Targeting (3PT) system will be demonstrated that allows dynamic targeting and re-tasking of the missile. Using these technologies, Combatant Commanders will have the reliable option of neutralizing heavily defended and dynamic targets without the incursion of manned platforms. Hardware and software changes to the TLAM Program of Record (PMA-280) will be incorporated via Engineering Change Proposals once demonstrated. Deliverables will include documented CONOPS and TTPs. Production of the TLAM will incorporate the JMEWS warhead, and add the data link, radio equipment, and interfaces necessary for 3PT. JMEWS will increase the number of targets held at risk, reduce cost, increase flexibility in access denied environments, and provide a long range, survivable, high-lethality weapon. The COCOM sponsor is USCENTCOM; U.S. Navy is the Lead Service. ***FY 2011 Accomplishments:*** Delivered remaining warheads for completion of arena, insensitive munitions, and sled testing against representative targets. ***FY 2012 Plans:***			

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
Complete Joint Military Utility Assessment and transition to PMA-280. Complete the JCTD.			
Title: Tactical Edge Data Solutions (TEDS)	1.500	1.917	-
Description: The Joint Requirements Oversight Council validated the need for TEDS in FY 2010. TEDS is the implementation of C2 Core extensions for tactical information at the battalion level so that web-services data sharing frameworks based on Universal Core (UCore) can enable data sharing among disparate systems. TEDS focuses on exchanging data from Army and Marine Corps C2 Authoritative Data Sources for the C2 and Battlespace Awareness domains. The efficiencies gained will be the reduction of redundant software being developed across multiple programs and the ability to seamlessly exchange data within Military Services as well as NATO and coalition partners who adopt UCore. Transition of the C2 Core extensions and Web services for translation and semantic mediation is planned for programs of record in the U.S. Army and U.S. Marine Corps. The output of TEDS will enable C2 systems to migrate to a Service Oriented Architecture environment. The final demonstration will be in FY 2012 and the JCTD will complete in September 2012 with transition expected in FY 2013 of data pilot services. ***FY 2011 Accomplishments:*** Demonstrated C2 Core data sharing between U.S. Army and USMC systems 1Q FY 2011. Demonstrated net-enabled Coalition Data Sharing using C2 Core in Coalition Warrior Interoperability Exercise with coalition partners 3Q FY 2011. ***FY 2012 Plans:*** Provide Net-Centric Information exchange capabilities that enable tactical C2 and tactical ISR systems to share data. Transition these capabilities by uploading the information exchange specifications to the DoD Metadata Data Repository. Transition Web services (computer code) to U.S. Army and USMC for use in tactical programs of record to enable mediation of data across their tactical C2 systems for position reporting, special activity reporting and spot reporting using U.S. message text formatting. Provide the repeatable processes for extending C2 Core mediation to other communities of interest such as logistics, force support, and cyber.			
Title: Pacific Sail	2.400	-	-
Description: Pacific Sail contains classified content only. The user sponsor is USPACOM and the Operational Manager is U.S. Pacific Fleet. This project integrates U.S. Air Force and U.S. Navy capabilities into a new capability that addresses one of USPACOM's priority capability gaps. An initial proof-of-concept demonstration was conducted in late FY 2009, and final at-sea demonstration was scheduled for late 2011. ***FY 2011 Accomplishments:***			

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
Completed final operational demonstrations and military utility assessment with FY 2011 funds. Coordinated for follow-on transition. Initial transition was expected to be an interim operational capability, forming the basis for a larger Navy program. Completed the JCTD.			
Title: Rapid Reaction Tunnel Detection (R2TD) ***Description:*** R2TD demonstrates a set of detection and mapping technologies, and establishes procedures to provide Joint Force Commanders with a capability to detect, characterize, and interdict tunnels on the battlefield and beneath the U.S. borders. R2TD will accurately locate subsurface voids up to 100 feet deep; detect tunnel construction in real-time and report summaries every four hours; detect movement of contraband through tunnels in near-real time and report summaries every four hours; precisely locate tunnel axis, ingress and egress points; characterize physical dimensions of tunnels; and characterize internal features of tunnels including floor, shoring, lighting, ventilation, and water presence/flow. ***FY 2011 Accomplishments:*** Completed Tactics, Techniques, and Procedures (TTPs) tested and verified at Operational Demonstration for passive technologies. Passive technology made ready for rapid fielding. Residuals are currently on the U.S. southwest border. In 3Q FY 2011, quickly responded to a request for theater tunnel detection as a result of the Afghan prison break. R2TD completed the site survey with recommendations for which technologies are appropriate for which sites. These systems are recommended for deployment to satisfy the USCENTCOM Joint Urgent Operational Needs for tunnel detection. ***FY 2012 Plans:*** The integrated detection and characterization system will be demonstrated at the final Operational Demonstration at Yuma Proving Ground in 1Q FY 2012. Transition all detection and characterization capabilities inclusive of the full system of systems integrated capability to Joint Project Manager (JPM) Guardian. Complete the JCTD.	4.000	2.822	-
Title: Command and Control Gap Filler (C2GF) ***Description:*** C2GF will provide an information systems architecture that can share all-source air surveillance data between government departments. The C2GF solution will also provide data fusion services to users. Additionally, the C2GF will refine the concept of operations and employment and TTPs necessary for air domain surveillance coordination. ***FY 2011 Accomplishments:*** Completed rescope of C2GF activities due to cuts in contributions from funding partners. ***FY 2012 Plans:***	2.000	2.112	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
Complete work on air surveillance data fusion capability. Validate and demonstrate the C2GF architecture by incorporating data from representative air surveillance sensors. Conduct Operational Demonstration at a U.S. Northern Command (USNORTHCOM) exercise.			
Title: Joint Unmanned Air Systems (UAS) Precision Targeting (JUPT) ***Description:*** JUPT rapidly provides precision coordinates from UAS generated imagery for use with coordinate seeking weapons. JUPT provides the Joint Commander the ability to rapidly transition from observing to striking high value targets with coordinate seeking weapons in all terrain, while minimizing collateral damage. ***FY 2011 Accomplishments:*** Conducted technical demonstrations. Conducted limited utility assessments. Spiraled out capabilities as approved by NGA. ***FY 2012 Plans:*** Complete system integration. Conduct operation demonstrations and conduct Joint Operational Utility Assessments. Transition capability to U.S. Army Program Manager-UAS and USSOCOM. Complete the JCTD.	3.200	1.433	-
Title: Fixed Wing Advanced Precision Kill Weapon System (FW-APKWS) ***Description:*** FW-APKWS provides the legacy AV-8B and A-10 (optionally F-18 and F16) aircraft with a precision air-to-ground low collateral damage weapon for use in close controlled strike applications. FW-APKWS will demonstrate a weapon that increases the flexibility of current fixed-wing inventory and delivers 50 residuals (25 USAF, 25 USN) for limited use. ***FY 2011 Accomplishments:*** Completed source selection. Completed the initial draft of the Management Transition Plan. Conducted instrumented measurement vehicle testing on AV-8B and A-10 aircraft. ***FY 2012 Plans:*** Conduct technical and operational demonstrations. Finalize Technical Data Package, complete Military Utility Assessment and Operational Assessment, and modify Operation Requirements Document of APKWS to include fixed-wing production requirements. Deliver combat-ready residuals.	4.000	2.556	-
Title: Operational Three-Dimension (Op3D) ***Description:*** Op3D is a joint interagency program sponsored by USSOCOM. Op3D will develop and transition capabilities to quickly discover, manage, generate, exploit, disseminate, and accurately update 3D Geographic Intelligence data from multiple collection systems to the warfighter. The JCTD consists of three overlapping development and demonstration spirals. Residuals from the effort include an enhanced 3D data processing pipeline, warfighter/analyst exploitation tools, TTPs, concepts of operations, user guides and training packages. USSOCOM is responsible for requirements validation and transition management	3.200	1.406	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
for the Special Operations Forces community. The National Geospatial-Intelligence Agency will develop and transition successful Op3D technologies into programs of record. Op3D will spiral capabilities into Agency and Service Production Centers. ***FY 2011 Accomplishments:*** Improved Beta versions based on feedback from production centers and warfighters to achieve more rapid/automated imagery processing and product development for time sensitive targeting and broad based user availability. Incorporated new capabilities into theater operations and/or Continental United States (CONUS) production center use. Initiated Spiral two tasks. ***FY 2012 Plans:*** Execute, evaluate, and transition Spiral two and three tasks. Develop CONOPs, standard operating procedures, TTPs, user guides, and training packages for successful Spiral Three processes. Complete the JCTD.			
Title: Pre-Positioned Expeditionary Assistance Kit (PEAK) ***Description:*** PEAK is a modular system that provides potable water, information sharing, communications, and electrical power generation to first responders in the period immediately following a disaster event. The system enables regional Combatant Commanders to better provide humanitarian assistance and disaster relief and quickly respond to a myriad of crisis situations around the globe. In addition to supporting U.S. military commanders, PEAK can support the disaster assistance needs of agencies, international relief organizations, partner nations, and non-Governmental organizations. The outputs and efficiencies demonstrated are: a water purification system tested and certified to provide safe drinking water from either salt water or fresh water sources; an operationally demonstrated capability for solar powered communication system for emergency responders; and operational concepts of employment demonstrated with partner nations and non-Governmental partners. ***FY 2011 Accomplishments:*** Completed testing and operational deployment of a prototype kit during 2Q FY 2011. Completed water purification certification testing and operational assessment of the “spiral two” PEAK system with U.S. Joint Task Force-Bravo and partner nations in Honduras. Completed operational demonstration and assessment in 4Q FY 2011. Delivered one complete kit to U.S. Southern Command for operational use. ***FY 2012 Plans:*** Deliver one complete system to USPACOM in 1Q FY 2012 for training and operational deployment. Transition PEAK components, capabilities, training manuals, and procedures to user communities and sustaining programs. Complete the JCTD.	3.300	0.511	-
Title: Integrated SATCOM-GIG Operations and Management (ISOM) ***Description:*** ISOM will demonstrate real-time IP SATCOM situational awareness (SA) and a scalable and policy-based management system that enables dynamic allocation and provisioning of SATCOM resources. ISOM will integrate certain existing terrestrial and IP SATCOM management tools which will greatly improve the ability to make the most of underutilized	3.000	3.067	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
SATCOM resources or to resolve complex warfighter communications outages. ISOM integrates real-time situational awareness of SATCOM resources to provide a single, over-arching view of current SATCOM allocations and the load on these links. It then provides an automated ability to act on this information by dynamically re-allocating or re-provisioning the SATCOM resources given to IP SATCOM networks. ***FY 2011 Accomplishments:*** Completed CONOPS; TTPs; and training documents. Completed the integration of ISOM SA with resource allocation module, data collectors, and web services system. Completed Operational and System Architecture. Developed a scalable policy-based network management system that is capable of acting on the SA information by dynamically re-allocating or re-provisioning IP SATCOM subnets. Deployed ISOM Data Collectors at DoD Gateways (Northwest, Camp Roberts). ***FY 2012 Plans:*** Conduct operational utility assessment in an operational network environment. Integrate ISOM SA with the policy-based management capability that enables dynamic allocation and provisioning of SATCOM resources in an end-to-end over the air architecture. Develop a common information exchange schema based on Multi-Technology Operations Systems Interface (MTOSI) standard for integration with Defense Information System Network. Deploy ISOM Master Servers at Theater NetOps Centers (TNC) in the Continental United States. Implement the Shared Information and Data Model (SID) for SATCOM systems by applying the Service Oriented Architecture-compliant, TeleManagement Forum, Next Generation Operations Systems and Software framework. Finalize CONOPS, TTPs, and training documents. Prepare for initial deployment and transition to configuration management for sustainment. Complete the JCTD.			
Title: Medium Altitude Global ISR and Communication (MAGIC) ***Description:*** MAGIC demonstrates subsystem technologies that enable an UAS having 120 hour sortie endurance with nominal 1,000 pounds payload at nominal 15,000 feet altitude. MAGIC key technologies will enable persistent ISR UAS deployment, more efficient collection of pattern of life data, and potential cost savings over current UAS. ***FY 2011 Accomplishments:*** Conducted several trade studies to inform critical design decisions. Demonstrated avionics package in surrogate aircraft. Roll-out of first aircraft fuselage. ***FY 2012 Plans:*** Transition UAS subsystem technologies to U.S. Air Force for aircraft integration and flight demonstration. Complete the JCTD.	5.000	-	-
Title: National Technical Nuclear Forensics (NTNF) ***Description:*** NTNF will strengthen strategic nuclear deterrence by enhancing nuclear forensics capabilities supporting attribution after release of nuclear materials. Details are classified. NTNF will integrate advanced air and ground debris sample collection	4.500	5.717	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
technologies in both manned and unmanned platforms, and integrate DoD capabilities into the developing joint interagency CONOPS for advanced air and ground sample collection with global applicability. The project will also demonstrate enhanced integrated yield estimation methods for nuclear events. The techniques to be employed will increase capabilities to determine initial yields and collect nuclear debris, while enhancing safety for NTNF Task Force personnel. ***FY 2011 Accomplishments:*** Detailed capability outputs are classified. Conducted technical testing, training and technical demonstration. Operationally demonstrated/exercised interim yield estimation methods for nuclear events, in addition to manual and robotic ground sampling collection capabilities to collect nuclear debris. Further developed and assessed CONOPS for integration into the developing joint interagency CONOPS for advanced sample collection with global applicability. ***FY 2012 Plans:*** Detailed capability outputs will be classified. Continue development with further technical testing, training and technical demonstrations. Operationally demonstrate/exercise (ODX) ground sampling collection platforms and airborne debris collection capabilities. Complete JCTD with culmination ODX of all three NTNF capabilities: yield estimation, air sampling, and ground sampling. Produce operational assessment. Publish Joint/Interagency CONOPS, TTPs, and DOTMLPF Change Recommendations. Complete the JCTD.			
Title: Rapid Site Exploitation (RSE) ***Description:*** RSE will employ innovative combat site collection and exploitation capabilities with a web portal to rapidly recognize, collect, analyze, share, track, and manage collected materials. Site exploitation will include biometrics, document and media, and other combat forensic materials. A web portal will link key information sources maintained by multiple U.S. Government organizations. RSE will shorten site collection times from hours to minutes and speed forensic analysis from days to hours. ***FY 2011 Accomplishments:*** Provided integrated site exploitation kits and prototype web portal interface, interoperable with biometric, forensic, and document/media exploitation enterprises. Conducted initial utility assessment. ***FY 2012 Plans:*** Continue efforts to complete integrated site exploitation kits and prototype web portal interface, interoperable with biometric, forensic, and document/media exploitation enterprises. Conduct final utility assessment and transition residuals to a program of record. Complete the JCTD.	3.100	2.811	-
Title: Dark Fusion (DF)	5.372	5.324	1.500

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
Description: DF is a classified capability to detect and track non-emitting maritime threats by integrating data from national collection capabilities. DF provides the ability to detect and track difficult maritime targets and increases maritime situational awareness. ***FY 2011 Accomplishments:*** Conducted technical demonstration with existing assets. ***FY 2012 Plans:*** Conduct technical demonstration with new sensors. Extended use expected to initiate in mid FY 2012. Transition capability to Office of Naval Intelligence Program of Record. ***FY 2013 Plans:*** Conduct Operational Demonstration and Utility Assessment. Complete the JCTD.			
Title: ADDER DeerPark ***Description:*** ADDER/DeerPark demonstrates a persistent Intelligence, Surveillance and Reconnaissance (ISR) capability by providing collection and geo-location of high value targets that use advanced communication devices. This effort upgrades a scalable airborne payload for the Senior Scout platform that provides search, detect, direction find, identify, and geo-location of signals of interest. This integrated technical approach delivers a sustainable capability that spirals to meet future Combatant Commander and U.S. Air Force requirements and utilizes open architecture. ***FY 2011 Accomplishments:*** Completed platform integration; conducted testing and training; and developed tactics, techniques and procedures documentation. Conducted payload demonstrations in field environments and completed operational assessment. Transitioned the residual capability to the USAF 645 Aeronautical Systems Group. Completed the JCTD.	4.284	-	-
Title: Commercial Radar Operational Support to SOUTHCOM (CROSS) ***Description:*** CROSS demonstrates the ability to task, on-demand, three commercial radar constellations and receive unclassified imagery to support operations and contingency planning activities. This capability provides USSOUTHCOM the ability to fulfill un-met lower resolution imagery tasks (e.g., Haiti disaster relief, Gulf oil spill, and specific classified military applications) within their area of responsibility. Upon successful demonstration at USSOUTHCOM, CROSS will replicate a similar model at remaining COCOMs and instantiate NGA contracts to provide direct and routine tasking and support for long-term COCOM radar imagery buys. ***FY 2011 Accomplishments:***	4.500	1.118	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
Established exploitation tool and standalone file transfer protocol (FTP) server at USSOUTHCOM; finalized operator training plans; completed the SAR architecture integration, conducted testing and problem resolution methodology; drafted transition plan to COCOMs and final security accreditation. Conducted vendor imagery buys, processor lease, and finalized CONOPS/TTPs. Conducted first technical demonstration. ***FY 2012 Plans:*** Establish the communications lease for Center for Southeastern Tropical Advanced Remote Sensing. Initiate NGA contracts to provide direct and routine tasking and support for long-term COCOM radar imagery buys. Conduct final utility assessment. Complete transition of the leave-behind capability for CROSS JCTD. Complete the JCTD.			
Title: Combat Commander Direct Participation, Transition Enabling, and Special Programs	35.059	39.128	40.000
Description: This effort is comprised of three programs that support the entire JCTD Program, separate from the specific JCTD projects. The three programs are (1) Unified COCOM Direct Participation; (2) JCTD Transition Enabling; and (3) Program Integration Office for interagency classified projects. Additional details follow: (1) COCOM Direct Participation: The COCOMs are essential in specifying capability needs, project selection, validation, demonstration, assessment, and transition of JCTDs. However, COCOM staffs are not manned to provide the daily interactions needed to develop and execute successful JCTDs and coordinate all operational interactions. Therefore, the JCTD Program enables COCOM staffs to directly participate in the Program, allowing each COCOM to select and fund an on-site JCTD manager, typically 1 full-time equivalent engineer with operational experience. (2) JCTD Transition Enabling: In FY 2011 the funding for JCTD Transition, Program Element 0604648D8Z, was transfered to the Program Element 0603648D8Z, which is reflected in the growth of this program. In some cases, Service or Agency partners cannot commit to transition JCTD products until demonstrations and assessments are complete at the end of the JCTD. This leads to situations in which the Service or Agency transition funding is not available for one to two years, due to the Service or Agency prior Program Objective Memorandum commitments. In such cases, where there is clear transition and the need to sustain the capability for a short time prior to availability of Service or Agency transition funds, the JCTD Transition Enabling fund may be used to meet that need. (3) Program Integration Office: A limited number of classified JCTDs are executed in special classification channels, typically involving partnership with other government agencies. JCTD Program funds are used to provide the special classification handling capability and to provide partial funding to the selected special projects. ***FY 2011 Accomplishments:*** COCOM direct participation funding enabled COCOM staff participation in developing and executing JCTD projects, ensuring direct warfighter input, and proper focus of JCTD projects. JCTD Transition Enabling funds targeted transition for projects that included medical resupply to forward units, squad-level immersive training, mapping the human terrain in forward areas, and			

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
interagency disaster response information sharing. The Program Integration Office executed three continuing projects, developed additional projects, and continued to manage special security. ***FY 2012 Plans:*** COCOM direct participation continues to enable COCOM staff participation in developing and executing JCTD projects, ensuring direct warfighter input, and proper focus of JCTD projects. JCTD transition enabling funds will provide transition bridge funding for four to six projects, sustaining the efforts for a year until committed Program of Record funds are received. The Program Integration Office will execute special projects as approved, and develop new projects addressing the most pressing COCOM needs. ***FY 2013 Plans:*** Continue to provide COCOM direct participation funds to enable COCOM staff participation in developing and executing JCTD projects, ensuring direct warfighter input, and proper focus of JCTD projects. Sustain selected completed JCTD efforts until Program of Record funds are received. Develop and execute special projects as proposed by COCOMs.			
Title: Enabling Technologies	6.000	7.331	7.300
Description: The Enabling Technologies fund is used to rapidly assess or mature emerging capabilities requested by COCOMs, prior to determining whether a JCTD project should be initiated. Emerging Technology investments are small, short (less than one year) efforts that may lead to JCTD proposals, depending on the COCOM assessment and determination of technical maturity. ***FY 2011 Accomplishments:*** Projects included an assessment of a capability to assist safe rotorcraft landings in brownout conditions, maturation of cyber warfare planning and assessment tools, assessment of a capability for electronic protection of airborne radars in electronic attack environments, assessment of a network capability for tagging and tracking items in transit, examination of a potential geospatial information exchange capability for friendly African nations, assessment of a capability to alert to Gobal Positioning System jamming or tampering, maturation of a military deception capability, collection of Arctic domain awareness capabilities for further integration, maturation of wastewater management capabilities for forward bases, planning for interagency air event sharing capability development, follow-on Persistent Ground Surveillance System fusion efforts, maturation of anti-jam precision guided munitions efforts, and others. Most of these investments matured into FY 2012 JCTD proposals. ***FY 2012 Plans:*** Projects will be determined based on emergent COCOM requests and emergent technology opportunities. Selected efforts will be small, focused, and executable in less than one year, and may lead to full JCTD proposals. ***FY 2013 Plans:***			

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
Projects will be determined based on emergent COCOM requests and emergent technology opportunities. Selected efforts will be small, focused, and executable in less than one year, and may lead to full JCTD proposals.			
Title: Smart Power Infrastructure Demonstration for Energy Reliability and Security (SPIDERS) ***Description:*** SPIDERS will demonstrate cyber-secure "smart" micro-grids with demand side management and integration of renewable energy and storage on military installations, in partnership with Department of Homeland Security and Department of Energy. The expected output and efficiency to be demonstrated is a reduction in the "unacceptably high risk" of extended electric grid outages by developing the capability to "island" installations while maintaining operational surety and security. ***FY 2011 Accomplishments:*** Tested circuit level micro-grid at existing hydrogen fueling station at Joint Base Pearl Harbor-Hickam, HI. Validated the cyber-security strategy for the utility electric energy management system at a national laboratory. Procured long lead items and started preparation for the demonstrations at Fort Carson, CO and Camp Smith, HI. ***FY 2012 Plans:*** Test larger smart micro-grid at Fort Carson, CO. Integrate existing Fort Carson photovoltaics with vehicle to grid energy storage and cyber security. Complete the JCTD.	4.300	1.597	-
Title: High Speed Container Delivery System (HSCDS) ***Description:*** HSCDS will integrate aerial delivery components to provide a cost effective, high speed ingress/egress, low-altitude, accurate Point of Need Delivery capability, which reduces exposure to threats for aircrew, aircraft, and ground receiving units. HSCDS will provide parachute-extracted Container Delivery System with C-130J and C-17 aircraft at maximum ramp open airspeed from as low as 250 feet above ground level. This provides warfighters the ability to conduct low altitude, fast and accurate resupply (up to 16,000 pounds of supplies via eight Containerized Delivery System bundles) to small combat units while maintaining aircraft maneuverability, thus reducing threat exposure. ***FY 2011 Accomplishments:*** Initiated integration of aerial delivery components and testing of HSCDS threshold capabilities on C-130J and C-17 aircraft. Conducted Operational Demonstration #1 in 4Q FY 2011. ***FY 2012 Plans:*** Continue integration of aerial delivery components and testing of HSCDS threshold capabilities. Execute Operational Demonstration #2 and rapidly field capability to theater. ***FY 2013 Plans:***	1.400	1.917	0.500

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
Execute Operational Demonstration #3. Finalize integration of components to meet objectives, test at objective capabilities, and plan for execution of final operational demonstrations to field objective capability to theater in FY 2013. Execute seamless transition of HSCDS capability to FY 2014 program of record with U.S. Army Product Manager Force Sustainment Systems. Complete the JCTD.			
Title: Maritime Predator (MP) ***Description:*** MP will demonstrate the ability to conduct clandestine, intrusive unmanned maritime operations in high-threat restricted water areas of interest from a safe standoff. MP will provide several platform payload combinations as a residual capability. ***FY 2011 Accomplishments:*** Demonstrated one platform and one payload. Details are CLASSIFIED. ***FY 2012 Plans:*** Demonstrate two platforms and three payloads. Transition residuals for operational use. Details are CLASSIFIED. Complete the JCTD.	3.000	2.130	-
Title: Preferred Force Generator (PFG) ***Description:*** PFG provides planners the capability to rapidly and accurately generate and refine preferred force lists to help expedite the planning process and provide the critical data needed for course-of-action analysis, transportation feasibility, and assessments for rapid force availability. Net-centric technologies will be employed to provide the service across the enterprise. ***FY 2011 Accomplishments:*** Developed a PFG service that interfaces with the Joint Capabilities Resource Manager sourcing capability. Conducted Technical Demonstrations. ***FY 2012 Plans:*** Conduct Operational Demonstration #1 and a Limited Operational User Assessment via a joint exercise. Develop CONOPS on application of preferred forces across the planning process. Enable all interface requirements with existing and future force requirements systems. Incorporate Attribute Based Access Control. Transition to Defense Information Systems Agency. Complete the JCTD.	2.100	1.331	-
Title: Global Decision Support (GDS) ***Description:*** GDS enables senior decision makers to use newer technologies that can deliver decision-quality information for quicker understanding of the situation and provides increased time for course of action (COA) development, risk assessment, and decision-making. GDS technologies provide digital conferencing capabilities that augment the current analog capabilities in	1.400	1.331	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
the national senior leader conferencing capabilities and leverage Defense Red Switch Network and secure Voice Over SIPRNET technologies. GDS provides authoritative data, secure mobile devices and improved visualization tools to enable a decision focused COA development and analysis for senior leaders in support of space and air events. Program Outputs and Efficiencies are improved collaboration capabilities supporting emergent time-critical events to provide senior leaders with rapid situational awareness to effectively respond or develop appropriate courses of actions for missile and space events. ***FY 2011 Accomplishments:*** Conducted National Event Conference for a missile event. Introduced automated conference initiation web services. ***FY 2012 Plans:*** Integrate the Global Sensor Integrated Network display with secret level secure mobile devices to support worldwide voice/data conferences. Transition GDS services to the Integrated Strategic Planning and Analysis Network Program of Record. Complete the JCTD.			
Title: Computer Adaptive Network Defense-in-Depth (CANDID) ***Description:*** CANDID will demonstrate the integration of Virtual Secure Enclaves (VSEs) inside existing tactical networks to enable network defense-in-depth and ensure C2 capabilities despite hostile attempts to hack, disrupt, and deny computer networks. CANDID will increase security of vital C2 capabilities in a cyber contested environment; and prevent infiltration from external threats, ex-filtration of protected information and C2 denial of service, and deliver cyber surveillance/situational awareness through fusion of heterogeneous sensor data. ***FY 2011 Accomplishments:*** Installed CANDID equipment on U.S.S. George Washington. Demonstrated and assessed prototype VSE SIPRNET C2 capability at USPACOM, U.S. Pacific Fleet/Joint Task Force 519, and functional components. ***FY 2012 Plans:*** Demonstrate leave behind/transition ready VSE SIPRNET C2 capability at USPACOM, U.S. Pacific Fleet/Joint Task Force 519, and functional components. Complete the JCTD.	2.400	4.015	-
Title: Movement Requirements Visibility – Theater (MRV-T) ***Description:*** MRV-T is software and the associated processes that offer the Services commonality in requesting movement support among every geographic theater of operation and the Joint Force Commander's (JFC) with unparalleled visibility of all joint theater distribution movements. MRV-T will improve the JFC's ability to deliver personnel and material through the joint theater distribution process. MRV-T enables improved decision-making by offering prioritized courses of action to meet delivery timelines. MRV-T increases visibility of joint theater distribution requirements; improves agility and adaptability to best meet war	2.700	2.396	0.500

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
fighter movement requirements; and enhances visibility of theater modal capacity and movement requirements to effectively use available capacity and substantially reduces operations and support costs. ***FY 2011 Accomplishments:*** Initiated Software Certification and integration of capability to receive live Integrated Data Environment/Global Transportation Network data during 4Q FY 2011. Conducted technical tests and planned for technical demonstration of MRV-T technology in 1Q FY 2012. ***FY 2012 Plans:*** Conduct technical demonstration of MRV-T technology in 1Q FY 2012. Continue Software Certification and integration of capability to receive live Integrated Data Environment/Global Transportation Network data. Conduct operational demonstrations of Joint Movement Requirements Visibility and Management at USPACOM, USEUCOM, and USCENTCOM Deployment and Distribution Operation Centers during 2Q through 4Q FY 2012. ***FY 2013 Plans:*** Conduct final operational utility assessment. Residual capability will remain in operation for extended use. Determine the military utility of the technologies and procedures demonstrated. Transition to Agile Transportation for the 21st Century Program of Record. Complete the JCTD.			
Title: Collaborative Coalition Collection Environment (C3E) ***Description:*** C3E is a language independent intelligence data collection interface usable by U.S. and Coalition forces with initial fielding to support the Operational Control (OPCON) transformation on the Korean Peninsula. C3E reduces data collection errors by guiding the user to choose a variety of options using cascading drop-down menus. C3E will enable U.S./Korean personnel to describe their requirements in general military terms, symbols and graphics within their native language. C3E reduces reliance on specialized skills, language, and process that are beyond the shared experience of coalition operators. It improves the ability to gather, manage, and understand collection requirements and tasks in real time. ***FY 2011 Accomplishments:*** Provided Mission Manager & Requirements (MM&R) User Interface with enhanced map, graphic data submit, query, and synchronization capabilities. ***FY 2012 Plans:*** Obtain authority to operate on CENTRIX–K and Department of Defense Intelligence Information System (DoDIIS) Collection Framework with MM&R II User Interface. Conduct Technical and Operational Demonstrations during Key Resolve and Ulchi	0.400	2.662	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
Focus Guardian Exercises. Demonstrate services for automated target analysis and transition C3E to the Joint Deployable Intelligence Support System program of record. Complete the JCTD.			
Title: SensorWeb 2 ***Description:*** SensorWeb will provide unified access to disparate sensor interfaces, data and services across the ISR Enterprise while delivering improved Command and Control / Battlespace Awareness using Distributed Common Ground Station Enterprise Component Services. SensorWeb will integrate sensors, services, and processing capability and assure access to Sensor Web data services in a single security domain (SIPRNET). SensorWeb will demonstrate an integrated ISR Sensor Network, based on Open Geospatial Consortium® (OGC®) Sensor Web Enablement (SWE) commercial standards, modified to work with Department of Defense and Intelligence community architectures providing assured, rapid access to USSOCOM/ USPACOM sensor data, KeyMaker data and applications via SensorWeb on the Distributed Common Ground System (DCGS) Enterprise. SensorWeb will provide rapid Command and Control in near real-time tasking and cross-cueing of SOCOM/PACOM sensors via an integrated SensorWeb architecture. ***FY 2011 Accomplishments:*** The project started in late FY 2011. Deployed and evaluated an initial set of sensor-oriented web services software library and Extensible Markup Language (XML) tags for an initial set of sensor types. The operational capability will eventually transition via DCGS- Special Operations Forces/National System for Geospatial-Intelligence (NSG) Expeditionary Architecture (NEA) into Joint Intelligence Operations Center-Information Technology (JIOC-IT)/DCGS-Intelligence Community and provide access across NSG and DCGS Enterprise via the DCGS Integration Backbone (DIB). ***FY 2012 Plans:*** An optional FY 2012 follow-on is available to expand the set of sensor types supported. Transition SensorWeb services to the JIOC-IT architecture to form the baseline of sensor data and ISR Command and Control in the Defense Intelligence and Information Enterprise.	3.000	-	-
Title: Non-Persistent Desktop Browsing (NPDB) ***Description:*** NPDB provides a desktop browsing environment that protects the enterprise from the adversary's exploitation of the browser by containing the adversary within the virtual environment. At the next invocation of the browser, a pristine, trusted desktop will be automatically invoked, removing the adversary presence, even if the intrusion was undetected. NPDB prevents infiltration from external threats, ex-filtration of protected information, Command and Control denial of service, and delivers Cyber Surveillance/Situational Awareness through fusion of heterogeneous sensors data. Infected sessions are restored in seconds and a pristine copy of the NPDB can be spawned quickly, and the infected copy quarantined for analysis, or discarded, without loss of functionality to the user, required of current desktop reimaging processes.	1.200	0.377	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
FY 2011 Accomplishments: Completed the build of the system test bed, the malicious code technical demonstrations, and the limited operational assessment. ***FY 2012 Plans:*** Conduct operational demonstrations and assessments and operational utility assessments. Transition NPDB within the Enterprise Solutions Steering Group acquisition process, which provides funding for initial deployment of Computer Network Defense capabilities across the DoD networks. The Defense Information Systems Agency will assume responsibility for program execution. Complete the JCTD.			
Title: Gorgon Stare Smart Link (GS-SL) ***Description:*** GS-SL will demonstrate the ability to dynamically allocate motion video operational sub-views to available bandwidth at optimum resolution and Quality of Service (QoS), considering variables such as users' priorities and near-real time (NRT) multi-source intelligence and command and control cues. This will result in: enhanced monitoring and response to the environment (identify sub-views in accordance with dynamic user priorities, mission priorities, events, and multi-source intelligence cues); dynamically prioritized, encoded, and delivered views to optimize QoS; and decision support in accordance with available bandwidth and intelligence requirements. ***FY 2011 Accomplishments:*** Developed requirements and operational architecture. Completed sub-view prioritization and complex event processing in static format and conducted testing in systems integration laboratory utilizing real Gorgon Stare imagery. Drafted concept of operations and tactics, techniques, and procedures. ***FY 2012 Plans:*** Complete QoS management supporting intelligence requirements; and conduct operational utility assessment based upon a live-fly demonstration. Transition initial capability for Cpmplex Event Processing (CEP) association of near real-time data with operational sub-views and sub-view prioritization to GS Program of Record, Increment two aircraft. Deliver full smart information management and allocation capability with GS system upgrades to GS Program of Record. Complete the JCTD.	2.800	1.960	-
Title: Joint Warfighting Integrated NetOps (JWIN) ***Description:*** JWIN will consolidate independent Service network management information into a single integrated network management view that uses a JWIN gateway to translate service specific network information into a common format. This common format allows for the integration of policy controls to enhance the Joint Force Commander's decision making process over network resources. Key benefits include enhanced situational awareness of network events on critical operations and end-to-end network distributed policy collaboration and management capabilities used to communicate authoritative direction over critical network resources. Joint tactics, techniques, and procedures will be identified to ensure a joint procedural construct is	2.000	2.456	1.251

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
established. JWIN provides the Joint Task Force Commander a consolidated network view which affords him/her the ability to monitor and influence tactical NetOps supporting associated missions to implement the Commander's intent. ***FY 2011 Accomplishments:*** Integrated and tested network management technologies and developed concept of operations required for effective Joint NetOps. ***FY 2012 Plans:*** Continue integration and testing of network management technologies. Develop an acquisition strategy to implement JWIN components. Develop Joint tactics, techniques, & procedures. ***FY 2013 Plans:*** Provide Joint/Military Utility Assessment. Provide PACOM with a leave behind capability to support current missions. Complete the JCTD.			
Title: Autonomous Technologies for Unmanned Aerial Systems (ATUAS) ***Description:*** ATUAS will integrate a series of technologies and demonstrate autonomous precision delivery and retrograde to and from a forward point of need in operationally relevant conditions. It will demonstrate increased mission level autonomy through onboard enhanced autonomous navigation and contingency management software for single operator/multi-vehicle control of two UAS reducing the risks to the Warfighter and enabling improved operational readiness. ***FY 2011 Accomplishments:*** Integrated, ruggedized, and demonstrated a hand-held delivery location beacon. ***FY 2012 Plans:*** Demonstrate, certify ,and make available the beacon system for the Marine Corps Cargo UAS deployment in 2Q FY 2012. Integrate and demonstrate autonomous delivery beyond line of sight, autonomous enroute re-programming, in-stride multiple drop locations and control of two (2) vehicles for a single ground control station 2Q through 4Q. ***FY 2013 Plans:*** Continue integration and demonstration of autonomous en-route re-programming, in-stride multiple drop locations and autonomous retrograde. Conduct an operational utility assessment during 4Q FY 2013 focusing on autonomous delivery of multiple loads to multiple locations and the conduct of retrograde operations. Transition the technologies to existing UAS	4.900	5.324	5.000

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
Programs of Record and an anticipated new Service or Joint Cargo UAS Program of Record in 4Q FY 2013. Determine the military utility of the technologies and procedures demonstrated. Complete the JCTD.			
Title: Countermeasure Expendable with Replaceable Block Elements for Reactive Unmanned Systems Multi-Mission Jammer (CERBERUS) ***Description:*** CERBERUS delivers a net-enabled modular expendable jamming system based on the U.S. Air Force Miniature Air-Launched Decoy (MALD) that employs replaceable nosecone payloads to counter emerging threats in the USPACOM area of regard. CERBERUS reduces overall mission costs by providing reconfigurable & flexible mission weapons. ***FY 2011 Accomplishments:*** Initiated the development of open architecture specifications and enhanced MALD mission planning software. Completed test planning for demonstration of non-coherent electronic attack payload nosecone assembly. Drafted the Implementation Directive. ***FY 2012 Plans:*** Technical demonstration of non-coherent electronic attack module. Complete advanced radar jamming payload assembly and data link electronic attack payload assembly. Conduct technical/operational demonstration of nose cone assemblies. Complete Operational Utility Assessment. Complete the JCTD.	2.250	3.940	-
Title: Arctic Collaborative Environment (ACE) ***Description:*** ACE will transition an open-access, web-based, Arctic regional and national decision-support system that integrates data from existing remote sensing assets to provide a monitoring, analysis, and visualization decision-support system based on earth observation data and modeling analysis. The primary outputs and efficiencies are: (1) increased Arctic maritime domain awareness to protect maritime commerce, critical infrastructure, and key resources; (2) obtain, analyze, and disseminate accurate data from the entire Arctic region, including both paleo-climatic data and observational data to enable accurate prediction of future environmental and climate; (3) serve as the foundation for an effective Arctic circumpolar observing network with broad partnership from other relevant nations; and (4) engage Russia as a full partner in the development and deployment of an Arctic awareness tool. ***FY 2011 Accomplishments:*** Completed User Requirements Document in 3Q FY 2011. Finalized the system architecture for the developmental server and identified candidate architectures for the operational system during 3Q and 4Q FY 2011. Conducted operational testing in 4Q FY 2011. ***FY 2012 Plans:***	3.500	1.282	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
Identify and integrate existing Arctic environmental data sets and models in 1Q FY 2012. Deploy developmental server in an operational environment during Q2 through Q4 FY 2012.			
Title: VIVID POINTER (VP) ***Description:*** VP will demonstrate the ability to gather, correlate, and fuse low-latency National, Theater and Tactical data while removing sources and collection methods. This data will be distributed via Link-16 and Global Command and Control System - Joint at the SECRET releasable level in order to support counter-Integrated Air Defense and counter-Long Range Aviation missions. ***FY 2011 Accomplishments:*** Conducted software development from non-traditional ISR assets, defined interface format and latency requirements, tested dissemination architecture via the U.S. Strategic Command Data Integration and Fusion Center (DIFC), and evaluated timeliness and format. ***FY 2012 Plans:*** Test in exercises and pending successful demonstration, baseline and integrate into the DIFC. ***FY 2013 Plans:*** Transition residual capability to the DIFC. Complete the JCTD.	3.250	1.065	0.300
Title: Critical Runway Assessment and Repair (CRATR) ***Description:*** CRATR developed the capability to conduct rapid airfield damage assessment, determine the minimum airfield operating surface required, identify unexploded ordnance, and repair runway damage to enable critical airfields to rapidly return to operation. CRATR evaluated existing, new and commercial technologies and procedures, and integrated the most successful to develop both material and equipment solutions. Successful solutions from early demonstrations will be used to create an interim modular repair kit which will form the Spiral One capability for theater. After a successful final demonstration, products from CRATR will be packaged into a final modular repair kit that will transition to the U.S. Air Force Airfield Damage Repair program. ***FY 2011 Accomplishments:*** Completed final pavement repair assessment report. Improved material packaging to extend shelf life. Conducted System Development Demonstration and transitioned Rapid Airfield Damage Assessment System to Airfield Damage Repair Program of Record. Completed the JCTD.	1.100	-	-
Title: Hardened Installation Protection for Persistent Operations (HIPPO) ***Description:*** HIPPO will develop and validate scalable, resilient-structured solutions to enhance continuity of operations in the face of major disruptions from war. Emphasis will be on capabilities required to enable/conduct persistent sortie generation	-	3.727	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
including the ability to recover, refuel/re-arm/unload-load, and launch aircraft and the systems that enable these activities. Solutions analysis will extend to port operations and critical Joint operations normally conducted in garrison to generate and deploy combat power. HIPPO will demonstrate a range of proven (weapons effect tested) sheltering methods and improved survivability capabilities for critical systems and a companion strategy for phased implementation with schedule and expected costs considering threat, location, mission and cost. ***FY 2011 Accomplishments:*** Completed Considerations for Installation Hardening and Candidate Technologies for Infrastructure Hardening research and studies. Completed geological analysis, surrogate threat weapon design, and analysis of hardened aircraft shelter (current design) against the emerging threat. Conducted technical testing, modeling and simulation, and technical demonstration of various hardening constructs against potential threat projectiles with appropriate explosive weights. ***FY 2012 Plans:*** Continue modeling and simulation, and technical demonstrations in testing scaled and/or full scale section(s) of various hardening constructs against potential threat projectiles with appropriate explosive weights. Update CONOPS, TTPs, and develop User Manual for HIPPO recovery, restoration and repair technologies. Conduct an operational utility assessment focusing on expedient, repair and recovery technologies during 3Q FY 2012. ***FY 2013 Plans:*** Conduct an operational utility assessment focusing on expedient, repair and recovery technologies during 1Q FY 2013. Residuals will be provided for extended use and sustained by the Air Force. Transition the hardening, repair and recovery capabilities to the Guam Strike and other appropriate programs of record during 1Q FY 2013. Conduct an operational utility assessment focusing on expedient, repair and recovery technologies during 3Q FY 2013. Determine the military utility of the technologies and procedures demonstrated. Complete the JCTD.			
Title: CLOUDBREAK Campaign Initiative ***Description:*** CLOUDBREAK will bring together JCTDs that focus on C2 among all COCOMs. CLOUDBREAK will drive a common “plug and fight” architecture that provides services and consumes data based on the Defense Information Enterprise Architecture (DIEA) and the Defense Intelligence Information Enterprise (DI2E) framework. CLOUDBREAK will demonstrate capabilities which can be provided as composable services on the Global Information Grid (GIG). Success will be achieved when capabilities from multiple programs of record, JCTDs, and other tools are reused by multiple COCOMs, based on common standards to meet changing needs. The CLOUDBREAK campaigns will demonstrate existing mature capabilities in Cyber, Ops/Intel, Situational Awareness and Regional Domain Awareness that meet COCOM priorities. ***FY 2011 Accomplishments:***	2.000	-	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
Initiated system engineering and planning for CLOUDBREAK Campaign 1 to be executed in FY 2012 in USPACOM during Terminal Fury 12. Efforts accomplished include requisite planning for campaign execution, developing test plans, metrics, and training to deliver the following services: Common Operation Picture (COP) integration of the National Decision Support Service (NSLDSS) JCTD and Maritime COP; synchronization of J6/Network and Cyber tools, and a Quick Reaction Capability (QRC) for the J2 Joint Intelligence and Operations Center (JIOC). ***FY 2012 Plans:*** Partner funding required. Complete CLOUDBREAK Campaign 1 during Terminal Fury 12 and Valiant Shield 12. CLOUDBREAK will provide Operations and Intellengece services from a DI2E enabled JIOC; integrated data sources; dynamic, reconfigurable COP services including widget Mashups; Cyber Situational Awareness Services; and automated tools to sync Ops, Intel and Cyber thereby automating the C2 of C2 services. ***FY 2013 Plans:*** Partner funding required. Provide CLOUDBREAK Campaign during a relevant exercise with a theme of Humanitarian Assistance/ Disaster Response (HA/DR). The services planned for demonstration include Maritime/Regional Domain Awareness Services, unclassified sensor integration, interagency Situational Awareness and Collaborative services that facilitate the automation of HA/ DR C2.			
Title: Joint Extended Range Illumination Projectile (JERIP)	-	2.400	1.100
Description: The Joint Extended Range Illumination Projectile (JERIP) creates an improved Infrared and Visible Light Illumination capability for maneuver commanders. JERIP extends Joint Night Vision range by 5 kilometers; provides 75 percent increase in illumination footprint, eliminates demilitarization costs by re-using M483 155mm projectile shell bodies, and creates a procurement savings of $10 million. JERIP will complete development and demonstration in 3Q FY 2013, and transition into PEO Ammo in 4Q FY 2013. ***FY 2011 Accomplishments:*** Fabricated initial component hardware and implemented initial Load, Assembly and Pack (LAP) of projectiles for technical demonstrations. ***FY 2012 Plans:*** Conduct technical and operational demonstrations on approximately 600 projectiles of the 155mm Extended Range Infrared (XM1123) and the Extended Range Visible Light (XM1124). ***FY 2013 Plans:***			

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
Finalize technical and operational demonstrations and assessments on the 600 projectiles during 1Q through 3Q FY 2013, and initiate immediate transition to the initial product contract during 4Q FY 2013.			
Title: Combined End-to-End EMIO (Expanded Maritime Interdiction/Interception Operations) Performance Optimization (C3PO) ***Description:*** C3PO will provide Maritime Commanders, Naval Law Enforcement, and Coalition Allies with the capability to deliver, disseminate, and share Expanded Maritime Interdiction/Interception Operations (EMIO) boarding data (including crew identity verification) using available collection devices while it can be acted upon. C3PO will demonstrate and transition a cloud-based EMIO web application providing U.S. and Coalition force boarding teams near real-time End to End submission, dissemination, Identification verification, and mission support during maritime boarding missions. ***FY 2011 Accomplishments:*** Defined top-level operational requirements, and began system architecture. Reviewed current COCOM directives and maritime boarding Standard Operating Procedures (SOP) to incorporate into specific draft CONOPS for the C3PO system. Began transition planning with Navy resource sponsors, Programs of Record and the COCOM Operational Manager (OM). Produced a draft Implementation Directive (ID). ***FY 2012 Plans:*** Publish ID, Management/Transition Plan (MTP), Integrated Assessment Plan (IAP). Lock-in operational requirements; finalize system architecture and integration activities. Conclude the updated boarding CONOPS; finalize system development and technically test the C3PO system. Begin C3PO Operator training activities and finalize CONOPS. Continue transition planning; prepare for Operational Demonstration (OD) One. ***FY 2013 Plans:*** Conduct Operational Demonstration (OD) One at Naval Forces Central Command (NAVCENT) with attendance from U.S. European Command. OD One will be evaluated by operators and the COCOM appointed formal assessment activity. Transition the C3PO capability to Navy for operational use by DoD, Agency and partner nations. Complete the JCTD.	1.600	0.800	0.800
Title: Regional Domain Awareness (RDA) ***Description:*** RDA demonstrates a standards-based unclassified framework for information sharing between U.S. government agencies and international partners. RDA will install GOTS software to integrate air, land, and sea sensor data to create a multi-domain unclassified information sharing framework between U.S. interagency and local, tribal, and international partners. RDA will demonstrate (1) assured integration from air, maritime, and land sensors and networks; (2) user defined monitoring and alerting; (3) selective sharing of situational awareness and alerts to multiple defined users; (4) CONOPS and TTPs supporting the sharing of unclassified information to non-PKI (Public Key Infrastructure) users; and (5) access to unclassified data and services. ***FY 2011 Accomplishments:***	1.000	4.000	0.800

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
Technical selection of GOTS framework. Technical Demonstration 1 executed during Trident-Warrior 2011 Field Experimentation exercise and demonstrated proof-of-concept data sharing between USSOUTHCOM, the United Kingdom, and France. Data standards adaptation developed in accordance with the National Information Exchange Model for Maritime (NIEM-M) format; and versions 1 and 2 of the NIEM-based Feature Description Document were released. ***FY 2012 Plans:*** Technical Demonstration 2 and 3; integration of partner nation data and services; federated services between multiple sites; data mediation services; Limited Operational User Assessement (LOUA); and initial transition to Defense Information Systems Agency (DISA) Multi-National Infomation System (MNIS) and USSOUTHCOM. ***FY 2013 Plans:*** Technical Demonstration 3; demonstration of partner nation data and services, federated services between multiple sites, and data mediation services; LOUA; and initial transition to DISA MNIS and USSOUTHCOM.			
Title: Three Dimensional Landing Zone (3D-LZ) ***Description:*** 3D-LZ will deliver an integrated sensor suite capable of providing rotorcraft pilots with situational awareness during degraded visual environments encountered on takeoff and landings, cable warning and obstacle avoidance cues, and general terrain awareness for safety of flight. The program will deliver an integrated turret to the Global Reach Program Office. ***FY 2011 Accomplishments:*** Draft Implementation Directive completed. Conducted initial Integrated Management Team (IMT) meeting. ***FY 2012 Plans:*** Complete Implementation Directive (ID) and Management Plan (MP). Begin turret design. Conduct bench and field tests on major subsystem components. ***FY 2013 Plans:*** Conduct technical demonstration via flight test of 3 dimensional imaging sensor. Complete turret integration. Conduct operational demonstration and assessment. Complete JCTD and transition to U.S. Air Force Program of Record.	0.250	5.300	7.050
Title: Anti Jam Precision Guided Munitions (AJPGM) ***Description:*** AJPGM will deliver precision navigation capability is severely GPS-jammed environments. AJPGM will also deliver home-on-jam capability. Specifics related to technologies, current capability, and threats are classified. ***FY 2011 Accomplishments:***	0.250	6.000	5.000

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APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 3: *Advanced Technology Development (ATD)*	R-1 ITEM NOMENCLATURE PE 0603648D8Z: *Joint Capability Technology Demonstration (JCTD)*	PROJECT P648: *Joint Capability Technology Demonstration (JCTD)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
Completed draft Implementation Directive. Conducted initial Integrated Management Team (IMT) meeting ***FY 2012 Plans:*** Complete Implementation Directive (ID) and Management Plan (MP). Initiate design of anti-jam navigation kit. Conduct technical demonstrations of home-on-jam kit in late FY 2012. Conduct variety of field and hardware in the loop tests on major subsystem components. ***FY 2013 Plans:*** Conduct technical demonstration of anti-jam kit. Complete system integration into test vehicle. Conduct operational demonstration and assessment. Complete JCTD. Transition to U.S. Air Force program of record.			
Title: Joint Strike Fighter (JSF) Enterprise Terminal (JETpack 5th to 4th) ***Description:*** JETpack 5th to 4th supports the COCOM's airborne gateway needs to distribute 5th Generation (Gen) data to 4th Gen fighters by translating their tactical data link into Link-16 messages that can be viewed by the 4th Gen aircraft. JETpack will demonstrate: (1) four flyable prototype dual-band, multi-beam antennas, (2) two JET terminals, and (3) two dual-band remote electronics. ***FY 2011 Accomplishments:*** Designed prototype component hardware and implemented initial bench test protocols. ***FY 2012 Plans:*** Conduct technical demonstrations to include the JET terminal with Intra-Flight Data Link (IFDL), and a dual-band, multi-beam antenna lab test. ***FY 2013 Plans:*** Finalize operational demonstrations and assessments on the flyable prototypes during 2Q through 4Q FY 2013, and initiate transition to the F-15C community.	1.000	8.000	6.000
Title: Minor Resource Projects (less than one million dollars) ***Description:*** The JCTD program completed and transitioned the following projects: Future Immersive Tranining Environment (FITE), Net Zero Plus (NZP), Joint Medical Distance Support & Evacuation (JMDSE), Daily Watch, Protection and Operation of IP-secure Network Terrain (POINT). Sea Tracker (ST) will continue into FY 2012. ***FY 2011 Accomplishments:***	2.876	0.640	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
Completed and transitioned: Future Immersive Tranining Environment (FITE), Net Zero Plus (NZP), Joint Medical Distance Support & Evacuation (JMDSE), Daily Watch, Protection and Operation of IP-secure Network Terrain (POINT). ***FY 2012 Plans:*** Sea Tracker (ST) will conduct extended user evaluation. Additional details are classified.			
Title: FY 2012 Combantant Commands (COCOM) Priorities ***Description:*** The first group of FY 2012 JCTD projects were identified under the revised JCTD selection process beginning with a Candidate Nomination Board in June 2011 followed by a Candidate Decision Board (CDB) in August 2011. This allows the Department to rapidly execute the JCTDs needed in FY 2012 to meet the COCOMs most pressing needs as soon as FY 2012 funds become available. COCOMs have proposed projects addressing a range of capability gaps, including cyber defense, logistics, information distribution, interagency collaboration in humanitarian assistance/disaster relief, operations in communications and GPS jamming environments, autonomous systems in current operations, advanced munitions, energy efficiencies, and space systems. Additional COCOM proposals will be acted on throughout the year to address emerging needs as funds are identified. ***FY 2012 Plans:*** Anticipate starting approximately 15 projects in FY 2012. ***FY 2013 Plans:*** Fund the second year of the FY 2012 projects that are scheduled to proceed to a second year.	-	22.018	19.250
Title: FY 2013 Combatant Commands (COCOM) Priorities ***Description:*** JCTD projects that support COCOM priorities are linked directly to COCOM integrated priority lists and validated joint operational needs statements. The first group of FY 2013 JCTD projects will be identified under the JCTD selection process beginning with a Candidate Nomination Board in June 2012 followed by a Candidate Decision Board (CDB) in August 2012. This allows the Department to rapidly execute the JCTDs needed in FY 2013 to meet the COCOMs' most pressing needs as soon as FY 2013 funds become available. Additional CDBs will be held throughout the year to address emerging COCOM needs. JCTDs indentified in these CDBs will be initiated as funds are identified. ***FY 2013 Plans:*** Fund the first year of the FY 2013 projects that are selected by the Candidate Decision Board.	-	-	61.912
Accomplishments/Planned Programs Subtotals	185.591	171.807	158.263

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C. Other Program Funding Summary ($ in Millions)

N/A

D. Acquisition Strategy

JCTD capabilities that demonstrate operational utility transition to acquisition via one of several methods:

- The capabilities address a documented capability gap in an existing Program of Record, so that the exisiting Program can acquire, further develop, sustain, and provide the capability under existing program documentation.
- The capabilities address capability gaps that naturally fit with an existing Program of Record, but program documentation addressing the new capabilities does not exist. In these cases, existing program documentation (such as the Capabilities Development Document or Capabilities Production Document) is revised to include the new capabilities from the JCTD, and the JCTD capabilities transition to the Program of Record.
- The capabilities address a current operational need without requiring Program of Record changes. In these cases, the JCTD capabilities may transition directly to operational use, with sustainment (operations and maintenance) funding arranged through the gaining command.
- The capabilities may be widely applicable commodity products, useful to many commands. In these cases, the commodity products listed on General Services Administration schedule, and made available for purchase by any commands needing the capability, using procurement funds.

E. Performance Metrics

Strategic Goals Supported in FY 2012:

- Project Selection Focus
- Spiral Technologies to Fielded Capabilities
- Time to Final Demonstration
- Adequately Shared Funding and Visibility
- Independent Assessment Capability
- Successful Military Utility Assessment (MUA)

The majority of funding from this Program Element is forwarded to the Services/Defense Agencies that execute the individual JCTD projects. The Deputy Assistant Secretary of Defense, Rapid Fielding maintains and provides overall programmatic oversight for the JCTD program, to include the individual JCTD projects. The JCTD performance metrics center on how fast relevant joint and/or transformational technologies can be demonstrated and provided to the joint warfighter. These metrics are driven by the overall business process which includes six parts: (1) selection focus; (2) ability to spin-off spiral technologies; (3) time necessary to complete a final demonstration; (4) adequately resourced projects with appropriate oversight; (5) capability to complete an independent assessment of the technology; and (6) the number of successful capabilities that are actually transitioned to the warfighter.

MEASURABLE OUTCOMES: Metrics include: all JCTDs will deliver products within 12 months to enable assessment for project continuation; 50 percent of JCTDs will provide an operationally-relevant prototype within 12 months and 75 percent will complete final demonstration within 24 months of Implementation Directive signature. JCTDs will spiral products and deliverables during the demonstration. At least 75 percent of JCTD projects will transition products to Programs of Record (PoR), sustained residual operations, or availability for procurement from the GSA Schedule.

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Transition Achievement: The JCTD program has been achieving actual transition rates in excess of the stated goal. The JCTD Program defines transition as a project's product or products going to new or existing PoRs and/or providing residual products sustained in direct support of operations that satisfies a specific requirement, or procurement availability on GSA Schedule.