Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Office of Secretary Of Defense	DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 3: *Advanced Technology Development (ATD)*	R-1 ITEM NOMENCLATURE PE 0603648D8Z: *Joint Capability Technology Demonstration (JCTD)*

COST ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	159.264	206.917	187.707	-	187.707	199.262	197.326	207.588	211.347	Continuing	Continuing
P648: *Joint Capability Technology Demonstration (JCTD)*	159.264	206.917	187.707	-	187.707	199.262	197.326	207.588	211.347	Continuing	Continuing

Note

Through FY 2010, the appropriation, Program Element (PE) and Budget Activity (BA) structure for the Joint Capability Technology Demonstration (JCTD) model included the following:
JCTD PE 0603648D8Z (RDT&E-DW, BA-3)
JCTD Transition Funding PE 0604648D8Z (RDT&E-DW, BA-4)
Defense Acquisition Executive (DAE) (RDT&E-DW, BA-5)

In FY 2011 funding is transferred from the JCTD BA4 PE and Defense Aquisition Executive (DAE) Pilot programs into the JCTD BA3 PE. The JCTD BA-4 PE and DAE BA-5 Pilot program PEs end.

Today's operations require even faster delivery of new capabilities. Therefore, the JCTD Program was revised in FY 2010 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: improved synchronization with COCOM experimentation, streamlined project approval and initiation, clear 1-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. 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 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, 93% of completed JCTDs have successfully transitioned capabilities to warfighters. 70% 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 o Defense 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 72 JCTD/ACTD projects delivered capabilities used in Operation Iraqi Freedom, and 52 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.

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- The program enables Coalition cooperative development by leveraging allied expertise and resources. Approximately 30% 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.
- 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, and tunnel detection and characterization.
- The program enables rapid response to new Department of Defense 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: The JCTD model is capability-based, not threat-based and supports U.S. Combatant Command (COCOM) priorities by focusing on near-term joint needs. Stated 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 a Program of Record (PoR), residual operations, or availability for procurement from the 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 PoRs and/or providing a residual product(s) sustained in direct support of operations that satisfies a specific requirement. Seventeen of the 18 JCTD projects that completed in FY 2010 have transitioned to PoR and/ or operational sustainment (93% successful transition). As of FY 2009, of 184 total AC/JCTDs, 64 have deployed in support of OEF/OIF covering the following Functional Areas: Battlespace Awareness, Command & Control, Force Application, Logistics, Protection, Net-Centric. Thirteen CENTCOM-sponsored AC/JCTDs deployed in OEF/OIF.

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B. Program Change Summary ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	168.577	206.917	211.229	-	211.229
Current President's Budget	159.264	206.917	187.707	-	187.707
Total Adjustments	-9.313	-	-23.522	-	-23.522
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-5.186	-			
• SBIR/STTR Transfer	-3.874	-			
• Defense Efficiency - Baseline Review	-	-	-14.523	-	-14.523
• Defense Efficiency – Contractor Staff Support	-	-	-0.935	-	-0.935
• Defense Efficiency – Report, Studies, Boards and Commissions	-	-	-7.492	-	-7.492
• Economic Assumptions	-	-	-0.572	-	-0.572
• Other internal adjustment	-0.253	-	-	-	-

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2010	FY 2011
Project: P648: *Joint Capability Technology Demonstration (JCTD)*		
Congressional Add: *Distributed Network Switching (DNS)*	1.600	-
Congressional Add Subtotals for Project: P648	1.600	-
Congressional Add Totals for all Projects	1.600	-

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).

Defense Efficiency – Baseline Review. As part of the Department of Defense reform agenda, implements a zero-based review of the organization to align resources to the most critical priorities and eliminate lower priority functions. Achieved by eliminating the functions in support of PE 0604648D8Z and focusing efforts on critical technologies being developed in PE 0603648D8Z.

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

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

Exhibit R-2A, RDT&E Project Justification: PB 2012 Office of Secretary Of Defense			DATE: February 2011
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Title: Adaptive Planning Pilot (APP)	2.400	2.400	-
Description: The Adaptive Planning Pilot (APP) JCTD is designed to provide Combatant Commanders with needed dynamic and agile force planning capabilities as outlined in the Adaptive Planning Road Map II. The APP JCTD will provide global force management tools for Adaptive Planning and Execution (APEX) users. The APP JCTD is a multi-year project sponsored by Joint Forces Command (JFCOM) . It will provide early capability to planners and force providers by providing additional services that are not present in the Global Command and Control System (GCCS) Family of Systems. The JCTD is a risk mitigation tool for the APEX program, providing valuable lessons learned from the Services Oriented Architecture (SOA) development approach. Completion for development and demonstration is planned for 2012. The Transition Manager is the Adaptive Planning (AP) Program Office in the Defense Information Systems Agency (DISA). The primary output will be the ability of COCOM and Joint Staff planners, as well as the military Services to conduct streamlined operations with the Global Force Provider (JFCOM) and			

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
with members of the Joint Planning and Execution Community (JPEC).The primary metric is more accurate and timely global force management during planning and execution. ***FY 2010 Accomplishments:*** Completed Spiral 1 technical demonstration and limited operational assessment. Developed Spiral 2. ***FY 2011 Plans:*** Complete Spiral 2 technical demonstration 3Q FY 2011 and Operational User Assessment is planned for 1Q FY 2012. Transition functionality to configuration management and sustainment by the DISA Adaptive Planning Program Office. JCTD completes in April 2012.			
Title: Advanced Distributed Aperture System (ADAS) ***Description:*** The Joint Requirements Oversight Council (JROC) validated the capability need for ADAS in FY 2008. ADAS is demonstrating and assessing the military utility of a multi-spectral suite of sensors on an H-60 helicopter to provide full spherical imagery to aircrew members via head-tracked, helmet mounted displays. This capability includes day/night pilotage, heads-up display with navigational/flight symbology data, multi-band threat laser warning, weapons symbology, partial brownout solution, and some hostile fire indications and friendly/enemy aircraft tracking information. ADAS will enhance aircraft survivability and aircrew situational awareness. During the developmental phases, ADAS Concept of Operations (CONOPS) and Tactics, Techniques, and Procedures (TTPs) will be developed and refined. ADAS is a multi-year project sponsored by US Special Operations Command (USSOCOM) with completion of development and demonstration by end of FY 2010. If the ADAS JCTD shows sufficient military maturity and utility, it will transition to a Program of Record (POR) under the USSOCOM Program Executive Officer for Rotary Wing. Army is the lead service. ***FY 2010 Accomplishments:*** Completed final system configuration and began flight testing. ***FY 2011 Plans:*** Complete flight test and Military Utility Assessment; support transition to Program Executive Office Rotary Wing.	5.700	-	-
Title: Airborne Weapons Surveillance System (AWSS) ***Description:*** The JROC validated the capability need for AWSS in FY 2007, the JCTD started in FY 2008. 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. The JCTD 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: (1) percent of detections of artillery fires at ranges of up to 20 km; (2) location accuracy of hostile firing units; and (3) transmission time of hostile	2.700	1.560	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
fires and hostile firing locations to coalition counter fire units, in efficient machine readable formats. The sponsor of AWSS is U.S. Pacific Command, and Republic of Korea is the coalition partner. Operational management is from Commander US Forces Korea and Republic of Korea (ROK) Army. Technical lead is Army Aviation & Missile Research, Development and Engineering Center. Technical demonstrations will occur in Korea using ROK unmanned air vehicle (UAV). ***FY 2010 Accomplishments:*** Concluded the core AWSS JCTD. Residual capability available for Combined Forces Korea. Delivered operational utility assessments. Concluded concepts of operations. Supported residual operations. ***FY 2011 Plans:*** Support residual operations by Combined Forces Korea.			
Title: CORPORAL ***Description:*** The JROC validated the need for CORPORAL in FY 2008. The output of CORPORAL is to provide ground-based, deployed Marines and Soldiers with the capability to take full advantage of tactically relevant sensor data, command & control (C2), and electronic attack (EA) in near real time. Specifically, the capabilities will include Non-Traditional Intelligence Surveillance and Recognizance (NTISR) ,"on-demand" to the ground unit and beyond line-of-sight connectivity maximizing opportunity for collaboration or synchronization. Distributed operations demand faster responses and necessitate providing greater capability to existing aircraft rather than introducing new aircraft. Greater joint service capacity is needed from existing and planned EA assets and platforms. The efficiencies of CORPORAL will be to decentralize 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. This will provide the ground forces with a beyond-line-of-sight (BLOS) connectivity to ISR resources that they do not have today. This JCTD will provide a collaborative distributed data and information exchange framework based on existing and planned warfighters' communication waveforms. CORPORAL is a multi-year project sponsored by US Central Command with a planned transition by the Marine Corps in 2011. ***FY 2010 Accomplishments:*** Completed Technical Demonstration # 1A, critical design review for the Shadow Electronic Attack configuration, and initial system testing. ***FY 2011 Plans:*** Complete Technical Demonstrations 2 and the Military Utility Assessment and transition CORPORAL to PMA-234.	2.300	-	-
Title: Communications Air-Borne Layer Expansion (CABLE)	3.100	1.200	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Description: The Joint Requirements Oversight Council (JROC) validated the need for CABLE in FY 2008. The outcome of CABLE is to demonstrate 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. Outputs and efficiencies to be demonstrated include; (1) seamless interconnection of multiple air, maritime and land network coverage areas supporting voice and data; (2) cross-band and multi-routing-domain connectivity within and between coverage areas through IP routing; (3) the extension of command and control connectivity throughout the full range of operations; and (4) enhanced network services for voice, video and data communications over a common IP network. U.S. Strategic Command (USSTRATCOM) and U.S. Joint Forces Command (USJFCOM) are the sponsors. US Navy is the lead service; US Air Force is the supporting service. Transition to the Service Programs of Record (POR) is in FY 2011. ***FY 2010 Accomplishments:*** Conducted operational demonstration and Operational Utility Assessment. Finalized planning for operational demonstrations and Operational Utility Assessment. Technical management and lead service shifted to Navy when Air Force Objective Gateway program was canceled. Completed transition agreements with Navy and USAF program offices as well as with industry partners that have aerial layer networking related programs and products. Transition items included networking and routing software suites, technical and operational documentation, concepts of operations and network architectures. Transition efforts were led by Air Force Global Cyberspace Integration Center and Navy Program Executive Office Command, Control, Communications, Computers, and Intelligence (PEO C4I). Supported Joint Aerial Layer Networking Analysis of Alternatives. ***FY 2011 Plans:*** Complete Operational User Evaluation and finalize technical documentation for transition partners. Support transition of CABLE demonstrated technologies. Transfer final documentation and concept of operations to COCOM sponsors and service command elements. Complete transition to the Services. Support Joint Aerial Layer Networking Analysis of Alternatives. Complete the JCTD.			
Title: Counter Intelligence - Human Intelligence Architecture Modernization Program, Intelligence Operations Now (CHAMPION) ***Description:*** The JROC validated the capability need for CHAMPION in FY 2006. The outcome provides improved capabilities for the counter-intelligence (CI), human-intelligence (HUMINT) and Special Forces communities of interest. These improvements offer an accessible and actionable information system for the management of the CI/HUMINT collection, mission planning and asset management information. The capabilities include technologies to integrate structured and un-structured reports, entity extraction and tagged geospatial information. The primary outputs demonstrated were: (1) joint data standard for human	0.480	-	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
domain; (2) CHAMPION information collection tool and associated concept of operations (CONOPS) and tactics, techniques and procedures (TTPs); (3) CI/HUMINT mission management tools with federated search capability and data replication/access across multiple networks; and 4) integrated geo-tagged photo extraction, CI/HUMINT data access tools for multi-intelligence discipline fusion. The efficiencies gained are; (1) improved effectiveness of CI/HUMINT operations; (2) elimination of human domain data stovepipes; 3) joint human domain data standard; (4) improved web-enabled data access across multiple networks and security levels; (5) Joint CONOPs/TTPs; (6) geo-spatially enabled mission and asset management tools; (7) prototype voice biometrics standards, architecture and operational concepts. The transition strategy is to incorporate CHAMPION capabilities into the Distributed Common Ground Station Army program of record. Additional CHAMPION products are also transitioning to PM TENCAP and PM CHARCS. The sponsoring Combatantant Command is the U. S. Central Command (CENTCOM). Other organizations involved as participants, users of capabilities, and/or observers include USSOCOM, USJFCOM, Defense Intelligence Agency, and the National Security Agency. The lead service is the Army. ***FY 2010 Accomplishments:*** CHAMPION completed and transitioned the Coordinate Operational Resources for Voice Exploitation Technology (CORVET) Initiative to DoD PM Biometrics who is integrating CORVET's Rome Audio Processing Tool-Release (RAPT-R) and Falcon (both voice processing and matching functions) into the Biometric Automated Toolset - Modified (BAT-M). CORVET introduced voice-matching capability to augment existing biometrics acquisition, exploitation, and processing systems.			
Title: Common Ground ***Description:*** The JROC validated the need for Common Ground functionality in FY 2009. The objective is to achieve Joint or Coalition capability to interoperate on common ground geospatial data and C2 data and information 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 (SOA) standards and guidance, as well as international standards adopted by the US to address information exchange (i.e., Joint Consultation, Command and Control Information Exchange Data Model - JC3IEDM). Common Ground will enable the sharing of digital orders and plans across C2 systems and a reduction of errors and misunderstanding among distributed systems. All Common Ground capabilities will be incorporated as commercial software under a DoD Enterprise License. Common Ground is sponsored by USJFCOM. The US Army Engineering Research Development Command is the technical lead agency, the National Geospatial Agency functions as transition agent. The NATO Consultation, Command and Control Agency (NC3A) serves as technical experts and liaison between NATO's systems and the US systems. ***FY 2010 Accomplishments:***	6.200	6.496	-

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Demonstrated commercial geospatially-extended NATO standard Joint Consultation, Command and Control Information Exchange Data Model (JC3IEDM) supporting Joint and multinational interoperability. Demonstrated common NATO and US analytic services in Joint C2 Systems. Drafted JC3IEDM specification extension to US and international JC3IEDM standards. Produced test reports on architectural stability and documented interim user juries to facilitate a user centric design for the components and information products. Performed initial operational user assessment between US and NATO to validate assumptions on C2 efficiencies, model architectures and baseline interoperability, network and architecture metrics. Conducted assessments on Tactical Spatial Object tools. Delivered geospatial tools for inclusion in the Commercial Joint Mapping Tool Kit. Demonstrated Common Ground tools in Coalition Warfighter Interoperability Demonstration. ***FY 2011 Plans:*** Conduct final operational assessment. Award DoD Enterprise contract for analytic and interoperability software. Initiate Doctrine, Operations, Training, Materials, Logistics, Personnel, Facilities (DOTMLPF) activities. Complete documentation for enterprise licensing of functionality in NGA Commercial Joint Mapping Toolkit (CJMTK). Complete the JCTD.			
Title: Riverine & Intercoastal Operations (RIO) ***Description:*** The JROC validated the capability need for RIO JCTD in FY 2009. 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 (MOB), supporting the Battlespace Awareness and Force Protection capability areas. Persistent detection and monitoring of riverine activities will be accomplished through networked Unattended Ground Sensors (UGS) and sensor data used to enhance localized situational awareness. U.S. Southern Command is the Operational Manager, Naval Surface Warfare Center Dahlgren Division is the Technical Manager and Program Executive Office Littoral Mine Warfare - Antiterrorism/Force Protection (PMS-480) is the Transition Manager. The Naval Expeditionary Combat Command (NECC) and Naval Special Warfare community provide U.S. Navy support for RIO. The first operational demonstration will occur within the Continental US (CONUS) 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 (DHS). This first increment will conclude with an Operational Utility Assessment performed by the Operational Test and Evaluation Force (OPTEVFOR). The second RIO increment will focus on the jungle environment outside CONUS (OCONUS) with Colombia in FY 2011. It will culminate with a technical demonstration and Letter of Observation provided by OPTEVFOR. ***FY 2010 Accomplishments:***	3.200	2.400	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Defined requirements and conceptual operations for US Navy. Selected and technically demonstrated baseline technology solution set during TD-0 (sensors, communications and COP) in Panama. Drafted the Information Exchange Agreement (MIEA) and other supporting agreements between U.S. and Colombia. ***FY 2011 Plans:*** Conduct technical and system integration discussions with Colombia. Integrate RIO aboard Colombian Riverine Support Vessel. Technically and operationally test and demonstrate RIO in the Intercoastal environment through formal Limited Operational Utility Assessment. Spiral capability to the U.S. Navy , DHS and Colombia. Transition RIO from U.S. to Colombia following successful demonstration. Begin transition to U.S. Navy. Complete the RIO JCTD.			
Title: Future Immersive Training Environment (FITE) ***Description:*** The JROC validated the capability need for FITE JCTD in FY 2008. FITE JCTD will demonstrate advanced virtual training technologies for small units. It will provide a common software training environment for a variety of different training hardware configurations including Virtual Reality, Fixed-Base Mixed Reality and Augmented Reality. FITE JCTD has two spiral demonstrations. The first spiral successfully demonstrated an individual worn Virtual Reality system at Camp LeJuene and Fort Benning. The second spiral will demonstrate advanced Mixed Reality technologies for fixed location training facilities at the Marine Corps' Infantry Immersion Trainer (IIT) and the Army's Combined Arms Collective Training Facility (CACTF). Spiral Two equipment will include a see-through Helmet Mounted Display that will project realistic virtual characters into the training environment. The sponsor and Operational Manager is USJFCOM ***FY 2010 Accomplishments:*** Completed integration of Spiral 2 components for demonstration phase including Facility Based Mixed Reality and Augmented Reality demonstration systems for USMC and Army. Conducted Spiral Two Operational Demonstrations in September 2010 at USMC and October 2010 at Army facilities. Published FITE JCTD final Operational Utility Assessment report and informed applicable Service Programs of Record (POR) of the results. Completed the core FITE JCTD. ***FY 2011 Plans:*** Support COCOM post-FITE JCTD residual activities leading to Service Programs of Record (POR) transition.	5.200	-	-
Title: National Senior Leadership Decision Support Service (NSLDSS) ***Description:*** The JROC validated the need for NSLDSS in FY 2008. NSLDSS provides senior decision-makers a method to develop rapid situation awareness to support response planning and execution to time-critical events of national significance. Current processes rely heavily on teleconferences, resulting more time spent on discovery than decision-making. NSLDSS is a combined hardware and software system consisting of DoD and commercial databases, search engines, source repositories,	3.000	3.000	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
network enterprise services, policy decision services, enterprise universal data descriptor , visualization tools, and web 2.0 capabilities. The primary outputs and efficiencies to be demonstrated are: (1) improved global situational awareness for senior leadership; (2) improved course of action options; and (3) improved quality of information for senior leader decision-making in a collaborative environment. The user sponsor is the Joint Staff J3 National Military Command Center (NMCC) and the Lead Agency is DISA. ***FY 2010 Accomplishments:*** Conducted Spiral 2 - Improved course of action options and decision making by integrating web services that support identification and visualization of available assets and resources. Conducted technical product integration, testing, and demonstrations including a Limited Operational Utility Assessment (LOUA). ***FY 2011 Plans:*** Conduct Operational Demonstrations and complete the Operational Utility Assessment (OUA). Complete the transition to DISA Program of Record. Complete JCTD.			
Title: Global Observer (GO) ***Description:*** The JROC validated the capability need for GO in FY 2007. The GO JCTD is a transformational program to demonstrate liquid hydrogen powered unmanned aerial vehicle, using a modified, internal combustion engine, capable of flying extremely long endurance (objective of 6 days on station) with a moderately sized payload capacity (380 lbs) at an altitude of 55-65,000 ft. above mean sea level. GO will provide low-cost persistent surveillance (ISR) and communications relay. The efficiencies of GO will be a long endurance capability that support s placing a system into theater from garrisoned locations, reducing the number of forward bases required for world-wide operations and relieving the optempo from other overstressed assets. Transition Strategy: GO will transition to Air Force Special Operations Command for extended use to support intelligence, surveillance, and reconnaissance with the persistent operations using the Eectro-Optics/Infrared and communications relay payloads. Pending JROC validation of the capability requirement, the Air Force Air Combat Command will transition GO to the Combined Air Force. ***FY 2010 Accomplishments:*** Completed aircraft #1 for first flight configuration (battery powered) at Edwards Airforce Base; Flight Readiness Review completed; Started aircraft #2 and aircraft #3 integration; Completed first flight test of aircraft #1. ***FY 2011 Plans:***	2.856	4.500	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Complete flight demonstrations with aircraft #1. Additional JCTD Program funding in FY 2011 is contingent upon a user interest in a particular flight demonstration (such as a particular endurance at a given altitude with a given payload weight), to be followed by the user intent to fund follow-on use of the aircraft if the particular demonstration succeeds.			
Title: Hard Target Void Sensing (HTVS) Fuze ***Description:*** The JROC validated the capability need for HTVS Fuze in FY 2008. The objective of the HTVS Fuze JCTD is to provide the Bomb Live Unit-109 (BLU) and BLU-113 legacy warheads the ability to count voids and detonate at the optimal point, and improve weapon survivability and function in hard target environments. The JCTD will provide warfighters a proven capability with a number of residual mission ready fuzes. The acquisition strategy allows a smooth transition from the JCTD to Engineering Manufacturing and Development (EMD) in FY 2011 followed by production. The lead Combatant Command is USTRATCOM and the Lead Service is USAF. To date, the HTVS Fuze JCTD has accomplished the following: Sufficiency review for FY09 initiative to fund JCTD complete; Sufficiency review for SDD, Production and Sustainment completed; Acquisition Strategy for entire HTVSF Program Approved; Systems Requirements Review and Systems Functional Review for both contractors; Management and Transition Plan approved. The JCTD will provide warfighting commands a proven capability with a number of residual mission ready fuzes no later than 12 months after the JCTD. The acquisition strategy allows a smooth transition from the JCTD to Engineering Manufacturing and Development (EMD) in FY 2010 followed by production. The U.S. Navy also has a requirement for this capability and provided FY09/10 funds to support the JCTD. The lead Combatant Command is USTRATCOM and the Lead Service is the USAF. ***FY 2010 Accomplishments:*** FY 2010 Accomplishments: Completed all sled and flight testing. Conducted final operational demonstrations. Completed Operational Utility Assessment (OUA) and Military Utility Assessment (MUA). Completed study to incorporate new requirements for the Capability Development Document.	6.000	-	-
Title: Internet Protocol Router in Space (IRIS) ***Description:*** The JROC validated the need for capability for IRIS in FY 2007. IRIS uses a planned launch of a commercial communications satellite to introduce Internet Protocol (IP) routing and cross-banding between C-band and Ku-band transponders. USSTRATCOM seeks to improve network reliability and availability through dynamic topology updates (multiple transport paths) and improved collaboration and interoperability among infomation sources and users (e.g., sensors, soldiers, command centers at Joint, Allied and Coalition levels). The IRIS outputs and efficiencies include: (1) demonstrate the capability to collaborate with industry in leveraging the commercial acquisition processes to provide near-term, space-based, IP routing network capability; (2) demonstrate the capability via a commercial payload to conduct on-board IP packet routing communications from a geostationary orbit; (3) explore and incorporate a decision process to determine military user assignment	0.600	-	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
to commercially provided IRIS SATCOM capability. The Defense Information System Agency (DISA) is the DoD lead Agency for obtaining commercial satellite communications support for operations, will develop a provisioning model for future assignment of military users to the demonstrated commercial capability as appropriate, and define contracting language for future services subscription in support of operations, including integration of IRIS services into existing network architectures beyond the IRIS JCTD. ***FY 2010 Accomplishments:*** Participated in the industry led end-to-end IRIS technical capabilities demonstration with representative hardware prior to Intelsat General IS-14 launch. Conducted operational and network services demonstrations with representative military and joint, inter-Agency users. Extended industry SATCOM-based IP-routed services for continued evolution of network services provisioning and management processes, potential billing procedures, and industry-government organizational and technical interfaces. Introduced the functionality to international partners through USAFRICOM sponsored capacity building demonstrations. Completed the final operational utility assessment and produced the final assessment report.			
Title: Joint Enable Theater Access Seaports of Debarkation (JETA-SPOD) ***Description:*** The JROC validated the need for JETA-SPOD capabilities in FY 2006. JETA-SPOD will develop and demonstrate: a Lightweight Modular Causeway System (LMCS) transportable by and employable from intra-theater sealift vessels such as the JHSV or other current Army/Navy watercraft; and an austere port Decision Support Tool for selection of optimal sites from multiple austere Seaports of Debarkation (SPOD) options. The JCTD will optimize the use of the Joint High Speed Vessel (JHSV), current Army/Naval watercraft, and Lines of Communication bridging requirements by providing more rapid flow of combat power and sustainment through multiple theater austere seaport locations. This provides Joint/ Combined Force commanders a means to mitigate anti-access activities and increases flexibility to conduct operational maneuvers from strategic distances. JETA-SPOD sponsor is U.S. Pacific Command. The lead Service is Army. The primary outputs and efficiencies are: the LMCS will reduce weight and volume by 50 percent ; a reduction in deployment time by 50 percent; and elimination of in-water connections; the Decision Support Tool capability is an increase in availability of throughput prediction information for 50-80 percent of worldwide small ports; and the combination of LMCS and the Decision Support Tool includes a five-fold increase in the number of JHSV-compatible ports and doubling of the port throughput rate. The transition strategy for LMCS and the Decision Support Tool is to transition to Programs of Record: Product Director, Army Watercraft Systems (PD AWS) and USTRANSCOM, respectively. ***FY 2010 Accomplishments:***	0.600	-	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Completed Lightweight Modular Causeway System (LMCS) advanced sea state testing, demonstrated emplacement via rotary wing delivery and use during river crossing operations. Finalized CONOPS documentation. Initiated transition of LMCS as part of Vessel to Shore Bridging solution to Product Director, Army Watercraft Systems (PD AWS). Completed JETA-SPOD ACTD.			
Title: Joint Force Protection Advanced Security System (JFPASS) ***Description:*** The JROC validated the capability need for JFPASS in FY 2008. JFPASS provides a comprehensive, effective, and sustainable Joint force protection capability. JFPASS will demonstrate and transition an integrated joint force protection Command and Control architecture, providing rapid situation awareness, decision support, and more effective force protection with reduced workload through systems integration. The primary outputs and efficiencies: 1) numbers of currently distinct force protection systems that are integrated for common situation awareness; 2) decreased time required to provide situation awareness to all in chain of command with force protection response missions; 3) decrease in operations center manning and workload required to maintain force protection situation awareness and manage situation responses. JFPASS is sponsored by US European Command. The project will conduct an initial demonstration and limited assessment after one year, to be followed by in-theater installations and operational utility assessment in the second year. Army, Navy, and Air Force force protection experts are participating. The US Navy is providing the Technical Manager, US Air Force provides the deputy Technical Manager, and US Army provides the Transition Manager. This project is aligned with the Joint Staff Installation Unit Base Integrated Protection Capabilities Based Assessment process. ***FY 2010 Accomplishments:*** Completed utility assessment. Completed JCTD with capability fielded at Spangdahlem AFB, Germany.	4.200	-	-
Title: Joint Surface Warfare (JSuW) ***Description:*** The JROC validated the capability need for JSuW in FY 2007. The JSuW JCTD will allow multiple existing Intelligence, Surveillance, and Reconnaissance (ISR) assets, launch platforms, and standoff weapons to communicate via maturing weapons data link network technologies. The efficiency is: Joint ISR platforms can provide initial targeting data and in-flight targeting updates to standoff weapons while the launch platform either remains beyond or decreases time inside the threat envelope. As a result of this interaction via the weapons data link network, the Combatant Commander wil have multiple options for joint kill chains to increase operational agility, and have significantly extended space in which surface targets may be successfully prosecuted. ***FY 2010 Accomplishments:***	1.200	-	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Completed ground and flight testing of J-11 message set installations on JSTARS, LSRS, A/F-18, and JSOW-C1. Completed military utility assessment. Software configurations were transitioned to appropriate Programs of Record.			
Title: MASINT Tactical Intelligence Fusion (MASTIF) ***Description:*** The JROC validated the capability need for MASTIF in FY 2006. MASTIF will provide the warfighter with a data fusion capability to enable a single operator to exploit a suite of multi-disciplined sensors against concealed/obscured targets in near real-time while: (1) Enabling a single operator with minimum time over target to rapidly detect, identify, and geolocate potential targets using automated sensor fusion and reasoning; (2) Reducing sensor false alarm rates by combining multiple types of intelligence sensor outputs; (3) Increasing operator efficiency by improving situational awareness through automated sensor management and pointing; (4) Eliminating the need for the operator to gain expertise on each individual sensor; and (5) Providing an open architecture design that can be adapted and tailored to different mission applications and operational environments. The project sponsor is United States Southern Command (USSOUTHCOM), which also serves as the Operational Manager. The lead DOD agency is the Defense Intelligence Agency (DIA) and the Transition Manager is United States Special Operations Command (USSOCOM). ***FY 2010 Accomplishments:*** Transferred residuals to SOUTHCOM. Customized system for installation on user partner platform. Continued development of CONOPs and TTPs, based on user feedback. Capabilities transitioned to user community.	1.200	-	-
Title: Medusa ***Description:*** The Joint Requirements Oversight Council (JROC) validated the capability need for Medusa in FY 2008. Medusa will demonstrate the employment of the Low Cost Guided Imaging Rocket (LOGIR) aboard the US Navy MH-60S helicopter against a multi-axis simultaneous attack from Fast Attack Craft (FAC) and Fast Inshore Attack Craft (FIAC). In this manner, US 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 defense strategy. Additionally, the technology is readily adaptable for use against land-based targets. COCOM sponsor is US Central Command and lead Service is the US Navy. ***FY 2010 Accomplishments:*** Completed the design and integration of the launcher and rockets aboard the MH-60 aircraft. Completed preliminary demonstrations. ***FY 2011 Plans:***	4.304	4.326	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Complete critical design review of rocket launcher. Complete SIL testing of H-60 software configuration. Complete rocket and launcher integration and flight test and military utility assessment. Complete Milestone B documentation and SD&D contract package to support transition of Medusa rocket and launcher designs, software, CONOPS, and TTPs to PORs. Complete transition of Medusa to PMA-242 and PMA-299.			
Title: Net Zero Plus (NZP)	2.400	-	-
Description: The Joint Requirements Oversight Council (JROC) validated the capability need for NetZero Plus (NZP) in FY 2008. NZP JCTD will demonstrate and assess reduced fuel demand, improved infrastructure and alternative energy supply seamlessly to the warfighter. This will be accomplished by reducing external fuel requirements for facilities/forward operating bases and reducing risk to coalition lines of communication by reducing delivery of fuel to bases and facilities by soldiers, sailors, airmen, and marines. NZP leverages research and development from federal and private labs and COTS/GOTS technology in innovative power generation and distribution, energy efficient enduring and expeditionary structures, efficient lighting and renewable energy. The combined capabilities will establish an energy efficient Forward Operating Bases blueprint used by tactical elements, operational commanders, theater planners, interagency organizations, and coalition partners. The emphasis will be on replacing or improving current facilities with energy efficient structures and integrating renewable energy technologies with improved energy generation to power those structures. NZP sponsor is U.S. CENTCOM. The lead Service is the Army with Air Force and Marine Corps as participants. The primary outputs and efficiencie are: the performance of alternative structures, distribution and supply with metrics measuring the number of kilowatts used with a goal of 40 percent reduction the first year, 50 percent in the second year and 60 percent the third year. Demand, Infrastructure, and Supply technologies are planned for transition to Mobile Electric Power Program of Record, PEO (Combat Support and Combat Services Support) Force Provider Program of Record, Air Force Basic Expeditionary Airfield Resources (BEAR), and placed on the General Services Administration (GSA) Schedule or Defense Logistics Agency (DLA) acquisition. ***FY 2010 Accomplishments:*** Installed a two-story energy efficient dome, expanded intelligent power distribution with installation of a 1 megawatt microgrid, added a Waste to Energy system, and integrated Alternative Power source at National Training Center (NTC). Continued data collection and analysis; Conducted Military Utility Assessment; Net Zero-Plus provided information to the strategy and roadmap for FOBS forward operating bases (FOB) and U.S. installations. ***FY 2011 Plans:*** Complete data collection and assessment and finalize military utility assessment for final Net Zero-Plus strategy and roadmap.			
Title: Transnational Information Sharing - Cooperation (TISC)	3.000	-	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Description: The Joint Requirements Oversight Council (JROC) validated the capability need for TISC in FY 2008. TISC will provide software tools for a non-classified portal for collaboration, planning and assessment by external partners and interagency organizations. TISC capability allows disadvantaged users to use the portal at low or no cost in austere and minimal network infrastructure environments. This capability will provide collaborative chat, identity management, translation and multi-lingual text chat and Web 2.0 social networking tools. Outputs and efficiencies will include improved planning and response to theater security cooperation challenges and stability and reconstruction operations. Technologies demonstrated will reduce the time and increase the effectiveness of disaster relief, humanitarian assistance and stability operations where DoD, interagency, non-governmental organizations, international organizations, coalition nations and other first responders need to cooperatively act, plan and assess courses of action. USEUCOM and USSOUTHCOM are sponsors. Requirements and operational assessment will include external partners outside of DoD in the TISC community of interest. The TISC capability (operational concepts, tactics and procedures) will transition to the Theater Security Cooperation community, while the sustainment of the information sharing portal will become the responsibility of DISA using a fee for service model. The lead COCOM responsibilities are jointly shared between the US Southern Command (SOUTHCOM) and the US European Command (EUCOM) and the lead agency is the Defense Information Systems Agency (DISA). TISC is a multi-year JCTD that will conclude in 2011. ***FY 2010 Accomplishments:*** Demonstrated and operationally assessed TISC in the Haiti earthquake relief effort. ***FY 2011 Plans:*** Transition TISC portal to DISA as an Enterprise fee-for-service model.			
Title: One Box One Wire (OB1) ***Description:*** The Joint Requirements Oversight Council (JROC) validated the need for OB1 in FY 2009. OB1 will provide a secure operating system separation kernel, virtual machine technology, 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 terminal connected to multiple data centers via one wire (network cable) — one box, one wire, multiple network and security domain access. The OB1 output will be formally evaluated and certified information security products pursuant to the combined DOD Intelligence Community Cross Domain Solution evaluation process managed by the Unified Cross Domain Management Office (UCDMO) and accredited for use in a broad spectrum of operational environments. The primary efficiencies include significantly reduced physical infrastructure , time and manpower savings in establishing mission networks, and savings in power, air conditioning, and other base/installation/office operating requirements. OB1 plans for a final demonstration and assessment in the fourth quarter of FY 2011. OB1 is sponsored by USCENTCOM.	6.000	6.000	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
FY 2010 Accomplishments: Completed Implementation Directive and Requirements Documentation. Completed CONOPS and TTP. Conducted technical demonstration of first OB1 case and evaluated initial artifacts. Continued security assurance evaluation, network systems and security engineering and implementation planning of the remaining test cases. Expanded to encompass three Separation Kernel vendors. Completed acquisition of test suites from each of the major vendors. Transition manager is Air Force Cryptologic Systems Group. ***FY 2011 Plans:*** Complete technical demonstrations of test cases and evaluate artifacts. Continue to focus on integration with the OIS “one wire” products. Complete test articles that attempt to address the full range of CENTCOM requirements. Document test concepts and plans for the test articles that may accelerate C&A activities. Complete certification and accreditation documentation suite in support of a certification action to be taken during the transition period. Provide a report that summarizes the technical results, identifies alternative ways forward and makes technical recommendations. The SPAWAR 5.8 team will continue to engage NSA, DIA and other pertinent agencies to ensure test artifacts and results are within their acceptable parameters. Complete the JCTD.			
Title: Mission Assurance Decision Support System (MADSS)	1.272	1.212	-
Description: The Joint Requirements Oversight Council (JROC) validated the need for MADSS in FY 2009. The expected output is a standardized framework and global capability for Commanders C2-related anomaly response and execution, and defense support to civil authorities. MADSS will provide integrated C3 Operational and critical infrastructure relationships understanding by correlating data from different data sources, using web-based services, secure network and automated data transformation services. MADSS final demonstration and assessment will occur in the third quarter of FY 2011, with transition to Defense Information Systems Agency programs of record in the fourth quarter of FY 2011. The expected efficiencies are improved responsiveness and proactivity through integrated real-time communications anomaly data feeds, telecommunications infrastructure analysis and assessment data, and a mission area knowledge base for rapid event analysis and Warfighter analysis of alternatives development. MADSS is sponsored by USSTRATCOM. The Defense Information Systems Agency (DISA) is the lead agency. NSWC Dahlgren is the technical lead. ***FY 2010 Accomplishments:*** Developed communication path to mission linkages. Developed knowledge base architecture and SOA design. Defined Authoritative Data Sources. Developed standard data format and semantic mediation services among information feeds. Conducted technical demonstrations and limited operational demonstrations. Finalized operational and system architectures. Completed Spiral 2. ***FY 2011 Plans:***			

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Conduct final technical demonstration. Conduct operator training. Conduct final operational demonstrations and utility assessment (August 2011). Finalize documentation and transition MADSS functionality to DISA program of record in Program Executive Office – Mission Assurance. Complete the JCTD.			
Title: Joint Recovery and Distribution System (JRaDS)	3.000	3.600	-
Description: The Joint Requirements Oversight Council (JROC) validated the capability need for Joint Recovery and Distribution System (JRaDS) in FY 2009. JRaDS will develop and demonstrate the 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 type trailer systems currently in DoD inventory. This FoS will offer high reliability and parts commonality and modularity in design thus reducing 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 (MHE) . These aspects will expedite cargo movement from Sea Ports of Debarkation (SPOD), Aerial Ports of Debarkation (APOD), 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 (TWV) and light to medium weight Rotary Wing aircraft. The JCTD will also produce an Aircraft Interface Kit (AIK) that allows Army Container Roll-On Platforms (CROP) and Flat Racks to be expeditiously loaded into C-130 and C-17 cargo aircraft. The efficiencies are: JRaDS reduces the time, vehicle and manpower requirements for Tactical Wheeled Vehicle recovery by 50 percent. JRaDS will reduce MHE requirements by 20 percent during operations in an austere environment and improve theater cargo velocity by 20 percent. By having a standardized FoS trailer fleet with common replacement parts, in-service effectiveness will improve by 20 percent and parts inventory and costs will be reduced by 50 percent. The transition strategy is to have Program Executive Office Combat Support/Combat Service Support (PEO CS/CSS) become the Joint Program Manager to procure and manage the supply of needed JRaDS trailers to the Services. 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. The sponsor is the U. S. Transportation Command (USTRANSCOM). The lead service is the Army. ***FY 2010 Accomplishments:*** Conducted three technical assessments and one operational assessment. Deployed four 40-ton trailers to Afghanistan for operational use as requested by the Army to fulfill an immediate operational need. Demonstrated the 34-ton trailer for engineer support use and prepared for aircraft interface and Port Opening Operational Assessment. ***FY 2011 Plans:*** Conduct final Operational Assessment. Submit final Operational Utility Assessment Report; Complete Capability Development Document (CDD); Transition to PEO CS/CSS.			
Title: Joint Medical Distance Support & Evacuation (JMDSE)	1.368	0.740	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Description: The Joint Requirements Oversight Council (JROC) validated the capability need for JMDSE in FY 2009. JMDSE will demonstrate capabilities needed to mitigate problems associated with low density, high demand casualty evacuation forces; providing virtual/distant triage capability on a noncontiguous battlefield; extending care of medical forces; and providing medical reach-back from first responder to forward resuscitative care facilities. The primary outputs include battlefield telemedicine and precision aerial delivery of small quantities of critical medical supplies and equipment for casualties in hostile and inaccessible areas. The efficiencies gained include: less costly and timelier delivery of critical medical supplies and casualty care equipment; improved battlefield care of casualties; reduced health risk to personnel on the battlefield. The transition strategy includes inclusion of precision aerial medical delivery systems, medical kits, and telemedicine capability in theater-based programs of record. The sponsor is US Joint Forces Command and the executive agent is OSD Health Affairs. ***FY 2010 Accomplishments:*** Identified and selected competitive prototype contracts for Joint Precision Aerial Delivery System-MedEx (JPADS-MedEx) for both Micro-Light and Ultra-Light Weight (MLW & ULW) systems; completed multiple technical test for Joint Combat Casualty Care System (JCCCS); conducted operational demonstrations #1 and #2 for precision aerial delivery; conducted limited operational utility assessment; and executed spiral development #1 for JPADS-MedEx. ***FY 2011 Plans:*** Conduct operational demonstration #3 to fully integrate JCCS and JPADS-MedEx (ULW and MLW) systems; conduct final operational utility assessment; execute spiral development #2; and complete final report and training documents.			
Title: Cooperative Security Engagement (CSE) ***Description:*** The Joint Requirements Oversight Council (JROC) validated the capability need for CSE in FY 2009. CSE will demonstrate operational concepts and tools for enabling joint, multi-national planning, coordination and synchronization. CSE will provide a framework for improved inter-agency adaptive planning, regional/event based information sharing, and integrated event assessment. The JCTD sponsor is U.S. Southern Command (USSOUTHCOM) with U.S. European Command (USEUCOM), and U.S. Agency for International Development (USAID) as co-sponsors. Technical lead is the U.S. Army Corps of Engineers. Transition will incorporate CSE capabilities into COCOM stability operations, including concepts of operation (CONOPs) and policy recommendations. JFCOM is the transition lead. The primary outputs and efficiencies to be demonstrated in the Operational Utility Assessment are: (1) improved interagency adaptive planning; and (2) streamlined regional and inter-agency assessment. ***FY 2010 Accomplishments:*** Integrated architecture, interagency assessment plan; identification of planning, information sharing and assessment tools, initial operational concepts. Technical demonstration 1 of software solutions. ***FY 2011 Plans:***	0.600	3.500	1.305

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Technical Demonstration 2 in an operational context of tools and concepts with the cooperative security community of interest in selected regions within USSOUTHCOM / USEUCOM / USAID areas of responsibilities. The Operational Utility Assessment will be completed. Interagency Tactics, Techniques and Procedures will be developed. ***FY 2012 Plans:*** Transition to USJFCOM and USAID.			
Title: Daily Watch ***Description:*** The Joint Requirements Oversight Council (JROC) validated the capability need for Daily Watch in FY 2009. Classified content only. U.S. European Command is the lead CoCom. National Reconnaissance (NRO) is the lead agency. ***FY 2010 Accomplishments:*** Classified content only. Conducted technical and operational demonstrations. Closed out JCTD. No additional JCTD investment projected, pending transition activities.	5.200	-	-
Title: Precision Acquisition Weaponized System (PAWS) ***Description:*** The Joint Requirements Oversight Council (JROC) validated the capability need for PAWS in FY 2009. PAWS will integrate multiple precision weapons aboard organic tactical ISR platforms, and demonstrate neutralization of threats. The weapon designs will allow multiple kills per sortie and engagement in environments where collateral damage and fratricide are unacceptable. This program will resolve the inability of Special Operating Forces (SOF) Intelligence, Surveillance, and Reconnaissance (ISR) platforms to prosecute targets. Currently, these platforms relay target data to SOF on the ground, who must then engage the targets directly. In the current process, the risk to SOF is increased greatly. The PAWS JCTD will alleviate this risk. Deliverables will include documented Concept(s) of Operation, Tactics, Techniques, and Procedures, software and hardware changes to demonstration platforms and weapons. Following the demonstration, fieldable prototypes will be made available to operational SOF units in their respective theaters. Tactical ISR system programs of record will make the changes necessary to incorporate this platform-independent technology. The Combatant Command/User Sponsor is the U.S. Special Operations Command (SOCOM) and the Lead Service/Agency is the U.S. Special Operations Command (SOCOM). ***FY 2010 Accomplishments:*** Established preliminary Concept of Operations (CONOPS), Tactics, Techniques, Procedures (TTP) Development, demonstrated weapon link operations, conducted several safety assessments, conducted two technical demonstrations of UAS-weapon integration and weapon release (several variations of inert and live fire test configurations) using surrogate launch tubes. ***FY 2011 Plans:***	5.188	1.200	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Finalize host launch tube and complete UAS integration. Low collateral damage testing, certification, and integration with host UAS. Conduct end-to-end system testing, and two Operational Demonstrations. Transition planning and execution of residuals to USSOCOM/PEO-FW. The Transition Manager is NAVAIR 4.5.			
Title: Counter-Electronics High Powered Microwave System Advanced Missile Project (CHAMP) ***Description:*** The Joint Requirements Oversight Council (JROC) validated the capability need for CHAMP in FY 2009. The objective of CHAMP is to demonstrate and assess a multi-shot and multi-target aerial HPM platform that is capable of degrading, damaging, or destroying electronic systems. For this effort a compact HPM payload will be integrated into an appropriate aerial vehicle to create the aerial HPM platform demonstrator. CHAMP is a multi-year project under sponsorship of United States Pacific Command (USPACOM), with completion of integration and final demonstration in FY 2012, and transition to an Air Combat Command program of record in POM FY 2012-2016. The primary outputs and efficiencies to be demonstrated in the JCTD Military Utility Assessment (MUA) 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. The Air Force Research Laboratory, Directed Energy Directorate, High Power Microwave Division is the designated Technical Manager. ***FY 2010 Accomplishments:*** Developed Concepts of Operations (CONOPs) and Tactics, Techniques, and Procedures (TTPs). Developed training, test and security plans. Began component systems integration and operator training. Completed critical design review and conducted ground testing. ***FY 2011 Plans:*** Complete component integration and ground testing. Complete operator training. Refine CONOPs and TTPs. Complete operational demonstration #1 to demonstrate 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. Develop requirements and documentation to support transition. ***FY 2012 Plans:*** Complete flight test, military utility assessment and documentation in support of transition to POR.	7.200	6.000	3.600
Title: Joint Multi-Effects Warhead System (JMEWS) ***Description:*** The Joint Requirements Oversight Council (JROC) validated the capability need for JMEWS in FY 2009. The JMEWS JCTD will demonstrate an updated multi-effect warhead system aboard the Tomahawk Land Attack Missile (TLAM). This warhead technology will provide a leap-ahead capability against a widely varied target set, which includes hard and soft targets.	6.000	6.000	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
In concert with this warhead, a Third-Party In-Flight Targeting (3PT) system will be demonstrated that will allow dynamic targeting and retasking of the missile as intelligence is updated. 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 also include documented Concept(s) of Operation, Tactics, Techniques, and Procedures. Production of the TLAM will be shifted to replace the current warhead with the JMEWS warhead, and to add the datalink, 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 US Central Command and the Lead Service is the US Navy. ***FY 2010 Accomplishments:*** Completed design and delivery of initial warheads. Completed initial arena testing for blast and fragmentation characterization. ***FY 2011 Plans:*** Deliver remaining warheads for completion of arena, insensitive munitions and sled testing against representative targets. Complete Joint Military Utility Assessment and end the JCTD. Transition to PMA-280 in FY 2012.			
Title: Tactical Edge Data Solutions (TEDS) ***Description:*** The Tactical Edge Data Solutions JCTD was validated by the Joint Requirements Oversight Council in FY 2010. The stated outcome of the JCTD 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. The JCTD will focus on exchanging data from Army and Marine Corps C2 Authoritative Data Sources (ADS) for the Command and Control (C2) and Battlespace Awareness domains. The efficiencies to be gained will be 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. UCore is the U.S. Government standard for interagency data exchange. The lead CoCom is U.S. JFCOM. The Marine Corps is providing the technical lead and the Army is providing the transition manager. Transition of the C2 Core extensions and Web services for translation and semantic mediation is planned for programs of record in the Army, Marine Corps and DISA. The output of the JCTD will enable moving C2 systems to migrate to DoD's goal of implementing a Service Oriented Architecture (SOA) environment. The final demonstration date will be in midyear FY 2012 and the JCTD will complete in September 2012 with transition expected in FY 2013 of data pilot services. ***FY 2010 Accomplishments:***	1.500	1.800	1.800

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Developed Implementation Plan and Management Plan. Defined architecture products, C2 Core extensions, developed web services for mediation of data (translation and semantic). Defined initial repeatable business process and objective services. Demonstrated net enabled tactical edge data exchange in Pilot 1 using a joint Maneuver Mission thread. ***FY 2011 Plans:*** Demonstrate net-enabled Coalition Data Sharing, expand web services and C2 core extensions to include NATO systems. ***FY 2012 Plans:*** Net-enabled SOA environment using tactical ISR systems. Post extensions to Metadata repository. Provide Web services and standards to C2 community to assist PORs in exposing and daring data. Provide repeatable process for extending C2 Core into other communities of interest.			
Title: Pacific Sail ***Description:*** Pacific Sail was an FY 2009 JCTD start that contains classified content only. The user sponsor is USPACOM and the Operational Manager is US Pacific Fleet. This project integrates US Air Force and US 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 demonstration is scheduled for late FY 2011. Pacific Sail project details are classified. ***FY 2010 Accomplishments:*** Classified content. Analyzed and reported on FY 2009 data collections. Conducted systems integration of sea-based components, and executed detailed planning and approval process for operational demonstration of sea-based system. ***FY 2011 Plans:*** Complete final operational demonstrations and military utility assessment. Coordinate for follow-on transition. Complete the JCTD.	4.800	3.400	-
Title: Rapid Reaction Tunnel Detection (R2TD) ***Description:*** The Joint Requirements Oversight Council (JROC) validated the capability need for R2TD in FY 2010. The outcome of R2TD is to demonstrate a set of detection and mapping technologies, and establish procedures to provide Joint Force Commanders with a capability to detect, characterize and interdict tunnels on the battlefield and beneath the US borders. R2TD is a multi-year project under the sponsorship of the United States Northern Command (NORTHCOM) and Joint Task Force North with support from the United States Army Corps of Engineers. R2TD will complete development and demonstration by end of CY 2011, and transition to NORTHCOM and Joint Program Manager Guardian by 2Q FY12. The lead service is Army. The primary outputs and efficiencies to be demonstrated in the JCTD Military Utility Assessment are: (1) accurately locate subsurface voids up to 100 feet in depth; (2) detect tunnel construction in real-time and report summaries every 4 hours; (3) detect movement of	3.525	4.152	2.650

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
contraband through tunnel in near-real time and report summaries every 4 hours; (4) precisely locate tunnel axis, ingress and egress points; (5) characterize physical dimensions of tunnels including depth, cross-section, and azimuth; and (6) characterize internal features of tunnels including floor, shoring, lighting, ventilation, and water presence/flow. ***FY 2010 Accomplishments:*** Integrated sensor feeds into single operational picture to produce verification of tunnel detection and movement activity. Sensors integrated and technically demonstrated include Border Tunnel Activity Detection Systems (BTADS), Electromagnetic Imaging (EMI), and Active Seismic Imaging Systems (ASI). Conducted technical demontration of tunnel characterization with a tele-operated robot. ***FY 2011 Plans:*** Fully integrated sensors and tactics, techniques and procedures (TTPs) will be operationally demonstrated at Yuma Proving Ground, problems identified and resolved, then the entire integrated detection and characterization system operationally demonstrated along the US southwest border. The final Operational Demo is scheduled for 4Q FY11. ***FY 2012 Plans:*** Completion of the JCTD is scheduled for FY 2012 to enable transition of all detection and characterization capability to JPM Guardian. The R2TD Transition manager is Joint Program Manager Guardian. The JCTD is structured to enable a potential "off-ramp" after 12 months if appropriate to deploy the integrated sensor suites and software algorithms for tunnel detection with Joint Task Force North to establish an initial residual detection capability. Follow-on characterization capability will be transitioned at this point for continued development if a transitioning organization can accept, or the JCTD will continue to mature the characterization technology for full-up integrated detection and characterization capability.			
Title: Command and Control Gap Filler (C2GF) ***Description:*** The Joint Requirements Oversight Council (JROC) validated the capability need for C2GF as an FY-10 new start. Participants include Department of Defense, Department of Homeland Security (DHS) and other U.S. Gov't agencies. The C2GF JCTD 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 or enable users to operate their existing fusion processes if desired. C2GF will demonstrate for Joint, Interagency, intergovernmental and Multinational (JIIM) partners a capability that enables efficient, secure, timely and trusted exchange of information resulting in enhanced aerospace security by shared situational awareness, persistent Wide Area Surveillance, actionable intelligence and information, and event Surveillance and Reporting. Additionally, the C2GF JCTD will also refine the concept of operations and employment and techniques, tactics and procedures necessary for JIIM coordination for air domain surveillance. Demonstrations are planned for FY10, 11, and 12. The COCOM user/sponsor is USNORTHCOM.	4.800	4.800	4.800

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
FY 2010 Accomplishments: Began architecture design, completed testbed communication network, designed preliminary multi-sensor correlator, completed data exchanged with DHS AMOC and BCS-F, completed C2GF JCTD Service Oriented Architecture. ***FY 2011 Plans:*** Provide SIGINT and additional data to correlators. Complete advanced classified sensor integration, demonstrations and utility assessments. Conduct operational demonstration and end the JCTD. ***FY 2012 Plans:*** Complete transition activities for the C2GF JCTD. This program will continue to demonstrate for Joint, Interagency, intergovernmental and Multinational (JIIM) partners a capability that enables efficient, secure, timely and trusted exchange of information resulting in enhanced aerospace security by shared situational awareness, persistent Wide Area Surveillance, actionable intelligence and information, and event Surveillance and Reporting.			
Title: Joint Unmanned Air Systems (UAS) Precision Targeting (JUPT) ***Description:*** The Joint Requirements Oversight Council (JROC) validated the capability need for small UAS systems in FY 2010. The objective of this effort is to rapidly provide precision coordinates from UAS generated imagery for use with coordinate seeking weapons. The Joint Commander must be able to rapidly transition from observing to striking high value targets with coordinate seeking weapons in all terrain, while minimizing collateral damage. Current UASs and targeting pods are unable to generate precision coordinates (category 1) under most conditions. The ability to rapidly strike targets identified by UAS assets is delayed because UAS derived coordinates lack precision required for coordinate seeking weapons. Deliverables include hardware, software, and documentation and a finalized CONOPS, TTPs, training package, and DOTMLPF change recommendations. The Combatant Command/User Sponsor is the U.S. Special Operations Command (SOCOM) and the Lead Service/Agency is also SOCOM. ***FY 2010 Accomplishments:*** Approved Implementation Directive (ID). Conducted repetitive evaluations of CONOPs / TTPs, threats and environment, and scenarios / vignettes. Began system integration. ***FY 2011 Plans:*** Approve Management Transition Plan (MTP). Complete system integration and conduct two operational demonstrations. Conduct Joint Operation Utility Assessment (JOUA). Spiral out capabilities as approved by National Geospatial Agency. ***FY 2012 Plans:***	0.500	3.600	0.600

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Execute transition activities to provide deliverables to USA (PM-BC PM-UAS). The Transition Manager is USA PM-UAS and SOCOM.			
Title: Fixed Wing Advanced Precision Kill Weapon System (FW-APKWS) ***Description:*** The Joint Requirements Oversight Council (JROC) validated the capability need for FW- APKWS JCTD in FY 2010. The objective of the FW APKWS JCTD is to provide the legacy AV-8B and A-10 aircraft with a precision air-to-ground low collateral damage weapon for use in irregular warfare operating theaters and beyond. The FW- APKWS JCTD provides a guided rocket that will help fill the gap left by a diminishing supply of laser Maverick (LMAV) missiles which are out of production. In addition, these legacy platforms are not included as threshold platforms in the Joint Air-to-Ground Missile (JAGM) Program of Record (POR). The FW-APKWS JCTD is considered very low risk as it leverages the existing APKWS POR developing laser guided rockets for the AH-1W rotocraft. As such it is anticipating a rapid transition to the APKWS POR upon completion of the Military Utility Assessment (MUA). Deliverables will include documented Concept(s) of Operation, Tactics, Techniques, and Procedures, and the Technical Data Package necessary to offer a fixed-wing variant in the APKWS POR. In addition, 50 combat-ready residuals will be delivered (25 USN, 25 USAF). The Combatant Command/User Sponsor is the U.S. Central Operations Command (CENTCOM) and the Lead Service/Agency is USN (PMA-242). ***FY 2010 Accomplishments:*** FY 2010 Accomplishments: Approved Implementation Directive (ID). Conducted Initial Design Reviews. Procured kits to support Instrumented Measurement Vehicles (IMV) test, Began IMV tests. Finalized Air Force launcher version. ***FY 2011 Plans:*** FY 2011 Planned Output: Approve Management Transition Plan (MTP). Complete IMV tests. Conduct technical demonstrations (USN and USAF flight tests). Begin operational demonstrations. ***FY 2012 Plans:*** FY 2012 Planned Output: Finalize Technical Data Package, Complete Military Utility Assessment (MUA) and Operational Assessment (OA), Modify Operation Requirements Document (ORD) of APKWS to include fixed-wing production requirements. Deliver combat-ready residuals. The Transition Manager is USN PMA-242.	3.500	4.800	2.400
Title: Sea Tracker (ST) ***Description:*** The Joint Requirements Oversight Council (JROC) validated the capability need for ST in FY 2010. The outcome of ST is a CLASSIFIED capability. The ST JCTD is sponsored by USSOCOM in cooperation with the Navy. The objective of the ST JCTD is to develop and transition capabilities to tag, track, and locate surface vessels of interest. Details are classified. ***FY 2010 Accomplishments:***	2.000	1.200	0.600

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Capability outputs are CLASSIFIED. ***FY 2011 Plans:*** Capability outputs are CLASSIFIED. ***FY 2012 Plans:*** Capability outputs are CLASSIFIED.			
Title: Operational 3- Dimension (Op3D) ***Description:*** The Joint Requirements Oversight Council (JROC) validated the capability need for Op3D in FY 2010. The Op3D JCTD is a joint interagency-sponsored program sponsored by USSOCOM. The objective of the Op3D JCTD is to develop and transition capabilities to quickly discover, manage, generate, exploit, disseminate and accurately update 3D GEOINT data from multiple collection systems to the warfighter. This controlled process will enhance effective transition to multiple GEOINT and 3D database production facilities to support military operations. The JCTD will consist of three overlapping development and demonstration spirals. Residuals from the effort will include an enhanced 3D data processing pipeline, warfighter/analyst exploitation tools, TTPs, CONOPs, user guides and training packages. USSOCOM acts as Lead Service and is responsible for requirements validation and transition management for the SOF community. The National Geospatial-Intelligence Agency (NGA) will develop and transition successful Op3D technologies into programs of record. The transition strategy for the Op3D JCTD is to spiral off capabilities throughout the JCTD into Agency and Service Production Centers. ***FY 2010 Accomplishments:*** Developed and Beta tested imagery processing software to facilitate rapid manual/semi-automatic 3D product development and dissemination. Incorporated new capabilities into theater operations and CONUS production center use. ***FY 2011 Plans:*** Improve 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. Incorporate new capabilities into theater operations and/or CONUS production center use. ***FY 2012 Plans:*** Execute, evaluate, and transition Spiral 3 tasks. Develop CONOPs, SOPs, TTPs, user guides, and training packages for successful Spiral 3 processes.	3.400	3.702	1.320
Title: Pre-Positioned Expeditionary Assistance Kit (PEAK) ***Description:*** The Joint Requirements Oversight Council (JROC) validated the capability need for PEAK in FY 2010. The outcome of PEAK is demonstrate and transition of an array of capabilities that can be pre-positioned to help provide sustainable, essential	2.850	3.420	0.438

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
services of value to partner nations through military-to-military operations. PEAK is a three-year project under sponsorship of USSOUTHCOM, with completion of development and demonstration by end of CY 2012 and transition to US Government Agencies related to USSOUTHCOM and other Regional Combatant Commands and partner nations by FY 2012. The lead service is to be determined. The primary outputs and efficiencies to be demonstrated in the JCTD Military Utility Assessment are: (1) enhance partner nation capabilities to carry out key missions through proactive military-to-military engagement; (2) improve partner nations' ability to provide critical services for targeted purposes during the first days of a natural or man-made crisis through a structured planning process; (3) collaboratively enhance regional stability; (4) assess and deliver up to four types of emergency assistance kits focused on water purification, power generation, communications and information sharing as the key enablers of distributed essential services; (5) provide a process for social networking and trust-building that can enhance partnership relationships in many areas, and contingencies; and (6) Provide a searchable knowledge base of cost-effective infrastructures that can be used in HA/DR, BPC and other missions. ***FY 2010 Accomplishments:*** Developed four components for expeditionary assistance kits focused on water purification, power generation, communications and information sharing as the key enablers of distributed essential services. Conducted technical testing and demonstration May – July 2010 and delivered prototype water purification with associated hybrid power capability to SOUTHCOM, AFRICOM, and PACOM for operational user evaluation in August 2010. Conducted initial technical testing of communications and information sharing components in September 2010. Spiral Output – the Water Purification with hybrid energy source prototype kit type left behind for continued use and evaluation by operational users. ***FY 2011 Plans:*** Complete integration of components for expeditionary assistance kits focused on water purification, power generation, communications and information sharing as the key enablers of distributed essential services. Conduct Limited Operational Utility Assessment (LOUA) in February 2011 and successfully demonstrate mature water purification and hybrid power components and prototype communications and information sharing components. Final operational utility demonstration of the Pre-positioned expeditionary assistance kit is scheduled for September 2011 building on the scenario and technical success of the February LOUA. Demonstrate PEAK in collaboration with nations from the USSOUTHCOM AOR. Spiral Output –PEAK kits with mature water purification, power generation, communications and information sharing components left behind for continuing use and evaluation by operational users. ***FY 2012 Plans:***			

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Begin transition to US Government Agencies related to USSOUTHCOM and other Regional Combatant Commands and to partner nations both for purchase and local production. Develop integration and employment CONOP to integrate PEAK capability with other partners. Business Case Analysis (BCA) completed.			
Title: Integrated SATCOM-GIG Operations and Management (ISOM)	3.126	3.149	3.148
Description: The Joint Requirements Oversight Council (JROC) validated the need for ISOM in FY 2010. The ISOM JCTD outcome is to demonstrate real-time Internet Protocol (IP) satellite communications (SATCOM) situational awareness (SA) and a scalable and policy-based management system that enables dynamic allocation and provisioning of SATCOM resources. The JCTD will streamline existing SATCOM resource management tools which will greatly improve the ability to make the most of underutilized SATCOM resources or to resolve complex warfighter communications outages. The lead agency is DISA, which is serving as both the technical and transition manager. The primary outputs and efficiencies to be demonstrated are: (1) integrated, real-time situational awareness of SATCOM resources that provides a single, over-arching view of current SATCOM allocations and the load on these links; and (2) an automated ability to act on this SA information by dynamically re-allocating or re-provisioning the SATCOM resources given to IP SATCOM networks. ISOM JCTD plans for a final demonstration and assessment in the third quarter of FY 2012. ISOM is a multi-year JCTD sponsored by USSTRATCOM.			
FY 2010 Accomplishments: Developed Implementation Directive and Management and Transition Plan. Began development of Concepts of Operations (CONOPs), Tactics, Techniques, and Procedures (TTPs) and Training documents. Conducted initial technical and operational demonstration. Completed Spiral 1 - the development and implementation of Web Services and the integration of a data exchange model for data correlations – providing SATCOM Configuration, Network Operations applications and Network Monitoring software. Demonstrated an integrated, real-time SA of IP modem hub and terminal information, within the ISOM lab testbed architecture.			
FY 2011 Plans: Complete CONOPS, TTPs, and Training documents. Conduct second technical and operational demonstration. Complete Spiral 2 – the integration of ISOM SA with resource allocation module, data collectors, web services and policy-based management system. Complete Operational and System Architecture. Develop 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. Deploy ISOM Data Collectors at DoD Gateways (Northwest, Camp Roberts). Transition manager is DISA.			
FY 2012 Plans: Will conduct operational utility assessment in operational network environment. Demonstrate a scalable and policy-based management system that enables dynamic allocation and provisioning of SATCOM resources in an end-to-end over the air			

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
architecture. Will develop a common information exchange schema based on MTOSI standard for integration with Defense Information System Network. Will deploy ISOM Master Servers at Theater NetOps Centers (TNC) CONUS. Will implement the Shared Information and Data Model (SID) for SATCOM systems by applying the SOA-compliant TMF NGOSS framework. Will complete CONOPS, TTPs, and Training documents. Will prepare for initial deployment. Will transition to configuration management for sustainment. Complete the JCTD.			
Title: Medium Altitude Global ISR and Communication (MAGIC) ***Description:*** Additional, persistent Intelligence, Surveillance and Reconnaissance capability is critically needed across the Combatant Commands. Unmanned air systems provide the bulk of our persistent ISR capability. New generation UAS capabilities are needed for affordability and increased flexibility. The next leap in capability is envisioned to be a medium altitude long endurance UAS capability. The outcome of this effort is demonstration of technologies enabling 120 hour sortie endurance with nominal 1000 pounds payload (maximum of 2600 lbs) at 15,000 feet with modular design allowing for integration of a myriad of payloads including EO/IR, SIGINT, Ground Moving Target Indication, wide area surveillance, communications relay, and strike packages. The demonstration of this 5-day capability will validate decreased manning levels necessary to operate autonomous systems thereby reducing life-cycle costs. Additionally, the integration of advanced avionics, commercially available propulsion, and standards based (open-architecture) interfaces will allow the Department an affordable, flexible solution to the CoCom flexible mission demands. This project will demonstrate a suite of technologies enabling 5-day endurance and reliability. Subsequent efforts will evaluate payload flexibility and modularity. The lead service/agency is the Air Force. The plans are for subsystem demonstrations and assessments in 2011. This project is sponsored by USCENTCOM. Planned Transition Strategy: 1) Develop and validate manning for long-endurance, autonomous ISR platforms. 2) Capability to provide flexibility of configuration with open-architecture design. 3) Provide core technologies to USAF (303rd AESW) for further development of a deployable long-endurance UAS. ***FY 2010 Accomplishments:*** Developed Implementation Directive and Management Plan with Transition Strategy. Integrated avionics onto surrogate test platform. Fabricated aircraft using advanced materials for strength and low weight, contributing to long endurance. Demonstrated long duration engine operations in testbed. ***FY 2011 Plans:*** Complete initial phase of the JCTD.	5.000	-	-
Title: National Technical Nuclear Forensics ***Description:*** The Joint Requirements Oversight Council (JROC) validated the need for this capability in FY 2010 and it fulfilled Congressional notification requirements in June 2010 . This project will strengthen strategic nuclear deterrence by enhancing	0.500	7.440	4.440

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
nuclear forensics capabilities supporting attribution after release of nuclear materials. Classified details of the problem can be provided upon request. The outcome and efficiencies will be to integrate advanced air and ground debris sample collection technologies in both manned and unmanned platforms, and develop and assess a joint interagency concept of operations 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 federal and local incident responders. Details of collection capabilities and concepts of operation are classified and can be provided upon request. The lead agency is the Defense Threat Reduction Agency (DTRA) and lead service is the Air Force. The project plans for a final demonstration and assessment in 2012. The CoCom sponsor is USSTRATCOM. Planned Transition Strategy: 1) Joint Program Executive Officer-Chemical Biological Defense (JPEO-CBD) and Air Force Material Command (AFMC) will establish new Programs of Record (PORs) to support the prompt diagnostics, air sampling and ground sampling elements of the National Technical Nuclear Forensics mission; 2)Yield estimation software, sample collection technologies, incident mapping capability remain for limited operational use (LOU), and coordinated within identified PORs; 3) Training packages, concepts of operation, tactics/techniques/procedures also coordinated with appropriate combat development organizations. ***FY 2010 Accomplishments:*** Development of Joint/Interagency CONOPS (concept of operations), TTPs (tactics, techniques and procedures) and training plans. ***FY 2011 Plans:*** Detailed capability outputs will be CLASSIFIED. Conduct technical testing, training and technical demonstration. Operationally demonstrate interim yield estimation methods for nuclear events in addition to manual and robotic ground sampling collection capabilities to collect nuclear debris. Further develop and assess CONOPS for advanced sample collection with global applicability. ***FY 2012 Plans:*** Detailed capability outputs will be CLASSIFIED. Continue development with further developed technical testing, training and technical demonstrations. Operationally demonstrate airborne debris collection capabilities. Complete JCTD with operational demonstration of all three NTNF capabilities: yield estimation, air sampling, and ground sampling. Produce operational assessment. Publish Joint/Interagency CONOPS, TTPs, an DOTMLPF Change Recommendations (DCR). Complete the JCTD.			
Title: Rapid Site Exploitation (RSE)	-	3.600	2.640
Description: This capability 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			

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
media, and other combat forensic materials. A web portal will link key information sources maintained by multiple US government organizations. Intent is to shorten site collection times from hours to minutes and speed forensic analysis from days to hours. ***FY 2010 Accomplishments:*** Able to accomplish the capability to employ innovative combat site collection and exploitation capabilities with a web portal to rapidly recognize, collect, analyze, share, track, and manage collected materials. The sites included the biometrics document and media and other combat forensic materials. A web portal will link key information sources maintained by multiple US government organizations. Continue goal to shorten site collection times from hours to minutes and speed forensic analysis from days to hours. ***FY 2011 Plans:*** Provide integrated site exploitation kits and prototype web portal interface, interoperable with biometric, forensic, and document/ media exploitation enterprises. Conduct initial utility assessment. ***FY 2012 Plans:*** Continue efforts in FY2012 to complete integrated site exploitation kits and prototype web portal interface, interoperable with biometric, forensic, and document/media exploitation enterprises. Conduct final utility assessment.			
Title: Dark Fusion ***Description:*** The Joint Requirements Oversight Council (JROC) validated the capability need for this capability in FY 2010. The outcome is a CLASSIFIED capability to detect and track non-emitting maritime threats by integrating data from national collection capabilities. This effort is expected to be a three year project under the sponsorship of United States Northern Command (NORTHCOM) and CENTCOM/NAVCENT with the Navy as the lead Service via Naval Research Laboratory. Technologies involve existing automated processing capabilities developed for national systems data. The primary outputs and efficiencies to be demonstrated in the Military Utility Assessment are CLASSIFIED. ***FY 2010 Accomplishments:*** Capability outputs are CLASSIFIED. Conducted survey of potential test locations for first technical demonstration; established preliminary Concept of Operations (CONOPS), & Tactics, Techniques, Procedures (TTPs) ***FY 2011 Plans:*** Capability outputs are CLASSIFIED. Conduct technical demonstration with existing assets. ***FY 2012 Plans:***	0.500	6.000	5.000

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Capability outputs are CLASSIFIED. Extended use expected to initiate in early FY12. The transition Manager is PM National Tactical Integrated Processing Service (NTIPS) and expects to transition to the NTIPS Program of Record.			
Title: Protection and Operation of Ip-secure Network Terrain (POINT)	0.700	1.460	-
Description: The POINT objective is to demonstrate a system to meet the USPACOM's published requirement for minimum essential command and control in a contested cyber environment. Other COCOMS have similar requirements. Generally, current DoD CONOPS provide network defense at network boundaries. Once penetrated, adversaries have broad range within the network to exfiltrate sensitive data, inject malicious data and code, or deny service to authorized users. The proposed CONOPS employs virtual secure enclaves to segment the network, increasing the layers of defense to further protect key cyber terrain elements. It forces adversaries to try to penetrate multiple protection layers. In addition, the smaller sizes of protected enclaves offer greater ability to surveill and protect the key terrain, such as networked Command and Control sites. This structure allows operational assessment of both the broad network and, independently, the key cyber network terrain. The JCTD will integrate sophisticated computer network defense technologies to provide defense-in-depth by functionally segmenting networks through the deployment of virtual secure enclaves (VSE) to protect key cyber terrain. VSEs employ virtual private networks secured with layers of cryptographic systems. The enclaves, and the network in which they reside, operate with real time network surveillance, network anomalous behavior detection, and centralized router control technologies to provide the capability to adaptively manage risk to operational networks throughout an Area of Responsibility. Implementation of this technology enables network analysts at Combatant Commands (COCOMs), Joint Task Force (JTF) Global Network Operations (GNO), service Network Operations Centers or other analysis centers to filter complex information containing network protocols and packet data in real time to ensure decision making at strategic and operational levels during cyber attacks. The POINT approach aligns with the DoD Computer Network Defense Information Assurance strategy employing defense-in-depth to protect DOD information and information systems. The lead service is the Navy. The plan for final demonstration and assessment is in 2011. This project is sponsored by USPACOM. ***FY 2010 Accomplishments:*** Developed Implementation Directive and Management Plan with Transition Strategy. Assessment organization identified and developed Integrated Assessment Plan (IAP). Developed TTPs and CONOPS. Developed Training Support Packages. Conducted JFCOM Information Operations cyber war demo (technical demonstration). Conducted operational demonstration using USPACOM exercise. ***FY 2011 Plans:*** Finalize systems, training, test, and security. Conduct one technical demonstration and one operational demonstration. Conduct operational utility assessment. Transition to limited operational use.			
Title: ADDER DeerPark	1.400	4.260	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Description: The ADDER/ Deer Park Joint Capability Technology Demonstration (JCTD) is sponsored by the United States Southern Command (USSOUTHCOM). This JCTD will demonstrate a persistent Intelligence, Surveillance and Reconnaissance (ISR) capability which is critically needed across the Combatant Commands by providing collection and geo-location of high value targets that use advanced communication devices. This effort upgrades a scalable airborne signals intelligence (SIGINT) payload for the Senior Scout platform that provides search, detect, direction find, identify, and geo-location of modern SIGINT signals. The integrated SIGINT approach delivers a sustainable capability that spirals to meet future COCOM and USAF requirements and utilizes open architecture in accordance with OSD direction. Senior Scout is an ISR suite of equipment configured in a shelter capable of installation in a C-130E/H/J aircraft. This system provides capabilities to exploit elements of interest with direct reporting to air and ground component commanders. Senior Scout is a flexible capability adaptable to Strategic and Tactical ISR support, Counter Drug, and Military Operations Other Than War. ***FY 2010 Accomplishments:*** Upgraded hardware and software incorporated with existing ADDER system. ***FY 2011 Plans:*** Complete platform integration; conduct testing and training; and develop tactics, techniques and procedures documentation. Conduct payload demonstrations in field environments.			
Title: Commercial Radar Operational Support to SOUTHCOM (CROSS) ***Description:*** The CROSS JCTD will demonstrate the ability to task, on-demand, three commercial radar constellations and receive unclassified imagery to support operations and contingency planning activities. This capability will provide SOUTHCOM the ability to fulfill un-met lower resolution imagery tasks (e.g. Haiti disaster relief, gulf oil spill, specific classified military applications) within their Area of Focus. Upon successful demonstration at SOUTHCOM, 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. The COCOM sponsor is SOUTHCOM, the lead Service is the US Air Force (Space Innovation and Development Center). NGA is a key partner in this JCTD. ***FY 2010 Accomplishments:*** Initiated vendor(s) imagery buy and vendor(s) processor lease. Began developing CONOPs/TTPs. ***FY 2011 Plans:*** Establish exploitation tool and standalone FTP at SOUTHCOM; finalize operator training plans; complete the SAR architecture integration, conduct testing and problem resolution methodology; finalize transition plan to COCOMs and final security	-	6.000	1.050

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
accreditation. Vendor(s) imagery buy, predecessor lease, finalize CONOP/TTPs. Conduct utility assessment and complete the JCTD. ***FY 2012 Plans:*** Establish the communications lease for Center for Southeastern Tropical Advanced Remote Sensing (CSTARS). Initiate NGA contracts to provide direct and routine tasking and support for long-term COCOM radar imagery buys. Complete transition of the leave-behind capability for CROSS JCTD.Conduct utility assessment and complete the JCTD.			
Title: COCOM Direct Support, Pre-Transition, and Classified Programs ***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 Combatant Commander (COCOM) Direct Support; (2) JCTD Pre-Transition (new in FY 2011); and (3) Program Integration Office for interagency classified projects. Additional details follow: (1) COCOM Direct Support: 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. Therefore, the JCTD Program provides direct support to COCOMs, enabling the COCOMs to select and fund on-site support, typically 1-2 full-time equivalent JCTD managers. (2) JCTD Pre-Transition: 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 1-2 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 Pre-Transition 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 2010 Accomplishments:*** COCOM direct support enabled COCOM staff participation in development, review, and execution of over 100 JCTD Projects and Enabling Technology efforts. The Program Integration Office executed five special projects, developed proposed new start efforts, and managed special security for the JCTD Program. ***FY 2011 Plans:*** COCOM direct support continues to enable COCOM staff participation in developing and executing JCTD projects, ensuring direct warfighter input and proper focus of JCTD projects. Pending funding appropriation, JCTD pre-transition funds are targeting transition for projects including medical resupply to forward units, squad-level immersive training, mapping the human terrain	16.536	26.000	24.000

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
in forward areas, and interagency disaster response information sharing. The Program Integration Office will execute three continuing projects, develop additional projects, and continue to manage special security. ***FY 2012 Plans:*** COCOM direct support continues to enable COCOM staff participation in developing and executing JCTD projects, ensuring direct warfighter input and proper focus of JCTD projects. JCTD pre-transition funds			
Title: Enabling Technologies ***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 efforts that may lead to JCTD proposals, depending on the COCOM assessment and determination of technical maturity. ***FY 2010 Accomplishments:*** Funding was invested in Mini PTDS technology assessment, leading to the rapidly developed Persistent Ground Surveillance System JCTD which is deployed to multiple forward operating bases in Afghanistan. FY 2010 funding enabled data collection and analysis using two-dimensional transmit and receive array designs in the Next Generation Over the Horizon Radar technology risk reduction. As a result, other funding (non-JCTD) was directed to a Phase 2 technology risk reduction effort. Interagency resources (including a small FY 2010 Enabling Technologies investment) developed a successful FY 2011 JCTD proposal to enable better Arctic domain awareness, with friendly nation participation. An effort has been started to assess the efficacy of a purified hydrogen peroxide gast technology, enabling infection control in continuously occupied spaces, such as hospitals (severe problem in theater hospitals in current conflicts). Pending successful tests in a CONUS military hospital, this capability may be deployed in FY 2011. A quick assessment of a low-cost sky-wave radar for maritime awareness was initiated. The use of commercial satellite radar imagery for vessel detection and classification is being demonstrated. A project investigated virtual secure enclaves for computer network defense, leading to two successful JCTD proposals to protect critical command and control information. These and other efforts were all conducted at request of COCOM staffs. ***FY 2011 Plans:*** FY 2011 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. Selected efforts may lead to a JCTD proposal, or other path to fielding or acquisition. Projects that COCOMs have requested include 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	6.559	6.000	6.884

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
and tracking items in transit, examination of a potential geospatial information exchange capability for friendly African nations, assessment of a capability to alert to GPS jamming or tampering, and others. ***FY 2012 Plans:*** FY 2012 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:*** New Start - Contingent upon congressional appropriation and congressional notification -- 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. SPIDERS will demonstrate cyber-secure industrial control systems; application of Smart Grid technologies to military installations; secure micro-grid for sustained mission assurance and emergency support; integration of distributed and variable renewable generation and storage; effective demand-side management; and redundant, distributed back-up power systems. Output and efficiency to be demonstrated: Reduce the "unacceptably high risk" of extended electric grid outages by developing the capability to "island" installations while maintaining operational surety & security. ***FY 2011 Plans:*** Test circuit level micro-grid at existing hydrogen fueling station at Hickam AFB, HI. Tie in renewable energy source, diesel generators, and energy storage. Validate in a laboratory simulation the cyber-security strategy for the utility electric energy management system. Begin preparation for the demonstrations at Ft. Carson, CO and Camp Smith, HI. ***FY 2012 Plans:*** Test larger smart micro-grid at Ft. Carson, CO. Integrate existing Ft.Carson photovoltaic with vehicle to grid energy storage and cyber security.	-	4.000	1.500
Title: High Speed Container Delivery System (HSCDS) ***Description:*** New Start - Contingent upon congressional appropriation and congressional notification – High Speed Container Delivery System (HSCDS) will integrate aerial delivery components to provide a cost effective, high speed ingress/egress, low-altitude, accurate Point of Need Delivery (POND) capability which reduces exposure to threats (aircrew, aircraft, ground receiving units) when resupplying small combat units and provides greater load density to smaller drop zones. Program Outputs and Efficiencies: HSCDS will demonstrate and rapidly field a high speed, low altitude, accurate capability for Container Delivery System (CDS) sized bundles from DoD's high speed capable cargo aircraft . ***FY 2011 Plans:***	-	2.230	1.800

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Integrate aerial delivery components and test HSCDS threshold capabilities on C-130J and C-17 aircraft. Plan for early execution of Operational Demonstration in 1QFY12. ***FY 2012 Plans:*** Execute Operational Demonstration and rapidly field capability to theater. 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 FY13. Execute seamless transition of HSCDS capability to FY13 program of record with US Army Product Manager Force Sustainment Systems.			
Title: Maritime Predator (MP) ***Description:*** New Start - Contingent upon congressional appropriation and congressional notification – Maritime Predator (MP) will demonstrate the ability to conduct clandestine, intrusive unmanned maritime operations in high-threat restricted water areas of interest from a safe standoff. (Details classified). Program Outputs and Efficiencies: MP will provide several platform payload combinations as a residual capability. ***FY 2011 Plans:*** Demonstrate one platform and one payload. ***FY 2012 Plans:*** Demonstrate two platforms and three payloads.	-	2.500	2.000
Title: Preferred Force Generator (PFG) ***Description:*** New Start - Contingent upon congressional appropriation and congressional notification – Preferred Force Generator (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 COA analysis, transportation feasibility and assessments for rapid force availability. Key technologies will address data access and user defined parameters for force selection. Net-centric technologies will be employed to provide the service across the enterprise to include the SOA approach to data access/sharing. Program Outputs and Efficiencies: PFG improves the Department's Adaptive Planning ability to generate and analyze Courses of Action with increased speed and accuracy. ***FY 2011 Plans:*** Develope a PFG service that interfaces with the Joint Capabilities Resource Manager (JCRM) sourcing capabilit.. Conduct Technical Demonstrations (TDs) 1 & 2, Operational Demonstration (OD) 1, and a Limited Operational User Assessment (OUA) via a joint exercise. Develop CONOPS on application of preferred forces across planning process.	-	1.250	1.250

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Enable all interface requirements with existing and future force requirements systems. Incorporate Attribute Based Access Control (ABAC) ***FY 2012 Plans:*** New PFG services that include optimizing and rapidly populating a TPFDL with preferred forces for a large contingency plan (CONPLAN). Complete Operational Demonstration 2 and Operational User Assessment 2. Transition to Joint Capabilities Resource Manager Program of Record.			
Title: Global Decision Support (GDS) ***Description:*** New Start - Contingent upon congressional appropriation and congressional notification – Global Decision Support (GDS) enables senior decision makers use newer technologies that can deliver decision-quality information toenable quicker understanding of the situation and provide increased time for course of action development, risk assessment, and decision-making. GDS technologies provide digital conferencing capabilities that augment the current analog capabilities in the national senior leader conferencing capabilities and leverage Defense Red Switch Network and secure Voice Over SIPRNET (VOSIP) 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: 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 Plans:*** Conduct National Event Conference for a missile event: introduce automated conference initiation, NCES & ISPAN web services that will transition to ISPAN as a spiral increment and be integrated with the next appropriate spiral release in FY 11. ***FY 2012 Plans:*** Integrate the Global Sensor Integrated Network display with secret level secure mobile devices to support worldwide voice/data conference that will transition to ISPAN as a spiral increment and be integrated with the next appropriate spiral release in FY 12.	-	1.250	1.250
Title: Computer Adaptive Network Defense-in-Depth (CANDID) ***Description:*** New Start - Contingent upon congressional appropriation and congressional notification – CANDID will demonstrate the integration of Virtual Secure Enclaves (VSEs) inside existing tactical networks to enable network defense-in-depth and ensure Command and Control (C2) capabilities (common operating picture, chat, and email between trusted clients) despite hostile attempts to hack, disrupt, and deny computer networks. Program Outputs and Efficiencies: (1) increased security of vital C2 capabilities in a cyber contested environment; and (2) prevents infiltration from external threats, exfiltration of protected	-	6.230	3.770

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
information and C2 denial of service, and delivers cyber surveillance/situational awareness through fusion of heterogeneous sensor data. ***FY 2011 Plans:*** Demonstrate and assess prototype Virtual Secure Enclaves Siprnet Command and Control capability at US Pacific Command, US Pacific Fleet/Joint Task Force 519, and functional components. ***FY 2012 Plans:*** Demonstrate leave behind/transition ready Virtual Secure Enclaves Siprnet Command and Control capability at US Pacific Command, US Pacific Fleet/Joint Task Force 519, and functional components.			
Title: Movement Requirements Visibility – Theater (MRV-T) ***Description:*** New Start - Contingent upon congressional appropriation and congressional notification -- Movement Requirements Visibility – Theater (MRV-T) is software and 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. The MRV-T enables improved decision-making by offering prioritized courses of action to meet delivery timelines. Program Outputs and Efficiencies are: (1) increased visibility of joint theater distribution requirements; improved agility and adaptability to best meet war fighter movement requirements; and enhanced visibility of theater modal capacity and movement requirements to effectively use available capacity; and (2) substantially reduces Operations and Support costs by effectively using available capacity. ***FY 2011 Plans:*** Complete Software Certification; integrate capability to receive live Integrated Data Element/Global Transportation Network data during 2Q through 4Q FY 2011. Technical demonstration of MRV-T technology is planned for 4Q FY 2011. ***FY 2012 Plans:*** Conduct operational demonstrations of Joint Movement Requirements Visibility and Management at USPACOM and USCENTCOM Deployment and Distribution Operation Centers during 2Q through 4Q FY12.	-	2.332	2.250
Title: Collaborative Coalition Collection Environment (C3E) ***Description:*** New Start - Contingent upon congressional appropriation and congressional notification – Collaborative Coalition Collection Environment (C3E) is a language independent intelligence data collection interface usable by US and Coalition forces with initial fielding to support the OPCON transformation on the Korean peninsula. C3E will reduce data collection errors by guiding the user to choose a variety of options using "conditional" or "cascading" drop-down menus, where the sequential drop-	-	2.500	2.500

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
down menus are dependent upon the selections in the previous drop-down menus. C3E will provide the capability that enables US/Korean personnel to describe their requirements in general military terms, symbols and graphics within their native language. Initially, PRISM will be a prime object for read/write integration serving as a gateway to other collection management systems. Program Outputs and Efficiencies: Reduced reliance on specialized skills, language and process that are beyond the shared experience of general military operators. Improves the ability to gather, manage, understand and adapt to thousands of collection requirements and tasks in real time. ***FY 2011 Plans:*** Capabilities will be validated by conducting a Technical Demonstration (TD) and an Operational Demonstration (OD) during Key Resolve and Ulchi Focus Guardian Exercises to demonstrate the US and ROK PRISM/PSAS Interface. It will also:Provide Mission Manager & Requirements (MM&R) II User Interface with enhanced map, Graphic data submit, query and synchronization capabilities: and obtain Authority to operate on CENTRIX–K & DoDIIS Collection Framework PSA S—CENTRIX data online with PRISM & PSAS. ***FY 2012 Plans:*** Develop read, write and data transport to other coalition systems. Conduct TD and OD during Key Resolve and Ulchi Focus Guardian Exercises. Demonstrate:SOA implementation, XMPP SOA Services for automated target analysis & LOC target analysis and deliver C3E to USFK for FY 13 transition to JDISS			
Title: SensorWeb 2 ***Description:*** New Start - Contingent upon congressional appropriation and congressional notification - SensorWeb will provide unified access to disparate sensor interfaces, data and services across the ISR Enterprise while delivering improved C2/ Battlespace Awareness using DCGS Enterprise Component Services listed in the Systems View 4B. SensorWeb will integrate sensors, services and processing capability and assure access to Sensor Web data services in a single security domain (SIPRnet). Sensor Web 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 SOCOM/PACOM sensor data, KeyMaker data and applications via SensorWeb on the 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 Plans:***	-	3.025	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Deploy and evaluate an initial set of sensor-oriented web services software library and XML tags for an initial set of sensor types. In FY11, operational capability will transition via DCGS-SOF/NEA into JIOC-IT/DCGS-IC and provide access across NSG and DCGS Enterprise via the DCGS Integration Backbone (DIB). ***FY 2012 Plans:*** An optional FY12 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.			
Title: Non-Persistent Desktop Browsing (NPDB) ***Description:*** New Start - Contingent upon congressional appropriation and congressional notification - Non-Persistent Desktop Browsing (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, exfiltration of protected information, Command and Control denial of service, and delivers Cyber Surveillance/Situational Awareness through fusion of heterogeneous sensors data. ***FY 2011 Plans:*** The NPDB will transition within the Enterprise Solutions Steering Group (ESSG) 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.	-	1.025	-
Title: Gorgon Stare Smart Link ***Description:*** New start – Contingent upon congressional appropriation and congressional notification. In current contingency operations, wide area persistent sensors are deployed, generating far more data than can be processed and disseminated in a timely manner. Operators need tools to assist in identifying, processing, and disseminating the key data that is often buried in very large data collections. The Gorgon Stare Smart Link project will demonstrate the capability to dynamically prioritize, process, and deliver key data with optimized quality of service (bandwidth constrained), for the Gorgon Stare sensor system. Pending favorable utility assessment, the Smart Link products will be fielded in operations in FY 2012. ***FY 2011 Plans:*** Conduct System integration and lab testing, with assessment of timeliness of timeliness of subview setup, timeliness of bandwidth reallocation, and numbers of priority subviews reported over available bandwidth. ***FY 2012 Plans:***	-	2.440	2.780

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Live fly end-to-end demonstration and assessment, including assessment of quality of service delivered versus requested quality. Transition in FY 2012, pending user evaluation.			
Title: Joint Warfighting Integrated NetOps (JWIN) ***Description:*** New Start - Contingent upon congressional appropriation and congressional notification - Joint Warfighting Integrated NetOps (JWIN) will consolidate independent service networks 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 the integration of policy controls to provide a single end-to-end situational awareness view for the Joint Task Force Commander. Key benefits include enhanced situational awareness to understand the impact of network events on critical operations and end-to-end network distributed policy control and management capabilities used to execute authoritative direction over critical network resources. ***FY 2011 Plans:*** Integrate and test network management technologies and concept of operations required for effective joint NetOps. ***FY 2012 Plans:*** Develop a acquisition strategy to implement Joint Warfighting Integrated NetOps components. Provide USPACOM with a leave behind capability to support current missions.	-	2.897	2.306
Title: Autonomous Technologies for Unmanned Aerial Systems (ATUAS) ***Description:*** New Start - Contingent upon congressional appropriation and congressional notification -- Autonomous Technologies for Unmanned Aerial Systems (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 reduceing the risks to the Warfighter and enabling improved operational readiness. Program Outputs and Efficiencies are: (1) Intelligent autonomous navigation capabilities, delivery location beacon, autonomous retrograde technology; (2) Multi-asset control capabilities, autonomous identification of optimum load delivery locations and, (3) reduce the risks to the Warfighter and enable improved operational readiness. ***FY 2011 Plans:*** Integrate, ruggedize and demonstrate a hand-held delivery location beacon during 2Q through 4Q FY 2011. The beacon system will be demonstrated, certified and made available for the USMC immediate Cargo UAS deployment in 1Q FY12. ***FY 2012 Plans:***	-	5.000	5.000

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	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 1Q through 4Q.			
Title: Countermeasure Expendable with Replaceable Block Elements for Reactive Unmanned Systems Multi-Mission Jammer (CERBERUS) ***Description:*** New Start - Contingent upon congressional appropriation and congressional notification – Countermeasure Expendable with Replaceable Block Elements for Reactive Unmanned Systems Multi-Mission Jammer (CERBERUS) will deliver a net-enabled modular expendable jamming system based on the USAF ADM-160C Miniature Air-Launched Decoy (MALD) that employs replaceable nosecone payloads to counter emerging threats in the PACOM area of regard. CERBERUS reduce soverall mission costs by providing reconfigurable & flexible mission weapons. ***FY 2011 Plans:*** Develop open architecture specifications and enhanced MALD mission planning software. Test/demo non-coherent electronic attack payload nosecone assembly ***FY 2012 Plans:*** Test/demo advanced radar jamming payload assembly, datalink electronic attack payload assembly, open architecture vehicle, net-enabled airborne electronic attack expendable CONOPS	-	2.100	3.700
Title: Arctic Collaborative Environment (ACE) ***Description:*** New Start - Contingent upon congressional appropriation and congressional notification - Arctic Collaborative Environment (ACE) is a web-based, open source military, civilian whole of government Arctic Decision Environment Support System. ACE leverages NASA, other government agencies' investments, and experience in Arctic research to integrate disparate data, models, and products focused on Arctic sea ice flow and characteristics, permafrost melt, sea surface temperatures, state, and currents from U.S. agencies and partner nations. Program Outputs and Efficiencies: ACE assesses and transitions the Arctic Decision Environment Support System with integrated data from existing remote sensing, buoy, and in-situ data. ACE builds partner capacity through collaborative sharing, enabling military/civilian long-term environmental planning, forecasting, and management, near term cooperative actions, and understanding the current state of the Arctic Northwest Passage and the Northern Sea Route. ***FY 2011 Plans:***	-	3.983	1.204

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Conduct technical and operational demonstrations of prototype computing regional and national node systems, remote access stations, GIS integration and image processing, graphical user interface for ACE products. Develop and demonstrate CONOPS/ TTP. ***FY 2012 Plans:*** Transition the processing and service software, system hardware, and supporting technical, training and operational documentation to the National Oceanic and Atmospheric Administration, Partner Nations, the National Ice Center, the Earth Science Office at the Marshall Space Flight Center, European and Northern Commands. ACE will provide the foundation for the Sustaining Arctic Observing Networks nd contribute to the realization of the Global Earth Observation System of Systems.			
Title: Additional FY 2011 JCTD New Starts ***Description:*** Additional FY 2011 project proposals are in preparation. Pending appropriation of funds and results of future Candidate Decision Boards tentatively scheduled for January and April 2011, additional JCTD projects may be selected, followed by Congressional Notification. Proposals being considered are in areas including automation and robotics for force protection, interagency information sharing, advanced space and terrestrial sensors, and military capabilities for humanitarian assistance/ disaster relief. ***FY 2011 Plans:*** Anticipate starting 2-3 additional projects in FY 2011. ***FY 2012 Plans:*** Continue or complete the additional FY 2011 new starts.	-	15.238	33.690
Title: FY 2012 JCTD New Starts ***Description:*** The first group of FY 2012 JCTD new starts will be identified under the revised JCTD selection process beginning with a Candidate Nomination Board in May 2011 followed by a Candidate Decision Board (CDB) in July 2011. This allows the Department to rapidly execute the JCTDs needed in FY12 to meet the Combatant Commands (CoComs) most pressing needs as soon as FY12 funds becomes available. In addition, quarterly CDBs will be held throughout the year to address emerging CoCom needs. JCTD's indentified in these quarterly CDBs will be initiated as funds are identified. ***FY 2012 Plans:*** Anticipate starting approximately 15 new start projects in FY 2012.	-	-	56.032
Accomplishments/Planned Programs Subtotals	157.664	206.917	187.707

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	FY 2010	FY 2011
Congressional Add: Distributed Network Switching (DNS)	1.600	-
FY 2010 Accomplishments: Evaluated the application of the technology to an existing Navy shipboard environment in a land-based laboratory to evaluate applicability, robustness, and supportability of the emergent high-speed switching technology in realistic operational environment. In the Engineer Control Systems Lab at NAVSYSPHILLY the technology was found to solve an operational issue experienced on a weekly basis by deployed ships. ***FY 2011 Plans:*** Pending ongoing discussion with Navy regarding DNS application. No further funding via the JCTD Program.		
Congressional Adds Subtotals	1.600	-

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• Line Item #96/ PE 0604648D8Z: *JCTD Transition*	10.715	0.000	0.000		0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

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 no program documentation addressing the new capabilities. 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 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 can be listed on General Services Administration schedule, and be 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

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- 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 Rapid Fielding Directorate (RFD) 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: The JCTD model is capability-based, not threat-based, serving U.S. Combatant Command priorities by focusing on near-term joint needs. Stated 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.

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.