Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Office of Secretary Of Defense										DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*				R-1 ITEM NOMENCLATURE PE 0607828D8Z: *Joint Integration & Interoperability*							
COST ($ in Millions)	**FY 2009 Actual**	**FY 2010 Estimate**	**FY 2011 Base Estimate**	**FY 2011 OCO Estimate**	**FY 2011 Total Estimate**	**FY 2012 Estimate**	**FY 2013 Estimate**	**FY 2014 Estimate**	**FY 2015 Estimate**	**Cost To Complete**	**Total Cost**
Total Program Element	45.795	45.840	44.139	0.000	44.139	48.745	48.882	49.333	50.412	Continuing	Continuing
P818: *Joint Integration & Interoperability*	45.795	45.840	44.139	0.000	44.139	48.745	48.882	49.333	50.412	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Unified Command Plan 2004 assigned USJFCOM with the mission as the Joint Force Integrator for interoperability and integration of future and fielded capabilities critical to Joint, Multi-National, and Interagency warfighting operations. In addition, Management Initiative Decision (MID) 912 signed by the Deputy Secretary of Defense (DEPSECDEF) 7 January 2003 expanded the USJFCOM JI&I role to increase operational through tactical level joint integration of the following capabilities: Common Operational and Tactical Pictures; Combat Identification; Situational Awareness; Adaptive Mission Planning and Rehearsal; Interoperability among Service/ Agency intelligence systems; Interoperable Joint Fires, Maneuver, and Intelligence; and Integrated Joint Battle Management Command and Control. In support of these missions, the outcome of USJFCOM JI&I program is to:

-- identify, assess and develop mission capable solutions for COCOM interoperability and integration capability shortfalls;
-- provide Combatant Commanders with interoperable combat identification and situational awareness capabilities among United States Interagencies, and Allied and Coalition Forces in support of the Global War on Terrorism operations;
-- develop joint requirements supporting specific joint missions identified in MID 912 (Joint Close Air Support, Joint Fires, etc.);
-- develop joint integrated architectures that guide service capability mapping to achieve joint interoperability; and,
-- establish joint data standards and cross domain solutions to facilitate future system interoperability and integration.

The Quadrennial Defense Review (QDR) and follow-on Strategic Planning Guidance emphasized the need to continue building upon the Department's capability-based planning and management initiatives. To promote this shift and better integrate joint capability development across the Department's requirements, acquisition and resource allocation processes, the Deputy Secretary of Defense (DSD) appointed the CDRUSJFCOM as the designated Command and Control (C2) Capability Portfolio Manager (CPM). The C2 CPM has appointed the USJFCOM, J8 as the Command's Joint Capability Developer (JCD), charged with responsibility for day-to-day execution of CPM roles and responsibilities. The outcome of the JCD as the working management arm of the JC2 CPM is to develop courses of action to resource, acquire, and develop C2 related Doctrine, Organization, Training, Material, Leadership, Personnel, Facilities (DOTMLPF) capabilities in conjunction and coordination with the Combatant Commanders, Services and Agencies.

The primary outputs include:

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-- Coordinated, synchronized and integrated development and delivery of C2 capabilities to address Warfighting capability area gaps and shortfalls, and
-- Provide systems engineering and data strategy expertise and analysis (C2 Communities of Interest (COIs) and appropriate architectures) on C2 portfolio capabilities development.

B. Program Change Summary ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	49.371	46.214	0.000	0.000	0.000
Current President's Budget	45.795	45.840	44.139	0.000	44.139
Total Adjustments	-3.576	-0.374	44.139	0.000	44.139
• Congressional General Reductions		0.000			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	-0.255	0.000			
• SBIR/STTR Transfer	-0.770	0.000			
• Other	-2.551	-0.374	44.139	0.000	44.139

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COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
P818: *Joint Integration & Interoperability*	45.795	45.840	44.139	0.000	44.139	48.745	48.882	49.333	50.412	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

The Unified Command Plan 2004 assigned US Joint Forces Command (USJFCOM) with the mission as the Joint Force Integrator for interoperability and integration of future and fielded capabilities critical to Joint, Multi-National, and Interagency warfighting operations. Management Initiative Decision (MID) 912 signed by the Deputy Secretary of Defense (DEPSECDEF) 7 January 2003 expanded the USJFCOM role to pursue, within its authorities in the military needs and operations domain, integration of key joint military capabilities at operational through tactical levels. In consonance with these assigned missions, the Joint Integration and Interoperability Program (JI&I) funds USJFCOM efforts to identify critical characteristics of joint military capabilities and synchronize Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel and Facilities (DOTMLPF) capability elements into a coherent package for employment by joint commanders.

The JI&I Program provides resources for a wide spectrum of efforts to define, refine, and deploy integrated joint capabilities. JI&I-funded endeavors aim to improve US and coalition capabilities to conduct coordinated operations. Necessarily, JI&I-funded projects most frequently address Command & Control (C2) and Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) - the capstone capabilities for integrating disparate elements of military force for joint and coalition operations. The JI&I Program supports tasks and projects associated with USJFCOM's role as co-lead (with ASD Networks Integration & Interoperability) of the C2 Capability Portfolio including coordination of C2 operational architectures, strategies, and policies. Likewise, JI&I partially funds integration activities associated with the C2 Configuration Integration Board (C2CIB), a senior council co-led by USJFCOM, US Strategic Command (USSTRATCOM) and ASD(NII). The C2CIB integrates oversight of C2 Configuration Portfolio Management (CPM) and the Netcentric CPM.

With USJFCOM as executive agent, the JI&I Program delivers outcomes conforming to joint integration missions.
-- In concert with the separately funded Joint Systems Integration Command (JSIC), JI&I resources investigate joint C2/C4ISR shortfalls and ascertain characteristics of DOTMLPF remedies to meet mission requirements. The remedies are then pursued through partnerships with Component force development authorities and acquisition sponsors;
-- Consistent with USJFCOM's role as operational sponsor for joint C2, JI&I underwrites Joint Combat Capability Developer (JCCD) activities compiling operational requirements for C2/C4ISR capability development and integrated testing;

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-- Delivers assessment and recommendations for improvement of interoperable Combat Identification (CID) and Situational Awareness (SA) capabilities among United States
forces, interagency organizations, and allied/coalition forces;
-- Establishes joint data standards and cross domain solutions to facilitate future system interoperability and integration.

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Command and Control (C2) Capability Portfolio Manager (CPM)	10.623	11.628	12.061	0.000	12.061
Primary OUTCOME (objective). Continued oversight and execution of the DoD C2 Strategic Plan objectives in concert with Capability Development Increments. Incremental delivery of "born joint" capabilities will be coordinated through the CPM process, enhancing the joint war fighting capability of the combatant commanders. CPM will continue to review the effectiveness of the C2 portfolio to identify emerging capability gaps and to address those gaps through CPM processes. For example, the CPM working with this unique community assessed and delivered a number of warfighting capability enhancement recommendations across the DOTMLPF-P solution spectrum that were acted upon in the FY10-15 Program Objective Memoranda; significantly closing many long-standing joint capability gaps in the areas of: Net-Enabled Command Capability, Integrated Joint Fires, Blue Force Tracking and Combat ID, Deployable C2, and Data Link architectures to manage net-enabled weapon systems, and Joint Collaborative Information Environment. In accordance with QDR 2006 direction and DSD designation of CDRUSJFCOM as the Department's C2 CPM, JBMC2 was assimilated into the C2 Portfolio in FY 2007. The initial JBMC2 Joint Mission Thread - Joint Close Air Support (JCAS) was completed and brought to maturity the proposed solution products initiated through static and technical assessments. The successfully proven methodology used to assess the JCAS Mission Thread remains a useful construct for the CPM in assessing other C2 programs/systems, data strategy, architectures and their linkage from Joint Capability Area(s) to Mission Tasks to Functions, to determine which functions/systems/applications within the C2 portfolio should be continued, converged or eliminated to improve warfighter capability and interoperability.					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
These processes and relationships in the JCA of C2 will be leveraged by the C2 CPM and are instrumental in successfully accomplishing the objectives of portfolio management; balanced, optimized mix of portfolio capabilities given risk and fiscal realities. The JBMC2 program and processes, now part of the C2 CPM portfolio, have and will continue to produce the following products: capability/interoperability requirements, e.g., turning concept/capability documentation into enforceable technical requirements the Services and/or Agencies like DISA can design and build to; validated system of system architectures; operational assessments and proof of concept demonstrations for Joint solution sets. In order to hasten delivery of C2 capabilities across the full spectrum of warfare, the C2 CPM program has investigated Joint Test and Evaluation requirements necessary to support a more efficient acquisition process. The CPM program has also formulated a Net Enabled Universal Joint Task (NE_UJT) Working Group (to refine the quantitative aspects of the Net Ready Key Performance Parameters (NR-KPP) in terms of C2 attributes that are more measurable from a T&E perspective. Staff members have also participated in several exercises e.g. JTFEX, Empire Challenge, Bold Quest to identify C2 attributes that were or could have been collected to support CPM solution assessments. A limited Information Assurance/Computer Network Defense (IA/CND) demonstration was held in mid FY09 with the 46th Test Squadron in preparation for a more extensive event with the 46th and the Information Operations Range (IOR) near the end of FY09. CPM has also provided SMEs in the T&E area as members of the Netcentric Systems Test (NST) Science and Technology (S&T) Technical Review Team to identify requirements for more efficient test tools to support Systems of Systems (SoS) and Service Oriented Architectures (SOA) testing. These T&E related efforts together with other efforts across CPM have contributed to the concept of a Joint Systems Integration/Interoperability Laboratory (JSIIL) for evaluation of C2 capabilities. This concept was briefed to the JROC and to the Joint Mission Environment Test Capability (JMETC) in June 09 with a proposal brief to the JROC planned in Aug/					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Sept 09. These efforts will be done in partnership with the larger community of interest, the Joint C2 Network Steering Group, that includes; OSD/JS, Services, COCOMs, Agencies and Coalition forces. The primary outputs and efficiencies to be realized as part of an overall C2 CPM approach: 1) Improved, integrated, interoperable, and networked joint force; 2) Reduction in duplicative C2 systems/ programs across the DoD portfolio; 3) Improved portfolio decisions and recommendations regarding investment strategies and development efforts; 4) Associated benefits to warfighter efficiency and effectiveness: - Capability need is for Cooperative Target Identification to enhance combat effectiveness. Reduced fratricide, increased availability of close air support for troops under fire, more effective coordination of air assets, increased weapon accuracy and time sensitive targeting; - “Do No Harm” to existing warfighting C2 capabilities - Authoritative Data Sources with “secure transparency” timelines - Data Standards with breadth of application through Integrating architectures - Continuing migration toward joint and coalition interoperability through capability slices providing “real-time” offensive and defensive fires while minimizing fratricide; -Transition from legacy, platform-centric systems to a net-enabled environment focused on plug-and-play interoperability and application-independent data flow. - Partner with other portfolios to achieve a holistic capability					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: The C2 CPM orchestrated a Focused Integration Team (FIT) effort in an open and transparent process with full COCOM/Service/Agency and Joint Staff stakeholder participation to inform the Department's FY10-15 POM investment decisions related to optimizing the mix of C2 portfolio capabilities. This collaborative approach resulted in significantly less perturbation to Service programs, and ultimately yielded a $2.3B investment across the Future Years Defense Program (FYDP) in the C2 capability portfolio. C2 CPM POM 10 recommendations favorably influenced investment (materiel) and non-materiel decisions related to: Combat ID and Blue-Force Tracking, Adaptive Planning, Deployable C2, Collaborative Information Environment, Data Strategy, and Joint Task Force Headquarters (JTFHQ) manning and equipping issues. Building upon POM 10 efforts and analyses, the C2 CPM developed programmatic and non-programmatic recommendations and capability priorities for the Components' consideration during the FY09 Quadrennial Defense Review, FY11-15 Program/Budget Review cycle, and finally mission analysis and planning for FY12-17 POM cycle. In concert with the POM 2010-2015 effort, the C2 CPM in the development of the C2 Capability Mix Study directed in the Guidance for Development of the Force (GDF) and the development of a DoD C2 Implementation Plan directed in DoDD 5100.30 to guide the migration of legacy systems and enable the Department's transition to a net-enabled, service oriented architecture environment. Additionally, the C2 CPM continued necessary foundational work required to document and baseline the DoD C2 portfolio regarding systems mapping, architecture, requirements, data standards, and associated resources to inform current and future (POM 12) budget and investment recommendations. Test & Evaluation related deliverables have included: draft definitions of the Joint Mission Environment (JME) submitted to the Testing in a Joint Environment Roadmap Senior Steering Group (TSSG); establishment of working groups to review DOT&E strategic and implementation plans, Joint Staff documents and instructions e.g. 6212 and 3170 with subsequent submission of recommendations; and participation in a JFCOM Modeling and Simulation (M&S) Board of Directors to establish M&S					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
requirements necessary to create a Live, Virtual, Simulation (L,V,S) environment for Joint testing and training. *FY 2010 Plans:* Continued refinement of the analytic C2 baseline, methodology and portfolio management information to better identify and analyze current and future C2 capabilities in comparison to the POM 11 baseline to inform investment and trade-off recommendations for FY12-17 POM and Program/Budget Review process; refinement of Tier II and III Joint Capability Area (JCA) attributes and metrics; C2 systems and architecture mapping; C2 policy and direction, and the DoD C2 Implementation Plan. Continue to participate in selected venues to assess and evaluate C2 capabilities of interest to the program. Specific Joint Mission Threads (JMTs) will be identified for investigation in Limited Operational Assessment (LOA) events that exercise the JSIIL concept in more complex demonstrations with additional sites. Coalition forces C2 requirements will be considered in FY10 for possible inclusion in JSIIL. CPM will continue to work with JMETC and the NST tool development programs to ensure joint testing requirements are identified and presented to these organizations for funding consideration. Venue and JMT selections will be done in partnership with members of the Joint C2 Network Steering Group consisting of OSD/JS, Services, COCOMS and Agencies. Fully integrated joint architecture template development will be conducted to provide testing template deliverables as guidance for joint test planning and execution. A limited proof of concept/demo for architecture templates will be conducted in FY10 for a selected JMT. The output from the (NE-UJT) working group will be formally presented to the Joint Staff for consideration as a modification to a UJT. The JFCOM M&S BOD will draft an M&S requirements document for review by the analysis, test and training communities. A SOA effort for data management and sharing will be initiated to support the joint test and evaluation communities. The Joint Network Steering Group will plan for an integrated test and training event to include an Operational Evaluation phase based on the established Joint Experiment, T&E and ACTD (JETA) process to insert OPEVAL events into training exercises.					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: Follow-up and oversight of objectives and milestones identified in the DoD C2 Strategic and Implementation Plans; migration, development and divestiture plans and objectives. 2010 Quadrennial Defense Review guidance implementation in coordination with COCOM, Service, Joint Staff and Agency C2 stakeholders. C2 CPM directed studies, analyses and operational assessments for the development of C2 portfolio capability solutions necessary to satisfy warfighting requirements and inform the FY 13-17 Program/Budget process and associated joint programming guidance. Execution year oversight of prior year investment decisions and current year strategic plans. Maintain C2 capability analytic baseline to analyze current and future C2 capabilities. Provide portfolio assessment and oversight of approved POM 12 Resource Management Decisions (RMD). Conduct analyses to develop C2 capability requirement, investment and divestiture recommendations to inform the FY 13-17 program/budget cycle, CJCS FY13-17 Integrated Priority List (IPL), and CJCS Senior Warfighting Forum and risk assessments. Leverage planned COCOM exercises and OSD technology demonstrations and events to support measurable assessment and operational utility of potential C2 solution alternatives.					
Joint Blue Force Situational Awareness (JBFSA) Primary OUTCOME (objective) for this effort is to improve overall Friendly Force Situational Awareness and to develop solutions that reduce the potential for friendly fire. Friendly Force Tracking (FFT) Beyond Line-of-Sight/Non-Line-of-Sight Mission Needs Statement (BLOS/NLOS MNS) (Apr 02) and subsequent Joint Requirements Oversight Council Memorandum (JROCM) 128-03, and Combatant Command Joint Urgent Operational Need statements / requirements validated the need for an outcome that produced a joint, integrated, interoperable FFT air / ground / maritime operations capability. JROCM 076-05 endorsed specific approaches and actions identified by USJFCOM in response to Operation Iraqi Freedom (OIF) Lessons Learned Report on preventing friendly fire incidents (fratricide prevention).	3.700	1.300	1.300	0.000	1.300

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
The primary outputs and efficiencies to be realized are: 1) Increased development and integration of common data formats and the modification of supporting software / architectures in order to allow Position Location Information (PLI)/Situational Awareness (SA) data to flow freely among U.S., NATO and coalition forces; 2) Increased capability and capacity for Data Dissemination through the establishment of net-centric integrated services that allows for seamless access to FFT information to prosecute operations in a bandwidth limited environment by all warfighting echelons; 3) Increased / improved Joint Air - Ground Situational Awareness sharing capacity / capability through technical solutions, Concept of Operations, Tactics, Techniques and Procedures (TTP) delivery, along with the development, integration, testing, production, and deployment of airborne FFT capabilities; 4) Improved and increased force capability for Battlefield Deconfliction / Fratricide Avoidance, by increasing interoperability of systems through FFT data exchange standardization; and 5) Increased integration and availability of FFT data between tactical and logistics support forces. *FY 2009 Accomplishments:* The following initiatives were developed to address Friendly Force Tracking (FFT)/Combat Identification (CID) capability gaps: - SOCEUR/SOCAFRICA BFT/C2 Capability: As a result of limited data collection in their respective AORs, SOCEUR/SOCAFRICA required an ability to track SOF teams operating in austere environments. The initiative provides a 24/7 on-demand Low Probability Intercept/Low Probability of Detection/Low Probability of Exploitation global capability able to track high value assets. This two-phase project focused on developing an Iridium-based capability for testing, analysis and integration into the SOF teams. - Radio-based Combat ID (LITENING Pod at Bold Quest 09): Provided an air-to-ground targeting pod for fixed wing aircraft to cooperatively identify, real-time, SINCGARS equipped friendly forces (joint and coalition). RBCI SINCGARS radios were fielded and flight tested in Army helicopters. In early 2009 Lightning pod integration began for fixed wing and went to ground and flight tests in March and					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
June 2009. Bold Quest integration will begin in August with a full dress rehearsal and full fixed wing demonstration during Bold Quest in Oct/Nov 2009. - Reverse Mode 5 A-G JCTI Capability Demonstration: Provided an interoperable, platform-level cooperative CID capability to aid a pilot's shoot/no-shoot decision process. Capability is being integrated into US and NATO aircraft. Demonstration of Reverse Mode 5 transponder, using existing equipment, will take place during Bold Quest 2009. Analysis and current transponder modification for this demonstration to be completed by end of Q3 FY09. - GCC "Stop-gap FFT Packages": Provided a "stop-gap" FFT capability to support urgent operational needs until GCCs can program for an organic FFT capability. Capability will be seamlessly integrated into the current FFT architecture and provide FFT capabilities for missions sets including: VIP Tracking, Interagency support, Survey Teams/Advanced Parties and Crisis Deployments in theaters such as Georgia, HOA and AFRICOM. - AFSOC BFT/C2 Capability: Developed and implemented a near-real time FFT data and voice capability to assist in C2, shared situational awareness, location reporting, tracking and communications with and between AFSOC personnel engaged in SOF missions. Tied directly to the SOCEUR/SOCAFRICA FFT phased implementation, initiative developed a capability which is interoperable with, and can be modified for aircraft systems. Single Card Solution Project: Develop capability available for fielding within 24 months, provides tailored communications for dismounted warfighters and small vehicles enabling integrated and interoperable FFT/CID, voice and data capabilities. This capability includes a small, light-weight and power efficient encrypted transceiver for L-Band, UHF and 1GHz LOS for LINK-16 "lite" and IFF Reverse Mode 5.					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: Develop enhanced capability to share C2/SA data between U.S. and Coalition forces. In addition to sharing Position Location Information (PLI), capability will allow sharing of enemy PLI, MAYDAY, MEDEVAC, maps and overlays, and free text messaging between FBCB2 and coalition C2 systems. Effort will provide increased C2 capability at the tactical edge and reduce potential for friendly fire incidents. Develop capability to provide Friendly Force Tracking (FFT) data to U.S. and Coalition aircraft over various tactical data links (i.e. Link 14, SADL). Capability will provide the location of the nearest five friendly entities equipped with and FFT device in relation to a target/area of interest. Information will be used by operators to develop SA in making a decision to engage target. Knowing the location of friendly forces will reduce potential for fratricide. *FY 2011 Base Plans:* Develop capability for FFT systems to operate in a low-bandwidth, austere environment. Identify and assess Low Probability of Intercept (LPI)/Low Probability of Detection (LPD) waveform options, including integration of Global Personnel Recovery System capability to support Special Operations.					
Coalition Combat Identification (CCID) Advanced Concept Technology Demonstration (ACTD)/BOLD QUEST Primary OUTCOME (objective) for this effort is to inform U.S. and Allied investment in combat identification interoperability. The Coalition Combat Identification Advanced Concept Technology Demonstration (CCID ACTD) assessed the military utility of emerging combat identification technologies in a series of operational demonstrations conducted during 2003-2007. The technologies assessed provide a cooperative and non-cooperative target identification capability enabling coalition ground forces and aircrew to identify friendly, enemy and neutral ground entities. During the course of the ACTD, international participation, with the commitment of both technologies and forces, grew from an original three nation partnership to a coalition team of eleven nations investing forces and technologies in the operational demonstrations, Urgent Quest (September-October 2005) and Bold	4.000	4.000	4.000	0.000	4.000

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Quest (September 2007 and July 2008). Upon conclusion of these events, the Coalition Military Utility Assessment (CMUA) was produced and presented, along with system cost estimates, to U.S. Service investment decision-makers. Service authorities accepted the ACTD's conclusions and recommendations aimed at joint acquisition strategies for four of the ACTD's core technologies, the Battlefield Target Identification Device (BTID), Radio Based Combat Identification (RBCI), Synthetic Aperture Radar/Aided Target Recognition and the Laser Target Imaging Program (LTIP). During April 2008, the USD AT&L proposed the extension of the ACTD through FY 2010 with a view toward longer term continuation of Coalition Combat Identification capability development via a recurring (18-24 month cycle) series of Bold Quest events under USFCOM operational sponsorship. The international community voiced clear consensus with this sustaining this approach in the commitment of ten nations as active participants in Bold Quest 2009. The continuation of the Bold Quest coalition partnership will also include an expanded view of the Coalition Combat ID capability to encompass not only materiel, but also procedural and training elements. The Bold Quest assessments will leverage Joint and Allied requirements, capability gap analysis and metrics as documented in the Combat Identification/Blue Force Tracking Joint Capability Document and other U.S. and Allied studies. Critical Operational Issues (COI) driving the Military Utility Assessment include (1) Functionality (2) Operational Impact (3) Suitability, and map to metrics including timeliness, accuracy, completeness, range and probability of correct ID. The following Technical Programs/Initiatives were assessed during Urgent Quest 05, Bold Quest 07, 08: --Laser Target Imaging (LTI) - LTIP provides positive, day/night, timely and reliable stationary ground target detection, cueing and pilot interpreted identification at ranges compatible with advanced weapons (JDAM, JSOW).					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
--Synthetic Aperture Radar Aided Target Recognition (SAR/ATR) - SAR/ATR provides positive, all weather, day/night, timely and reliable stationary ground target detection, cueing and aided target recognition at ranges compatible with advanced weapons (i.e., JDAM, JSOW) --Radio Based Combat ID/Situational Awareness (RBCI/SA) - RBCI is a software only modification to existing combat radios to provide interrogation and reply combat identification capability. --Battlefield Target Identification Device (BTID) providing Millimeter Wave query-response capability for ground and air shooters. --Reverse IFF - Reverse IFF leverages onboard IFF (Mode 5/S) transponder systems to enable aircrew to query transponders installed on ground vehicles. --Combat Identification Server providing aircrew and other users with the capability to query ground target areas for archived friendly position location information. *FY 2009 Accomplishments:* As outlined in the USD AT &L Memo dtd April 30, 2008, the USJFCOM has taken the lead in establishing a recurring cycle of activity that produces periodic assessments of the emerging Coalition Combat Identification capability. It is estimated that this cycle will repeat every 18-24 months, with events and products timed to inform the appropriate capability development and management processes. This approach will not be limited to the assessment of materiel solutions; rather, it will address, as necessary, the doctrinal, training and other elements of the CCID capability. Properly institutionalizing this approach on a long term basis will require synchronizing CCID capability development activities with annual budget and exercise schedules. Commencing with a Concept Development Conference 9Sep 08) and continuing through three major planning conferences a collaborative team including four Services, USSOCOM and ten nations have converged to execute the next event, Bold Quest 2009 (BQ09), at U.S. Marine Corps Installations East venues (Camp					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Lejeune and MCAS Cherry Point, NC) during Oct-Nov 2009. A demonstration force including 550 military personnel, 22 fixed wing aircraft and 200 civilian support personnel will engage in two weeks of representative air/ground operations, focused on the assessment of Air-to-Ground Cooperative Target Identification technologies and procedures. In a precedent setting approach, Coalition Warrior Interoperability Demonstration 2009 (CWID09) was leveraged as a technical risk mitigation venue four months (June 09) prior to the major BQ09 operational demonstration. The U.S. CID-BFT Executive Steering Committee and counterpart NATO bodies have integrated BQ09 in consolidated Action Plans and programs of work. BQ09 is also providing the primary forum for demonstration and assessment of the Joint Aerial Layer Network as developed in the CABLE JCTD. Additionally, the Joint Personnel Recovery Agency (JPRA) is actively engaged in BQ09 for the evaluation of PR C2 systems and techniques in conjunction with BQ09 scenarios/vignettes. *FY 2010 Plans:* Following immediately upon conclusion of BQ09, production of the Coalition Military Utility Assessment Report will commence with a targeted completion and distribution to U.S. and Allied authorities NLT Feb/Mar 2010. It is further anticipated that BQ09 results will be presented during the CID-BFT Symposium scheduled for late Spring 2010. Within the U.S. Joint and Service community, BQ09 data and analysis will also inform the anticipated Analysis of Alternative activity associated with the Joint Cooperative Target Identification (JCTI) capability development. Concurrently, building upon previous development/assessment (BQ07/08/09), the USJFCOM, UK MoD and NATO ACT will lead a multinational group of participants focused on the operational deployment of the Combat Identification Server capability NLT FY11. Preparatory activity during FY10 will include collaborative testing of the U.S. and UK developed Servers, programmatic support and coordination with cognizant theater authorities (e.g. MNF-A) to ensure a fully integrated and supported deployment plan. As planned during 2009, the U.S. and Canada will use the Bold Quest as the forum to exercise the Joint Fires Testbed.					

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B. Accomplishments/Planned Program ($ in Millions)

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Anticipate that the mutually beneficial relationship forged between BQ and CWID in 2009 will be continued and refined during 2010, with the potential for linkage of BQ to other established joint, service and coalition exercises. *FY 2011 Base Plans:* Several initiatives are taking shape for Bold Quest activity in 2011. Retaining the Bold Quest focus on the needs of coalition shooters and other limited bandwidth users, and the prioritization of Air-Ground CID capability gaps, the integration of both Cooperative and Non-cooperative Target Identification capabilities on the same air platform will enable, for the first time, an assessment of the optimal mix of CTI/NCTI in the hands of one shooter. The results will both inform investment and development of innovative Tactics, Techniques and Procedures. In the Digitally Aided Close Air Support (DaCAS) area, assessment of Net-Enabled Weapon technologies and procedures will inform development of capabilities for Joint Terminal Attack Controllers (JTACs) to provide terminal control of designated weapons. Anticipate that Reverse IFF capabilities for Air-to-Ground CID, as seen in BQ07/09 proofs of concept, will mature to the point of integration with other ground CTI technologies, notably Radio Based Combat ID (RBCI) and Battlefield Target ID Device (BTID). Exploitation of emerging airborne IFF Mode 5/S systems for Air-Ground use will substantially expand the Air-Ground CTI capability of Allied air forces' ability to operate effectively with U.S. and coalition ground elements. A fundamental objective during FY11 will be to identify and establish long term relationships with the optimal test venues for recurring, programmed use in the continuation of BQ events.					
Joint Combat Capability Developer (JCCD) Primary OUTCOME (objective) for this effort is to identify and develop the capability needs and essential Doctrine, Organization, Training, Materiel, Leadership, Personnel, Facilities – Policy (DOTMLPF) and Policy attributes in support of objective Joint command and control (C2) requirements/ capability needs for use in the development of Joint net-enabled and agile C2 capabilities. Strategic Planning Guidance (SPG) directed establishment of a transformation path to achieve a joint command and control capability for DoD - "Strengthening joint operations through ... improved joint command and	7.600	6.400	6.400	0.000	6.400

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
control is an indispensable step forward in transformation." Unified Command Plan (UCP) 08 assigned USJFCOM as the Joint Force Integrator to lead the development of joint command and control doctrine, concepts, requirements and integrated architectures. Furthermore, DoD Directive 5100.30 (U), 1/5/2006, "Department of Defense (DoD) Command and Control (C2)" established USJFCOM as the advocate for joint command and control in the Department of Defense. Joint Requirements Oversight Council Memorandum (JROCM) 167-03, 22 August 2003 designated USJFCOM as operational sponsor for Net-Enabled Command Capability (NECC) and further delegated NECC (originally named Joint Command and Control (JC2) Capability) non-Key Performance Parameter (KPP) requirement adjustment approval authority to USJFCOM. DepSecDef Memorandum (10 Dec 2008) designates USJFCOM, delegated to the JCCD, as the joint functional sponsor for the Global Theater Security Cooperation Management Information System (G-TSCMIS) for the development of joint requirements. DepSecDef Memorandum (14 Sep 2006) directed capability portfolio management test-cases and empowered CDR USJFCOM as the C2 Capability Portfolio Manager (C2 CPM). USJFCOM J8 has been designated the Joint Capability Developer (JCD) and execution arm of C2 CPM and the C2 Capability Integration Board (C2CIB). The JCD takes direction from the CPM and the C2CIB and authority as appropriate and develops courses of action to source, acquire, and develop Joint net-enabled and agile C2 capabilities in conjunction with the Combatant Commands and Services. JROCM 173-07 (16 July 2007) approved the Net-Enabled Command Capability Increment I Capability Development Document (CDD) and Extensions, and validated the Key Performance Parameters (KPPs). The JROCM further states that the JROC will maintain approval authority for all KPP changes, delegates approval authority oversight for changes to key system attributes (KSA) to the Joint Capabilities Board (JCB), and delegates approval authority for all non-KPP changes to USJFCOM (via the JCCD organization). CJCSI 3265.01 Command and Control Governance and Management (22 Sep 2008) designates USJFCOM as responsible for the functional management of joint C2 requirements and capability development needs (to include GCCS FoS and NECC), formerly managed by JS/J3. USJFCOM executes operational sponsorship of the GCCS-Joint (GCCS-J) and capability development responsibilities of NECC through the JCCD. Finally, Program Decision Memorandum (PDM) II (19 Nov					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
2007) states that the JCCD and material provider (DISA) in consultation with the users (Combatant Commands and Services) can prioritize the delivery of functionality within already provided funding for the NECC Increment 1 and furthermore that the DOTMLPF-P capability requirements will be defined by the JCCD in consultation with ASD (NII), DISA, Combatant Commands and Services and identified within existing Service, Joint and Agency funding and infrastructure. *FY 2009 Accomplishments:* Capability Definition Packages (CDP) 1 thru 6 have been completed and forwarded to the materiel developers and CDPs 7-9, 16, 21, and an un-numbered cross functional CDP are currently in various stages of development - all covering the Joint Planning, Readiness and Execution mission capability areas as well as intelligence support to C2. These CDPs included emerging requirements and changes for the GCCS Family of Systems (FoS) as capabilities transition to and integrate with objective C2 capability. CDPs now include DOTMLPF - P Constructs (1 thru 6) and have been submitted for exercise and refinement during capability developmental test and operational test to ensure delivery of holistic C2 DOTMLPF capabilities to the warfighter. As directed by the C2 Joint Capability Board (JCB), the JCCD assessed the operational risk associated with the widening gap between DoD's current C2 capability and the objective joint C2 capability. This assessment (vetted and validated via the C2 governance structure) informed the way ahead for sustaining robust joint C2 capability and transitioning to an agile, interoperable and services-based C2 capability. In accordance with CJCSI 3265.01, the JCCD constituted the JCCD 06-level Council to provide a forum for addressing C2 capability needs issues. In less than a year, this Council has come to be viewed as the venue of record for positive action on issues of concern to the joint C2 community. It has already approved two actions on behalf of the Joint Air Interoperability Working Group (JAIWG), to include directing formal release of a Theater Battle Management Core System (TBMCS) software update. As directed by the OSD Joint Analysis Team, the JCCD, Service Combat Capability Developers (SCCD) Charter was developed and completed initial staffing to the COCOMs/Services and Agencies to capture roles and responsibilities, overarching governance structure and the end-to-end DOTMLPF-P capability development process. Developed Disconnected Operations/Dispersed C2 Operational					

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Concept (OPSCON) for Joint C2 net-enabled operations. Mission Capability Area Team (MCAT) completed their studies and analysis of a fully Joint approach to decomposing the GCCS FOS into "As Is" and "To Be" Capabilities. The net- enabled requirements identification database (NRID) achieved IOC (existing joint C2 requirements have been migrated to this new NRID). The NRID provides a means of vetting capability needs (CN) throughout the C2 stakeholder community while providing visibility of submitted CN inputs as it progresses through the requirements and capability development process. The NRID will become the primary tool for providing capability prioritization. All COCOMs and Services have designated and trained NRID managers. Developed draft CJCSM on NRID processes; focused on ensuring accurate identification of mandatory data fields. Continued NECC evaluations and assessments to provide supporting metrics for continued development of a net-enabled C2 capability within the acquisition system. Continued to coordinate and refine utilization / federation of NECC and JTF HQ Core architectures.					
FY 2010 Plans: JCCD continues development and mapping of requirements to additional CDPs, including emerging requirements and engineering changes for the GCCS FoS as capabilities transition and integration to objective, agile C2 capability. This includes development of the Theater Security Cooperation (TSC) CDP to address Global Theater Security Cooperation management Information System (G-TSCMIS) functional requirements. JCCD will continue to lead CJCSI 3265.01 directed responsibilities as co-chair of the JCCD Council of Colonels (CoC) as well as co-chair of selected C2 Working Groups – Joint Air Interoperability Working Group (JAIWG), Intelligence Functional Working Group (IFWG), Training WG, Security/Net-Centric WG, and the Readiness WG. Execute JCCD, CPM (JCD) and C2 governance processes via NRID: Collect, identify, aggregate, assess, and prioritize C2 requirements across DOTMLPF-P (NRID will achieve FOC in FY10 and will provide the capability capturing, prioritizing, and tracking warfighter C2 capability needs as they are fulfilled via materiel or non-materiel means). JCCD continues DOTMLPF-P construct development and validation as part of CDP development. This effort includes development of associated mission threads and warfighter business process models utilized for follow-on software development by materiel developers as well					

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as providing a testable construct for developmental and operational testing. Continue interoperability demonstrations, technical evaluations and capability warfighter utility assessments to provide supporting metrics for continued development of an agile, services-based C2 capability within the acquisition system. Early assessment of the pilot capabilities modules will be conducted to track and determine if there is a decrease in the number of interoperability fixes required to operationally employ the developed system. Establish a Net-enabled Requirements Governance Council (NRGC) and accompanying charter/terms of reference. The NRGC will provide a requirements management and decision-making forum to ensure appropriate requirements governance through the life-cycle of ongoing Joint C2 programs. The NRGC will approve schedule/content of capabilities released to support agile program execution, based upon collaboration between the JCCD and PM(s). This includes conducting semi-annual incremental build conferences with materiel developers, Joint Staff and ASD(NII). The incremental build conferences will ascertain the right integrated mix of new/enhanced capabilities based upon validated need (capabilities to adopt/adapt or new capabilities that require development) for the next planned release IAW established priorities by the JCCD and executable within programmed resources. JCCD will continue interoperability efforts to link objective C2 capability with the Distributed Common Ground Systems (DCGS), to be demonstrated in the CJCSI-sponsored exercise EMPIRE CHALLENGE. The JCCD will integrate requirements development and management for emerging adaptive planning capability so there is seamless transition to a robust, Joint solution. Develop NECC Incr I CDD Change 2 Annex to support updates in Key Performance Parameter and Key System Attributes. JCCD will commence development of Increment II Capability Development Document (CDD) or its approved nomenclature equivalent. Continue to provide JCCD perspective to DoD C2 community via JCIDS document review.					
FY 2011 Base Plans: Continued capability production and deployment. JCCD continues development and mapping of requirements (JC2, APEX, G-TSCMIS, and MNIS) to additional CDPs, including emerging requirements and engineering changes for the GCCS FoS as capabilities transition to, and integrate with, objective joint C2 capability; continues management of the NRID. Update JCCD management					

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documentation to capture and baseline the JCCD capability needs/development process. Execute the Joint C2 Capability Requirements Governance Council (JC2CRGC) (requirements management and decision-making forum) to ensure appropriate requirements governance through the life-cycle of ongoing Joint C2 programs. The Council will approve schedule/content of capabilities released to support agile program execution, based upon collaboration between users and PM(s). Continue to engage with interagency, multi-national and NGO communities to address requirements for both vertical and horizontal collaboration and information sharing and support C2 Implementation Plan activities.					
Joint Data Integration Primary OUTCOME (objective) for this effort is an improved information and data management process that enhances the Joint Task Force Commander's situational awareness, decision cycle, and builds a picture that the CJTF can use and trust. The Joint Data Integration (JDI) operational concept, endorsed by USPACOM's fully deployable joint warfighting staff (JTF 519) and based upon OIF/OEF lessons learned, directly addresses the challenges of data management in the JTF HQ C2 Joint Mission Thread. The concept of JDI is to combine the data contained within intelligence, data link, ground data, and sensor networks to produce an accurate, timely, complete and unambiguous Common Tactical Picture (CTP) for JTF use and for sharing with Functional Component Commanders. This common tactical picture becomes the basis for the CJTF's input to the COCOM's Common Operational Picture (COP), which is distributed via GCCS to supported/supporting commands and higher authority for shared situational awareness. The primary outputs and efficiencies to be realized are: 1) Improved quality of the common tactical picture in order to enhance Joint Task Force Headquarters Command and Control capabilities; 2) Increased standardization of data management tasks in current GCCS Family of Systems and future C2 systems; 3) Improved/increased automation requirements across future C2 systems; and 4) Reduced commander's decision cycle through accelerated processes, as a result of an increase in the commander's overall situational awareness.	1.120	1.968	0.668	0.000	0.668

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FY 2009 Accomplishments: Completed Joint Data Network Operations (CONOPS) for toolset development. Validated Functional Needs Analysis with warfighter input; prioritized development of DOTMLPF solutions to capability gaps identified in 2007 FAA that, if corrected, would yield the greatest return on investment as well as meet operational priorities noted in CCDR IPLs for the FY 11-15 timeframe. Provided updated data requirements for automation to future joint Command and Control systems Capability Production Documents. Confirmed Service acquisition plan for fielding Joint Interface Control (JICO) Support System (JSS). Initiated and developed the Interface Change Proposal (ICP) to MIL-STD-6040, US Message Text Formats, for creation of the Joint OPTASK Common Tactical Picture (CTP) Common Operational Picture (COP) message in both standard format and eXtensible Markup Language (XML). Coordinated JDI interfaces with USPACOM in order to improve the content of the COCOM's COP in Terminal Fury 09. Teamed with Navy's Center for Surface Combat Systems and Army Forces Command Joint Interoperability Division to write initial set of configuration control/filter settings/ permission set TTP for network management functions. Teamed with Navy NETWARCOM/PEO IWS and USAF Global Cyberspace Integration Center to identify potential Service material solutions to data integration and candidate technologies for use as JDI toolsets in Terminal Fury 09 and Austere Challenge 09. Successfully completed a Joint Data Integration Joint Feasibility Study, establishing the foundation for the OSD sponsored FY 09-11 Joint Test to integrate JDI into Service programs. Participated in development of the "EMPIRE CHALLENGE 09 ANNEX K, creating the airborne layer network and assisting in creation of the Ground Data Network. Supported ongoing POM12 C2 CPM efforts. *FY 2010 Plans:* Complete a JDI Functional Solutions Analysis (FSA). Submit a DOTMLPF Change Recommendation (DCR) supporting POM12 decision cycle that incorporates standardization of the JDI Operations Cell manning at JTF HQ levels and establishes a formalized training environment to educate future JDI Ops personnel to perform the functions assigned in CJCSM 3115.01B. Implement the next phase of the JDI operational validation, incorporating USPACOM and USEUCOM objectives in synthetic venues					

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selected by operators (Terminal Fury 10 and Austere Challenge 10). Further develop and validate, in an operational scenario, the TTPs for CTP to COP integration. Initiate a feasibility assessment of options to embed JDI training in Joint schoolhouses; provide interim JDI training in the form of Mobile Training Teams available to support COCOM/JTF operational needs upon request. In coordination with Air Combat Command and USEUCOM, develop courses of action for allied/coalition data sharing operations and cross domain solutions with NATO forces. Initiate coordination with NORTHCOM for potential inter-Agency use of the JDI capability and procedures within the CONUS AOR. Apply data obtained in Terminal Fury 09 and Austere Challenge 09 to the prioritization of C2 CPM Service programs; also use technical findings to enhance the development of joint C2 requirements. *FY 2011 Base Plans:* Initiate approved DCR recommendation for integration of JDI Ops training into formal schoolhouses. Complete and staff a JDI Initial Capability Document (ICD), based on the FY 10 FSA findings and DCR recommendations. Evaluate the performance of Navy PEO IWS Multi-Source Integration capability as potential data fusion device in land based and live fleet testing during Trident Warrior 11. Evaluate the performance of USAF Air Combat Command's multi-level security and data fusion device in USSTRATCOM's Data Fusion Integration Center. Initiate CTP visualization tool development incorporating scalable, operator selectable, doctrine statement controlled data management capability. Apply data obtained in Valiant Shield 10, Terminal Fury 10 and Austere Challenge 10 to the prioritization of C2 CPM Service programs; also use technical findings to inform the development of future Joint C2 machine to machine automation requirements.					
Turnkey Command and Control C2 Primary OUTCOME (objective) for this effort is to improve readiness of designated JTF HQs for their Command and Control (C2) systems by using an established and proven, repeatable methodology to assist designated Joint Task Force (JTF) Headquarters (HQ) in identifying gaps and shortfalls and facilitate the sourcing of the shortfalls in the joint command and control equipping portions of their forming process. This effort also includes C2 Capability Portfolio Management JTF HQ Focus	0.715	1.350	0.000	0.000	0.000

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Integration Team and Enabling Mission Partners support for capturing gaps in JTF HQ organization/ manpower/training/C2 systems which may be closed and other potential means to raise the readiness level of current and future JTF Capable HQs and improve their ability to operate with mission partners. The JTF Core Architecture, consisting of Increment 1 (JTF HQ), Increment 2 (JTF Functional Component Commands), and Increment 3 (Multinational and Interagency) architectures provide support to the JTF Command and Control Equipping process, and serve as a key aspect for many of the architectural efforts. Focuses and refines Command and Control (C2) systems, applications, and telecommunications requirements for JTF HQ to increase readiness of the JTF HQ formation. To assist Multinational Architectural Initiatives analysis is conducted and architectures are developed to better enable non-DOD partners to share information. This objective also includes reviewing JCIDS integrated architectures for J8 to ensure integration and interoperability at the operational and tactical level. This objective supports Improved, integrated, interoperable, and net-enabled joint force and Reduction in duplicative C2 systems/programs across the DoD portfolio. JTF HQ Command and Control Equipping Process support the QDR 2006 and the Unified Command Plan 2008 task to the CDRUSJFCOM to certify the readiness of assigned HQ Staffs designated to perform as a JTF HQ. The JTF HQ C2 Equipping Process provides a flexible and tailorable 6-step process that uses the JTF HQ C2 Baseline Templates and Architectures augmented by additional specialized architecture products and staff assistance visits for the designated JTF HQ. The JTF HQ Templates provide the JTF HQ with Joint Manning Documents (JMDs) and C2 Baseline Template and Architectures that lay out the historically required and doctrinally-based capabilities, requirements and manning, in addition to systems, applications, and network requirements, including telecommunications and VTC capabilities, for various types of JTF HQ operations. Current Templates address the range of types of military operations such as Major Combat Operations (MCO), Defense Support of Civil Authorities (DSCA), Disaster Relief and Foreign Humanitarian Assistance/Disaster Relief (FHA/DR), and Crisis Response and Limited Contingency Operations (Stability Operations), and provide a starting point for the JTF Commander's forming and planning process. USJFCOM personnel work with the					

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designated JTF HQ to help define their unique capabilities required capabilities using the Templates as a starting point, and then analyze and compare current capabilities to determine existing shortfalls and gaps. JTF HQ C2 Equipping Process personnel works with the JTF HQ to assist them in identifying their C2 capabilities and equipping solutions and determines and recommends associated sourcing options for shortfalls. JTF HQ C2 Equipping Process personnel have posted the templates and C2 and Battlespace Awareness architectures on the US SIPRNET that serves as a repository site for the JTF CDR and Staff to access the JTF HQ Templates as well as JFCOM and other selected organization and agency-produced information and products. A USJFCOM cross-directorate working group is using established processes to support sustaining the readiness phase of Commander, Second Fleet (C2F) JTF HQ Certification, the prepare and certify phases for 20th Support Command as JTF-Elimination, and has supported USCENTCOM in their certification for USNAVCENT/5th Fleet and other selected designated Service HQs as appropriate. *FY 2009 Accomplishments:* JTF HQ C2 Architectures, Analysis and Equipping Process worked with C2F (JTF-South) to improve and sustain their readiness as a JTF Capable HQs and supported the designated JTF HQ (JTF – E, 20TH Support Command) in their preparation and identification of joint C2 systems for improving their readiness. The work included the development of the Joint Mission Essential Equipment List (JMEEL) and with the USJFCOM J1, J3/4, J7, and JECC to analyze and improve Joint Manning Document (JMD). Additionally, we have supported two of their exercises. During LIBERTY FOCUS through our analysis we identified gaps in C2 systems and associated support and subsequently briefed the US ARMY Maneuver Support Center (20th Support Command's proponent) and provided recommendations for resolving the gaps. Specialized architectures were also developed to support their exercises and one OPLAN. JTF HQ C2 Architectures, Analysis and Equipping Process supported USCENTCOM as they prepared and certified USNAVCENT/5th Fleet as a designated JTF – JTF-CR. While supporting USCENTCOM and JTF –CR a detailed analysis of the mission was conducted to include communications requirements with Interagency organizations. Command and Control Communications Systems courses of action (COAs) were selected and architectures					

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were developed to support the COAs. Shortfalls were identified and sourcing solutions were recommended. Commander USCENTCOM (GEN Petraeus) certified JTF-CR's readiness on 2 June 2009. The JTF HQ C2 Architectures, Analysis and Equipping Process people have also assisted geographic combatant commands in support their JTF HQ Improving the Readiness Programs. ISAF architectures that were developed during 2008 were modified to support the USJFCOM sponsored and conducted Coalition Warfare Interoperability Demonstration 2009. Additionally analysis was conducted during the Demonstration on selected systems and applications that could be used to better our information exchange with multinational partners, Support was provided to the JTF HQ Focus Area Team as part of J8's C2 Capability Portfolio Management (CPM) mission and other related efforts that included solving a readiness issue with DJC2. This solution which is currently being implemented involves dedicated JCSE personnel assigned to each of the combatant commands DJC2 sets. USJFCOM was tasked to conduct a study as part of the National Military Strategy for Cyberspace Operations and JTF HQ C2 Architectures and, Analysis developed architectures for various operational level constructs and conducted an extensive analysis of current systems and their Information Assurance gaps as part of the overall study effort. Supported the development of USSTRATCOM Commander's Estimate for CYBERCOM. Extensive architectures were developed for USJFCOM J9 Joint Integrated Persistent Surveillance Experiment. These architectures focused on Ad Hoc Dynamic Retasking of ISR assets in IRAQ for USCENTCOM and Collection Management processes, systems and organizations in USPACOM AOR. Additionally, specialized architectures were developed to support the model and simulations portion of the experiment. 67 Joint Capabilities Integration Development System (JCIDS) documents were reviewed to ensure that joint integration and interoperability were addressed in the associated programs. JTF HQ Templates were refined to reflect the changes in JTF organization and the lessons learned from working with real-world JTF HQs. Additionally, Increment II of the JTF Architecture (Functional Component Command Headquarters) and Increment III (Multinational and Interagency) aspects of a JTF HQ were updated. Submitted a 2010 Multi-National Coalition Warfare Project (CWP) nomination package that was selected, in partnership with a USJFCOM J7 project, for funding by AT&L.					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: JTF HQ C2 Architectures, Analysis, and Equipping Process will support future designated JTF HQ in their preparation and certification phases to include the completion of 20th Support Command, (JTF-E) and USCENTCOM's Improving Readiness Programs efforts for designated JTF HQs. JTF HQ C2 Architectures, Analysis and Equipping Process will continue to support C2F as they maintain their readiness as a designated JTF for USSOUTHCOM. The JTF HQ Working Group will also conduct staff assistance visits to other geographic combatant commands (e.g. USCENTCOM, USNORTHCOM, USPACOM, USAFRICOM, and USSOUTHCOM) in support their JTF HQ Improving Readiness Programs. JTF HQ C2 Architectures, Analysis and Equipping Process will continue to work with multi-national partners and Interagency organizations to improve their ability to be able to be integrated into a JTF HQ as fully functioning partners. JTF HQ C2 Architectures, Analysis and Equipping Process will continue to support The USJFCOM Capability Portfolio Manager (CPM) through analysis and architectures and with information gathered on JTF C2 Organizations, Systems, Applications, and other related efforts (e.g. Cyberspace, CWID, and Irregular Warfare efforts). JCIDS will continue to be reviewed to address joint integration and interoperability. Architectures will be developed for the J87 Tactical Edge Data Solution initiative and the J9 Combating Weapons of Mass Destruction Limited Objective Experiment. Architectures, Templates, and Analysis products will be federated. Develop the Multi-National CWP project and produce a resulting capability that enhances the ability of a US JTF or TF to incorporate a multi-national mission partner. Turnkey transitioned to the Joint Architecture project as of 2011 under the “JTF HQ C2 Architectures, Analysis and Equipping Process” section.					
Joint Data Strategy Primary OUTCOME (objective) for this effort is to ensure the Joint Warfighter has the ability to access and share critical Command and Control (C2) information. Currently, operators do not have visibility of what data exists for their use. If they have visibility of available data, they then experience difficulty in accessing that data primarily due to a lack of system or software interoperability. If they are able to access the data, they then are not able to determine if the data is actually what they need, still current,	5.800	4.400	4.400	0.000	4.400

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
or the legitimacy of its pedigree. Data producers struggle with procedures on how to share their data with the operational consumers and on data description and tagging so that others understand it. USJFCOM, J87, has been designated the lead of the C2 Portfolio Data and Service Strategy. As the lead, JFCOM will work with COCOMs, Services, and Agencies (C/S/A) to achieve the primary outputs and efficiencies: making C2 data assets visible, accessible, understandable and interoperable by (1) Leading an effective C2 Portfolio Data Strategy Management Construct; (2) establishing a C2 Data Standards, C2 Data Framework and Best Practices; (3) Compiling authoritative data source (ADS) information supporting C2 and their exposure schedules provided by the data producers to inform C2 Capability recommendations; and (4) supporting key data pilots, Communities of Interest and other Data Strategy implementation activities in order to increase the Joint Warfighter's timely access to critical C2 information. The DoD Net-Centric Data Strategy: A DoD-wide effort to move from “privately” owned and stored data in disparate networks and within legacy systems/applications to an enterprise information environment where authorized known and authorized unanticipated users can access any information and can post their contributions for enterprise-wide access. If this initiative is not funded, the Warfighter will continue to not have visibility of available data for operational use, accessibility of the available data, and the ability to assess the data usefulness, pedigree and accuracy, how to communicate what data they need, how to share their data with others, and how to describe their data so that others may use it. *FY 2009 Accomplishments:* Conducted quarterly meetings of the C2 Portfolio Data Strategy Steering Committee, which provides a formal process for the C2 CPM to establish C2 data sharing priorities and standards for C2 capabilities; Redesigned and documented the C2 Core (V0.5), a comprehensive C2 information exchange data standard which includes re-usable components, extension rules, naming and design rules and conformance rules in concert with the DoD Universal Core that will enable joint, multinational, and interagency data interoperability within C2 Portfolio capabilities; Enhanced the C2					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Data Needs Matrix and visualization tool which identifies Authoritative Data Source (ADS) for C2 and their relationship to C2 capabilities in support of the C2 Portfolio by adding increasing the content, mapping the data sources to JCAs and preparing the matrix for DoD consumption; Developed a C2 data standards concept of operations and established a configuration management process for C2 Core artifacts; Led C2 Data Pilot Phase 4A, an effort to expose C2 Data Assets and support the development and refinement of the underlying technologies supporting net-centric C2 capabilities; Development of a tactical edge data approach, an effort to transition tactical edge data exchange into the net-enable environment; Contributed to the development of the Net-Enabled UJT tasks and measures as a first significant step to increase the rigor of the Net-Ready KPP; Developed new questions, in coordination with NII, for inclusion into the Enhanced Information Support Plan (EISP) in order for the appropriate compliance authorities to accurately assess programs of record progress in implementation of the DoD Net-Centric Data Strategy. *FY 2010 Plans:* Continued leadership of the C2 Portfolio Data Strategy Steering Committee; Measure and report progress of authoritative data source exposure as documented in the C2 Data Needs Matrix; Continue to enhance the C2 Data Needs Matrix visualization tool in support of the DoD ADS Registry and C2 CPM Capability recommendations; Integration of C2 Data Needs and C2 data standards information into the Joint Command and Control Architecture and Capability Assessment Enterprise (JACAE) tool; Develop POM12 recommendations for C2 Core implementation and adherence to ADS exposure schedules as necessary; Continued identification and refinement of COCOM data sharing needs and priorities; Further development and refinement of the C2 Core data standard and C2 Data Framework, to include vetting, desk top testing and piloting to achieve C2 Core V1.0 for early adopter implementation; Management of the C2 Namespace; Develop C2 Data Pilot Phase 4B; Execute the tactical edge data approach to achieve a net-enabled data exchange in the tactical environment; Increased involvement in multinational C2 data standards development processes to include participation in CWID10; Support to various C2 data initiatives to expose critical C2 data; Review ISP and requirement documents to assess implementation progress of the DoD Net-Centric					

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B. Accomplishments/Planned Program ($ in Millions)

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Data Strategy and provide recommendations to the appropriate organizations. Partner with Services to leverage activities for C2 core evaluation. *FY 2011 Base Plans:* Continued leadership of the C2 Portfolio Data Strategy Steering Committee; Continue to track ADS exposure progress; Utilization of C2 ADS tools to inform C2 Capability recommendations; Continue to refine C2 Core data standard to achieve V2.0; Track implementation of C2 Core data standard by early adopters; Continued integration of C2 Data Needs and C2 data standards information into the Joint Command and Control Architecture and Capability Assessment Enterprise (JACAE) tool; Continued identification and refinement of COCOM data sharing needs and priorities; Management of the C2 Namespace; Continue to execute the tactical edge data efforts in concert of multinational partners and C/S/As; Continued involvement in multinational C2 data standards development processes; Develop C2 Data Pilot Phase 5; Continue ISP reviews and provide recommendations to improve ISP generation with regard to the DoD Net-Centric Data Strategy; Continue to participate in the refinement measures/metrics to improve the Net-Ready KPP rigor.					
Recognition of Combat Vehicles (ROC-V) The primary outcome for Recognition of Combat Vehicles (ROC-V) is to enhance Air-to-Ground and Maritime combat identification capabilities, thereby reducing the potential for friendly fire. ROC-V is a training aid for ground forces, aircrews and ship crews that perform combat identification (CID) by visual identification of detected entities in the operational battlespace. It standardizes realistic Combat Visual Identification (CVI) training that is critical to both combat effectiveness and fratricide prevention. The program materiel developer for ROC-V is the U.S. Army Night Vision and Electronics Sensors Directorate (NVESD), Ft. Belvoir, VA, which currently receives approximately $1.5M per year from the Army and Marines to develop, maintain and distribute a Ground-to-Ground version of ROC-V. Resources provided in this Program Element will support the NVESD expansion of the program to facilitate the development of Air-to-Ground and Maritime versions of the training program. The funding will be used in general to expand the ROC-V training program database by adding US, Coalition,	1.400	1.400	0.000	0.000	0.000

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and Threat-type vehicles, maritime environment/small boat threats, and all aspect/extended range air-to-ground imagery with emphasis on concurrent development of Coalition releasable products. Additionally, the funding will allow development of a standardized air-to-ground, all aspect and range CVI training program for pilots, aircrew, Joint Terminal Attack Controllers (JTACS), and Unmanned Aerial Vehicle (UAV) operators. It will begin creation of a standardized maritime environment small boat threat CVI training program and begin the development of a deployable/portable CVI training capability. It also supports standardization efforts to incorporate these visual signatures into a Sensor Signatures Database Program for non-cooperative target identification. Primary Outputs and Efficiencies to be demonstrated: 1) Expansion of data Collection / Range Support for additional combat vehicles and Navy littoral watercraft 2) Improved processing, integration, and design of ROC-V modules for a standardized Joint A-to-G training aid 3) Expansion of personnel capable of supporting data field collection 4) Increased collection of mid-wave (3-5 micron), long-wave (8-12 micron) and short-wave (1-2 micron) thermal images 5) Expansion of Thermal and Daylight Visible images by 85-100 tactical vehicles and littoral watercraft for the A-to-G CVI training aid to include 60, 45, 25, and 15 look-down slant angles at select ranges. *FY 2009 Accomplishments:* Development of Air-to-Ground and Maritime ROC-V training software modules. Collected 60 tactical vehicle and 22 small boat thermal and daylight visible all aspect and multi-range images in a controlled range environment. Initiated Model & Simulation development efforts to transition already collected images to 3-D models. Fielded CVI training products to the warfighter. *FY 2010 Plans:* Continue development and maintenance of Air-to-Ground and Maritime ROC-V training software modules. Collect 20 tactical vehicle and 15-20 small boat thermal and daylight visible images per FY					

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B. Accomplishments/Planned Program ($ in Millions)

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in a controlled range environment. Continue Model & Simulation development efforts to transition already collected images to 3-D models. Continue fielding Air-to-Ground CVI training products to the warfighter.					
System of Systems Engineering (SoSE)	2.000	2.000	2.400	0.000	2.400
Primary OUTCOME (objective) of this effort is to provide System-of-Systems Engineering (SoSE) support to the Joint Command and Control (JC2) Capability Portfolio Manager (CPM) and Joint Capability Developer (JCD). Leveraging architectural products, data and data relationships residing in the Joint Command and Control Architecture and Capability Assessment Enterprise (JACAE) tool (including authoritative and traceable requirement sources, technical documentation, capability issues, previous analyses and assessments), the Capability Engineering branch provides detailed system analysis and end-to-end systems engineering rigor for C2 CPM decision-making. End-to-end system engineering includes capability mapping and integration, detailed analysis and assessment of CPM issues, executable architecture design and implementation, and modeling and simulation analysis. SoSE engineering for CPM is required by DEPSECDEF Capability Portfolio Management (CPM) MEMO date; 14 Sep 06; DOD 5000-series Directives and Instructions; Defense Acquisition Guidebook - Chapter 4.2.6., Joint Capability Developer Campaign Plan DRAFT v0.8 20 Nov 2007; and CPM Issue Findings and Recommendations. The CPM SoSE effort will follow the Office of the Secretary of Defense (Acquisition, Technology, & Logistics) (OSD AT&L) and Joint Staff core elements of SoSE as presented to Deputies Advisory Working Group (DAWG). Core elements of SoSE provide the context for the application of systems engineering to C2 CPM processes. Through data collection and mapping efforts SoSE will translate CPM System-of-Systems (SoS) capability objectives into high level requirements and provide the CPM an understanding of the components of the CPM SoS and their relationships over time. SoSE is an enabler for assessment and refinement of mission thread/ capabilities enabling the CPM to make effective recommendations. SoSE documentation and analysis will be stored in JACAE and made available for DoD enterprise reuse.					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: The Capability Engineering branch established the Digitally-Aided Close Air Support (DaCAS) Coordinated Implementation (CI) process through documentation and submission to the Joint Fires Support Executive Steering Committee (JFS ESC), through the Joint Staff Action Processing (JSAP) 136 staffing process, and now ready for Force Application Functional Control Board (FA FCB), Joint Capability Board (JCB), and Joint Requirements Oversight Council (JROC) approval. The modeling and simulation developed for the JCAS mission thread supported the J85-led effort to develop a JCAS Joint Capability Document (JCD) and the USAF effort to complete an Analysis of Alternatives for the Joint Effects Targeting System (JETS) program. The Capability Engineering branch provided analysis of Service program plans for DaCAS implementation in support of the JCAS C2 CPM team's POM-12 recommendations. The Capability Engineering branch developed a baseline Joint Personnel Recovery (JPR) mission thread as a continuation of the disconnected, intermittent, low-bandwidth (DIL) user analysis completed in FY-08. The thread and follow-on analysis provided the JPR C2 CPM team the necessary analysis to identify four POM-12 Service recommendations. The JPR architecture was used to support the Joint Personnel Recovery Agency (JPRA) Capability Based Assessment (CBA) and the Joint Capability Development Network Enabled Command and Control (NECC) analysis. The Capability Engineering branch observed Angel Thunder '09 and was instrumental to changing future Angel Thunder exercises. They will now support C2 CPM analysis beginning with the analysis of POM-12 recommendations. Other POM-12 recommendations will be analyzed in exercise Bold Quest '09. The Capability Engineering branch provided detailed architecture and analysis to the Command and Control Optimum Capability Mix (C2OCM) study, providing insight into the C2 system interactions across time. Applying Net-Centric Enterprise Services (NCES), and NECC overlays the branch					

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B. Accomplishments/Planned Program ($ in Millions)

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provided analysis of what would be needed to support C2 in the event of changes to the NECC program. The Capability Engineering branch is supporting the C2 CPM Command and Control On The Move (C2OTM) team as they develop POM-12 recommendations. The branch is developing a baseline architecture to identify the requirements for providing small teams of special operations and/or general purpose forces updates to commander's intent, fires coordination, COP, etc. The Capability Engineering branch provided inputs and support to the Joint Mission Thread Architectures for Testing Working Group (JMTAT WG) as the group stood up and developed the standards for what is a Joint Mission Thread and set up a repository to support the discovery and reuse of Mission Threads that have already been developed. The JMTAT WG is a sub-working group under the Joint Systems Integration and Interoperability Lab (JSIIL). *FY 2010 Plans:* The Capability Engineering branch will finalize the analysis of C2 CPM POM-12 issues to determine analytical complexity, timelines, and resources required; refine issues and gather system(s) data for analysis; task front-end architecture, data standards, & end-state assessment and testing requirements; assess issue-identified systems against capabilities, activities, nodes, system functions and system attributes in the performance of desk top analysis; deliver desk top analysis, executable architectures, reports and objective data to JC2 CPM Issue leads, Joint Systems Integration Center (JSIC), or other leads for detailed assessment and testing, and deliver implementation/execution plans. In response to needs for additional mapping depth and maturity, the team will continue to manage mapping activity to identify current C2 baseline, and then analyze changes to that baseline, including system changes, system attribute changes, and more holistic changes (applying NCES and NECC overlays); to provide C2 CPM capability mapping and analysis products for POM issues; mature mapping for all C2 systems, and continue to build a baseline of C2 system attributes into a mapping repository. The Capability Engineering branch will complete the analysis started in 2009					

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	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
for the C2 CPM JPR team and the C2OTM team POM-12 submissions. The Capability Engineering branch will continue to develop and support the approval of the JCAS Coordinated Implementation effort leading to all CAS participants being fully interoperable by FY 2012 – 15 and support the C2 CPM JCAS team's POM-12 submission. Architecture and analysis supporting C2 CPM have been stored in JACAE for reuse within the DoD enterprise. The branch continued to improve the C2 CPM analysis process by speeding the process via visualization and advanced analysis techniques. *FY 2011 Base Plans:* The Capability Engineering branch will continue to support C2 CPM for POM-12 and begin analysis of POM 14 issues as required. The Capability Engineering branch using architectural products, data, and relationships residing in JACAE, will provide detailed analysis supporting POM 12 and 14 C2 CPM functions from managing capability mapping integration, providing executable architecture capable of support modeling and simulation, to supporting issue analysis and assessment. They will continue to provide the detailed system analysis and end-to-end capability engineering rigor for C2 CPM decision-making. Continue to support JPRA and other similar Command initiatives with systems engineering and analysis. The Capability Engineering branch will coordinate their efforts with JSIC, Joint Interoperability Test Command (JITC) and Joint Fires Integration and Interoperability Team (JFIIT) to improve engineering products in support of C2 CPM.					
Integrated Fires Consolidated Activities Primary OUTCOME (objective) for this effort is the integration of Joint Fires Capabilities for US and Coalition Partners that improves combat / mission effectiveness while minimizing fratricide focus is on the following area: Joint Close Air Support (JCAS), Combat Identification (CID), Blue Force Tracking (BFT) (including Joint Blue Force Situational Awareness), Joint Fires, Fires related Joint Command and Control Capabilities, and Integrated Air and Missile Defense (IAMD). *FY 2009 Accomplishments:* Executed CID-BFT Action Plan CY08-09	3.600	4.214	4.300	0.000	4.300

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B. Accomplishments/Planned Program ($ in Millions)

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- Led actions to determine/resolve Service/COCOM position location information (BFT) security policy (JROCM 122-08) and published CJCSI 3910 in Dec 2008. - Evaluated the operational demonstration of Ground to Air technologies at Huntsville, AL in July 2009. - Monitored POM 10/PR11 plan for a synchronized Service acquisition and fielding of a Mode 5 identification friend or foe (IFF) capability, with an IOC of 2014 and FOC of 2020. - Planned and coordinated the CCID ACTD/Bold Quest operational demonstration to assess Air-to-Ground Cooperative Target Identification technologies and procedures. - Provided an assessment of the reliability and estimated life of alternative BFT communications platforms in order to reduce BFT reliance on National Technical Means through the review and utilization of existing Service, COCOM, Joint Staff, and JROC assessments. - Established and maintained a Joint Friendly Fire Data Base of real world combat fratricide events, and conducted trend analysis. - Evaluated emerging and promising technologies to identify high pay-off, emerging technologies for CID-BFT/JBFSA that have joint applicability and that are worthy of focused acceleration, including the Joint Sensor Signatures Database (JSSD) - Completed CID-BFT Joint Capabilities Document (JCD) (Increment 1 (ground domain) - Feb 09. Briefed C2 JCB for approval. Executed JCAS Action Plan					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
- Evaluated and monitored standardization and maintenance of Joint Terminal Attack Controller (JTAC) training and accreditation throughout Department of Defense and participating Coalition countries. Completed Biennial reviews - JCAS ESC continued to lead in consolidating U.S. input into the NATO standardization processes through engagement with the NATO Standardization Agency in the rewrite of NATO STANAGS. - Worked toward achieving C2 interoperability in the JCAS mission area through establishment of a JCAS digitally aided close air support (DACAS) standard to improve warfighting capability and reduce fratricide. - Continued to define and evaluate the simulation capabilities required for the JCAS mission area by exploiting existing systems and new technologies; identifying JCAS tasks where simulation can be used to obtain appropriate qualifications, update currency requirements, and maintain proficiency for key JCAS personnel. - Pursued initiatives that will more closely integrate the services' and SOCOM's JCAS training programs and exercises at the tactical level. - Evaluated and monitored standardization and maintenance of Forward Air Controller (Airborne) training throughout the Department of Defense; invited Coalition countries with evolving FAC(A) programs to participate in the standardization process - Developed JCAS Joint Capabilities Document (JCD) (Phase 1 - SEP 08). --- Completed Concept of Operations (CONOPS). --- Completed Phase 1 Capabilities Based Assessment (FAA & FNA).					

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B. Accomplishments/Planned Program ($ in Millions)

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--- Coordinated KMDS staffing and adjudication. Briefed FA FCB July 2009. - Led Integration of US & Coalition JTAC Standardization - Developed Allied/Coalition Joint Fires Capability through Technical Cooperation Program, Action Group 15 leadership - Supported Joint Urban Fires Prototype (JUFP) Experiments (J9 Project Resourced). - Developed IAMD ICD --- Completed Operational Concept. --- Completed Phase 1 Capabilities Based Assessment (FAA & FNA) Chaired NATO Sub Committee 7 (Identification) in Brussels under NC3B. Chaired AdHoc Working Group/6 (Surface to Surface Identification. Served as US Head of Delegation to AdHoc Working Group/5 and Friendly Force Tracking Working Group. Transitioned the JCAS Executive Steering Committee to the Joint Fire Support ESC to broaden the scope of issues to be worked for the warfighter. Completed JROC in Feb 2009. *FY 2010 Plans:* Continue Execution of CID-BFT Action Plan. - Lead actions to incorporate PLI (BFT) security policy in applicable documents and instructions.					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
- Monitor PR11/POM 12 execution for a synchronized Service acquisition and fielding of a Mode 5 IFF capability, with an IOC of 2014 and FOC of 2020. - Execute the CCID ACTD/Bold Quest operational demonstration and produce Coalition Military Utility Assessment to inform U.S. and Allied investment in Cooperative Target ID capability. - Provide an assessment of the reliability and estimated life of alternative BFT communications platforms in order to reduce BFT reliance on National Technical Means through the review and utilization of existing Service, COCOM, Joint Staff, and JROC assessments. - Maintain a Joint Friendly Fire Data Base of real world combat fratricide events, and conduct trend analysis. - Evaluate emerging and promising technologies to identify high pay-off, emerging technologies for CID-BFT/JBFSA that have joint applicability and that are worthy of focused acceleration, including the Single Card Solution for SOCOM. - Develop CID-BFT Joint Capabilities Document (JCD) (Increment 2 (air domain) - Sept 09- Jan 10 Continue Execution of JCAS Action Plan: - Evaluate and monitor standardization and maintenance of Joint Terminal Attack Controller (JTAC) training and accreditation throughout Department of Defense and participating Coalition countries. Expand Coalition participation both in JCAS ESC and JTAC Standardization Team. - Finish integration of STANAG 3797.					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
- Work toward achieving C2 interoperability in the JCAS mission area through establishment of a JCAS digital standard to improve warfighting capability and reduce fratricide. - Continue to define and evaluate the simulation capabilities required for the JCAS mission area by exploiting existing systems and new technologies; identifying JCAS tasks where simulation can be used to obtain appropriate qualifications, update currency requirements, and maintain proficiency for key JCAS personnel. - Pursue initiatives that will more closely integrate the services' and SOCOM's JCAS training programs and exercises at the tactical level. - Evaluate and monitor standardization and maintenance of Forward Air Controller (Airborne) training throughout the Department of Defense; invite Coalition countries with evolving FAC(A) programs to participate in the standardization process. Continue leading Integrated Air and Missile Defense integration efforts: - Develop and deliver IAMD ICD (Oct09) - Develop SIAP CDD v.2. - Oversee BMD ITWG products in response to COCOM requirements. Conduct analysis to support C2-CPM Integrated Fires/BFT Cell POM12 development. Support JFIIT Activities (Training/Assessment/Analysis) (JFIIT Project Resourced). Coordinate UAS Center of Excellence Activities w/JFCOM					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Office of Secretary Of Defense		DATE: February 2010
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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: Continue execution of JCAS and CID-BFT/JBFSA Action Plans. Implement actions for Digitally Aided Close Air Support (DACAS) across the services. Develop JFS Action Plan. Expand coalition participation in the JTAC MOA and JTAC Standardization Teams. Monitor POM action recommendations. Continued execution of Coalition Combat Identification Capability Development series, BOLD QUEST.					
Joint Architecture Integration and Development Primary OUTCOME (objective) for this effort is to integrate and develop joint architectures, in direct support of multiple C2 related efforts, to include Joint C2 (JC2) Capability Portfolio Management (CPM), and for cross-portfolio integration and federation efforts between the Joint Capability Areas (JCAs), and the mission areas of the DoD Enterprise Architecture (DoD EA): Warfighter Mission Areas (WMAs), Enterprise Information Environment Mission Area (EIEMA), Defense Intelligence Mission Area (DIMA), and Business Mission Area (BMA). The centerpiece of this effort is to develop and sustain a command and control (C2) capabilities mapping baseline and reusable repository of architecture information. Resident in the repository are the C2 capabilities mapping framework and the Joint Task Force Enterprise Architecture (JTF EA) providing reusable authoritative data and information for objective C2 capabilities analysis and assessment. This information is essential to inform C2 CPM decision-making and cross-portfolio architecture driven analysis. The information is simultaneously used to support analysis of JTF performance providing more efficient and effective JTF planning, certification and sustainment efforts (see related Turnkey project). In close coordination with OSD/NII and COCOM/Services/Agencies to develop and publish standards for the federation of DoD architecture data supporting the discovery and reuse of architecture and Joint Mission Thread products.	2.570	3.400	3.550	0.000	3.550

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Two subordinate but essential efforts are the development of the Joint C2 (Command and Control) Architecture and Capability Assessment Enterprise (JACAE) and the USJFCOM Joint Common Systems Function List (JCSFL). JACAE is comprised of the processes, systems, applications, and people necessary to support the reuse repository and architecture development. The JCSFL is a comprehensive common lexicon of warfighter system functionality descriptions used to develop integrated architectures and support the assessment of capabilities across DoD. The JCSFL is the essential hub of the capability mapping baseline used in capability analysis supporting capability portfolio management. Use of the JCSFL is required by CJCSM 6212.01E. The JCSFL is available to all COCOMs, Services, Agencies, and has been shared with NATO and multi-national partners. *FY 2009 Accomplishments:* Developed and refined Joint Architecture and Capability Assessment Enterprise (JACAE) schema, methodology and analytic reporting capability to support JFCOM cross directorate architecture efforts, to include C2 CPM, as well as analysis of warfighter identified issues across the DOTMLPF spectrum. Developed, staffed and adjudicated comments on the USJFCOM Joint Common Systems Function List Version 2.0 (July 2009) for use across DoD. Working with Johns Hopkins University Applied Physics Laboratory to expose the JCSFL information through web services. The initial results have been highly successful and those same efforts have also been used to support the J89 Architecture Federation web service efforts. Successfully conducted an Architecture Federation proof of concept demonstration between U.S. Joint Forces Command's (USJFCOM) Joint Command and Control (JC2) Architecture and Capability Assessment Enterprise (JACAE), U.S. Marine Corps (USMC) Marine Air-Ground Task Force (MAGTF) Collaborative Architecture Environment (MCAE), and U.S. Army's (USA) Capability Architecture Development and Integration Enterprise (CADIE) data repositories. Briefed the results to the DoD Enterprise Architecture Conference in June 2009.					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Delivered the Joint Architecture Development, Integration and Standards Implementation Report (June 2009) as part of the USJFCOM J8/NII Command and Control (C2) Policy, Guidance, and Standards Review. The report included a thorough search and analysis of DoD policies addressing C2 and architecture development. Significant findings were reported along with all supporting information. Refined and implemented the Capability Mapping Baseline Architecture Version 2 (mapping from the JCA, UJTL, Service Task, JTF Activity/Nodes, System Function, System, Applications etc. and their associated relationships) within the master JACAE environment enabling analysis and horizontal integration of the architecture efforts. Using the USJFCOM C2 Capability Mapping Baseline developed a logical data exchange example for sharing of federated capability information from various architecture repositories. Refined and further developed detailed JACAE Functional Requirements Document, Standard Operating Procedures, Customer Support Plan, and Configuration Management Plan to ensure rigorous enforcement of JACAE methodology to support reusability of all enterprise objects, as well as the ability to horizontally trace the reuse of C2 Baseline components. Developed and deployed a data call environment to support the Digitally Aided CAS effort. The environment exposed the Digitally Aided CAS data for worldwide collaboration and data input through the Defense Knowledge Online portal. Developed, reviewed, and baselined the Joint Task Force (JTF) and Heavy Brigade Combat Team (HBCT) and Joint Close Air Support (JCAS) reference architectures for use supporting architecture analysis and development Supported Authoritative Data Source (ADS) WG and C2 Core working groups in the development of a comprehensive federated environment to support C2 Capability Portfolio Management (CPM) efforts.					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Completed numerous reviews of JCIDS documents (Periodic) to ensure that these developments complied with overarching architecture policy and standards, and the ability to integrate with other capabilities comments were provided as appropriate to the program owners. Made significant IT improvements to the enterprise operating environment. Deployed additional systems to support 4 tiered system architecture, to include a 64 bit operating environment. Implemented version upgrades in the CITRIX, WEBLOGIC and WINDOW 2008 applications as well as developing virtual instances to increase performance. Resulting in the increased functional user capacity from 25 users to 100 users per application server. Developed architecture products that supported the identification and definition of the systems and applications that compose the C2 CPM portfolio. The capability was completed and provided in conjunction with inputs from J82 and J83 as part of a cross division effort. Completed the mapping of selected key Family of Systems (to include GCCS-J) with the JCSFL to identify the functionality they provided. The project is ongoing and will eventually map the C2 CPM portfolio systems with their associated functionality. Worked with CENTCOM, AFRICOM, USFK, STRATCOM in developing selected specific architecture products, training personnel, data and configuration management strategy in support of critical Joint architectures. *FY 2010 Plans:* Continue to refine and extend the architecture information sets to support C2 CPM-directed studies and analysis and guide operational assessments for the development of C2 Portfolio capability solutions.					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Provide architecture input to C2 portfolio capability planning guidance to Components for POM 2012-2016 development studies, analysis and operational assessments. Update of the JCSFL (V3.0) to include the Navy's CSFL V5.0 and functionality provided by TRANSCOM addressing Logistics and Transportation. Review emerging DoD policy addressing C2 capability and architecture and JCIDS document reviews for conformance. Through the Joint Architecture Integration Working Group (JAIWG) expand the federation effort to include other repositories of architecture information and related C2 CPM authoritative sources of information (ADS registry, C2-Pedia). Move Architecture Federation from proof of concept to an agile, usable, and scalable product that will support the goals and objectives of federation. Develop the policies and repeatable processes and solutions to allow federation to continue to expand. Continue to refine C2 Capability Mapping processes and procedures, and promulgate mapping and architecture standards, including subsequent versions of the Joint Common System Function List, which will be expanded to describe the functionality of systems within other Joint Capability Areas and capability portfolios, and will include web/net-centric service functional descriptions. Develop and baseline additional reference architectures (Irregular Warfare, MNC-I, MNF-I, Infantry BCT, JFACC) to make available for discovery and reuse by other efforts. Continue incorporation of and alignment of JACAE with data model and methodology standards in conjunction with OSD/NII, Service and COCOM communities.					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Develop capabilities with DISA Rapid Access Configuration Environment team. Working with DISA to build software solutions on prebuilt on demand deployable operating systems to lower the total cost of operation for J89 development efforts and increase return on investment for DISA and the JFCOM enterprise. Develop, build and deploy a server environment in support of J87's data strategy projects. To enable J87 to create a reachable and sustainable development and production environment that can support integration, federation and service enablement throughout JFCOM and the DoD. Publish JACAE Schema version 2.0. Develop future system CONOP in support of J89 mission set to be implemented in next year. Upgrade the JACAE environment from Teamcenter version 2007.1.1 to 2008.0.1 to improve architecture developer capabilities. Exposing the C2 capability mapping baseline for use as connection points for federation members and provide capability to connect to other potential sources of information for architecture Continue working with the COCOM's in support of joint architecture product development efforts. Publish federation schema and web services products to appropriate registries (MDR, NCES) for availability, consumption, and reuse. development efforts. Continue mapping of selected key Family of Systems with the JCSFL to identify the functionality they provided. The project continues to be ongoing and with the goal of eventually mapping the entire C2 CPM portfolio systems with their associated functionality. Conduct a JACAE document reviews and updates of the CONOP's, SOP, CM Plan, Customer Support Plan and System Requirements Document to ensure currency and applicability.					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: Continue development of schema and methodology in conjunction with OSD/NII and the COCOM/ Service/Agencies leading to development of Joint standard Lexicons and Taxonomies for the DoD architecture community.☐ Develop and baseline additional reference architectures in support of ongoing operations, such as the Afghanistan theatre and others as appropriate (Irregular Warfare, CJTF-XX) to enhance the enterprise's data sets and analytic capabilities. Continue to enhance and expand the JCSFL to include additional functionality. Continue to improve participation in the federation effort and increase the availability and scale of architecture information contained in the federated environment					
Capability Transition Management Primary OUTCOME (objective) is to transition capabilities that solve Joint Warfighting requirements. The capabilities developed and transitioned are the result of USJFCOM wide efforts at providing workable solutions identified by Combatant Command Commanders, Services and Agency inputs. These inputs are validated through the WarFighter . Challenge and Experimentation process (J9), Joint Training exercises (J7) , Lessons Learned and JFCOM Forward Support Element inputs (JCOA) , CWID interoperability trials (JSIC) , Irregular Warfare forums (JIWC) and Regional COCOM Joint Urgent Operations Need Statements (J8) . The Capabilities Transition Division serves as the J8 Directorate lead integrator and transition expert, providing management oversight of transition activities across the command for both material and non-material solutions.	2.127	2.400	3.000	0.000	3.000

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
The Capabilities Transition Division actively trains all JFCOM directorates and commands in the Doctrine Organization, Training, Materiel Logistics, Personnel, -Facility (DOTMLP-F) Policy principles with the goal of improving and enhancing the capability transition process for both material and non-material solutions. Additionally, transition activities are focused on the development and processing of acquisition documentation to include; Joint Capabilities Integration Development System (JCIDS) requirements, Certification and Accreditation documentation, Concept-of Operations (CONOPS) , and Test and Evaluation results. While the same path is followed in the transition of capabilities, the reality is that each capability transition presents its own unique set of challenges and requirements until complete. The transition division continues to refine this process and streamline the timeline defining success by two objectives that ensure capabilities transitioned are sustained for the WarFighter in the out-years. The objective for a material transition is to successfully transfer responsibility and ownership of developed and mature capabilities to formal acquisition programs. The objective for non-material transition is to ensure that the DOT_ LP-FP is institutionalized in a COCOM, Service or Agency and implemented across DoD. *FY 2009 Accomplishments:* J86 provides transition support to the JCDE Directorate focused on non-materiel solutions, i.e. DOTMLPF-P Change Recommendations (DCR). J86 accomplishments includes 24 projects being reviewed and considered for JCIDS (DCR) transition and 3 projects reviewed and accepted for materiel transition. J86 assigned 9 Transition Case Officers (TCO) to be embedded with the J9 to perform transition responsibilities. Each TCO is assigned 2-3 projects. Each project is binned under the appropriate Joint Capabilities Area (JCA) and has a 1 or 2 year lifecycle. The lists of the FY09 JCDE projects with their solutions to be transitioned are noted below.					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Project Name: Command and Control ISR (C2ISR) Project Term: FY08-09 Expected Project/Solution Outcome: CRADA CERDEC contracted L-3 to finalize development, and "militarize". Project Name: Enhanced Urban Reconnaissance Project Term: FY09-11 Expected Project/Solution Outcome: Awaiting Government Lead and being reconsidered for FY10 Project Name: Geospatial Analysis and Planning Support (GAPS) Project Term: FY08-09 Expected Project/Solution Outcome: Materiel-Army Project Name: Joint Counterintelligence/HUMINT Improved Integration (JCHI2) Project Term: FY09 Expected Project/Solution Outcome: DCR - CENTCOM/DCHC Lead Project Name: Joint Force Commander Domain Awareness (JFC DA) Project Term: FY09-11 Expected Project/Solution Outcome: DCR Project Name: Joint Integrated Persistent Surveillance (JIPS) Project Term: FY09-10 Expected Project/Solution Outcome: DCR for change in definitions (Doctrine focus) Project Name: Assured Air Access Project Term: FY09-11					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Expected Project/Solution Outcome: GVT Lead assigned project ramping up Project Name: CWMD Radiological and Nuclear (RN) Detection and Disablement Project Term: FY09-11 Expected Project/Solution Outcome: DCR and Materiel Solutions Project Name: Joint Distributed Operations (JDO) Project Term: FY09-11 Expected Project/Solution Outcome: CONOPS Project Name: Cross Domain Collaborative Information Exchange Project Term: FY08-09 Expected Project/Solution Outcome: Materiel to DISA Project Name: Cyberspace Operations Project Term: FY09-11 Expected Project/Solution Outcome: DCR (Cyberspace Operations (CO) Authorities - SCI project) Project Name: Joint Force Commander Command and Control (JFC C2) Project Term: FY09-11 Expected Project/Solution Outcome: DCR-(Doctrine Org, Training focus, possibly Psnl, and Leadership) Project Name: Planning, Assessment and Decision Support System (PADSS) Project Term: FY08-09 Expected Project/Solution Outcome: DCR (DISA IMT to takeover June 09)					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Project Name: Deployable Security Sector Reform (DSSR) Project Term: FY09 Expected Project/Solution Outcome: DCR (Organization Prototype) Project Name: Interagency Shared Situational Awareness (IASSA) Project Term: FY09 Expected Project/Solution Outcome: White Paper for NORTHCOM and DHS Project Name: Joint Logistics DCR (JxDS) Project Term: FY08-09 Expected Project/Solution Outcome: DCR (Logistics Ops) Provided Subject Matter Expert (SME) on the JFCOM Multinational Force-Iraq (MNF-I) and CDR USFORCES Afghanistan Rear Support Element (RSE). Collected, reviewed, and consolidated requirements from the deployed force and the JFCOM Forward Support Element (FSE), coordinated and submitted these requirements to the JFCOM Joint Planning Group (JPG) for review, approval, and assignment to the appropriate directorate. Provided transition expertise to institutionalize enduring capabilities resulting from JCOA studies and JFCOM Directorate proposed solutions. *FY 2010 Plans:* Expand integration and transition support to the Command Directorates, Commands, and Activities to include: J3/4, J5, J7, J9, JCOA, JECC, and JIWC. Assign Transition Case Officers (TCO) as required to become familiar with project capabilities being developed (materiel and non-materiel) and the associated transition requirements. Continue to provide assistance to help develop and implement the FY 10-11 JCDE Campaign Plan (CP). A total of 113 Warfighting Challenges (WFC) were submitted. In FY10 there are 66 WFCs being addressed. J86 will provide TCOs' for 27 JCDE project teams. Develop transition plans IAW					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
CJCSM 3010 as required and provide transition oversight for projects scheduled to end in FY10 and ensure integration of the C2 CPM for JCDE C2 projects to affect POM-12/13 as required. *FY 2011 Base Plans:* Continue to provide transition support to Command Directorates and Activities. Develop transition plans IAW CJCSM 3010 as required and provide transition oversight for projects scheduled to end in FY11. Ensure integration of C2 CPM for JCDE C2 projects POM-13 and POM 14 issues as required.					
Cooperative Security (CS) JCTD Primary OUTCOME (objective). The Cooperative Security (CS) Joint Capability Technology Demonstration (JCTD) is a joint interagency sponsored program that started in the 3rd quarter of FY09 and is scheduled to be completed the 2nd quarter of FY12. J86 acts as the Co-Transition Manager (XM) in partnership with USAID. SOUTHCOM, EUCOM and USAID are the Co-Operational Managers, and US Army Corps of Engineers and USAID are designated the Co-Technical Managers. The CS JCTD provides a systematic product suite that builds on synthesized frameworks, methodologies, and procedures. It will produce a web-enabled tool suite, which enhances USG and partner capabilities to conduct initial assessment, adaptive planning and evaluation for complex security and stability operations. The JCTD directly supports the intent to validate the Military Contribution to Cooperative Security Joint Operating Concept (JOC) V1.0 dated 19 September 2008. The objective is to transition materiel and non-materiel solutions to formal acquisition programs. Transition non-material capabilities by successfully transferring DOT_MLPF-P solutions that have force –wide application to ensure institutionalization across DoD. Additionally, transition COCOM/Agency specific solutions directly to the COCOM and/or Agency for injection into their internal process.	0.000	0.000	0.500	0.000	0.500

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	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
The Co-XMs will develop the transition plan to provide for sustainment of the products, CONOPS and TTP, to be published as part of the Management and Transition Plan (MTP) for this JCTD. The Co-XMs will develop transition plans for the residual capability, either with a Technology Capability Transition Agreement (TCTA), or a capability transition agreement with a Program of Record (POR) (i.e. a program at MS B or later). The TCTA is done for an acquisition program that is prior to MS B. The Co-XMs will initiate actions in cooperation with the BP CPM to program resources in the 2012-2017 Programs. Overall Transition Strategy The XM transition strategy will address distribution, updates and sustainment, of the CS JCTD products, including frameworks, methodologies, procedures, handbooks, manuals and materiel component(s) in an interagency environment for USG utilization. The transition of the CS JCTD capabilities will be through a two-phased approach. For the first phase (FY10-11), the OMs will finalize the CONOPS and TTPs, training package, DOTMLPF recommendations and capabilities documentation, incorporating results from ongoing operational use by COCOMs, USAID, National Security Council, DOS, and other DOD and USG users. The TMs will provide technical support on an as-needed basis for the leave behind residual package capability. The second phase (FY11 and beyond) is the materiel, delivery and support phase. It is conducted in parallel with the Extended Use (EU) phase. *FY 2011 Base Plans:* Perform XM Activities to include developing the Extended Use (EU) Residual Package. The transition strategy will include a plan for USG participation in the sustainment of the CS JCTD capabilities and negotiate a resource plan to extend the life span of these capabilities.					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
The first EU will commence immediately following the OD, pending the results of the Operational Utility Assessment. The EU will support finalization of CONOPS, TTPs the training package, and DOTMLPF recommendations. The residuals will include the following: • Operational Utility Assessment (OUA) Integrated Action Plan (IAP), CONOPS, and TTPs. • Assessment, planning, monitoring and evaluation methodologies and documentation • Tailoring procedures and tools • Mission Thread Capability Package • System support package • User maintenance manuals • Training packages • Interface control documentation • Final Transition Plan.					
Coalition Warrior Interoperability Demonstration (CWID) Primary OUTCOME (objective) for this effort is to improve overall management, oversight and operational support to DoD acquisition entities seeking the capabilities of new, commercial technology that can fill existing gaps in the DoD C2ISR infrastructure while expanding coalition team building with NATO and Five Eyes nations, other Coalition Partners, and US military/defense agencies. The primary outputs and efficiencies to be realized are increased support to DoD Acquisition community identifying and assessing commercial capabilities that improve coalition command, control and coordination for both conventional and irregular warfare operations in the following areas: - capabilities that improve leader centric, net-enabled operations; - capabilities that enhance coalition battle space situational awareness;	0.540	1.380	1.560	0.000	1.560

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
- abilities that enhance coalition logistics planning and nation - capabilities that enhance coalition, military, government agency, international organization and non-governmental organization partnership - building capabilities; - capabilities that improve secure information sharing between disparate security domains and communities of interest in an operational environment; - capacities that improve centralized command, decentralized control for irregular / hybrid warfare units *FY 2009 Accomplishments:* Managed year-long planning effort executed CWID 09 in June 2009 consisting of 41 Trials, at five linked sites with US and Coalition forces participating. This year's demonstration saw improved support to the DOD acquisition community through the use of sponsor provided key performance parameters and key system attributes in technical and Information Assurance assessments. Subjective assessments of commercial capabilities were eliminated from the 2009 CWID demonstration. Initial planning and work breakdown structure for a CWID system integration laboratory (CWID SIL) which will provide a persistent capability to capture and store assessment, test and certification data for US and Coalition C2ISR systems for the DOD and Coalition defense communities at large. *FY 2010 Plans:* Serve as the JFCOM lead for CWID responsible for the overall success of the annual demonstration event. Activities in FY10 include; Issue CWID 2009 final report and select the Top Performing Technologies for continued evaluation (1st QTR FY10) Direct and conduct five major planning conferences that select the trials to be presented in CWID 2010. The CWID 2010 level of effort and participation is forecast to be similar to CWID 2009 with					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
approximately 40 Trials assessed and over 400 participants conducting evaluations on a linked secure network. USJFCOM coordinates with USEUCOM, and USCENTCOM, for the 2010 CWID effort; Oversight and management of the CWID program governed by the CJCSI 6260.01 series. While still under review, USJFCOM is anticipating assumption of additional CWID responsibilities that have been traditionally performed by the Joint Staff to include; COCOM and Coalition Partner on information sharing agreements, lead for coordination of Service program offices for risk reduction efforts in CWID and programmatic related to funding CWID. *FY 2011 Base Plans:* Continue oversight and management of the CWID program governed by the CJCSI 6260.01 series instruction and the CWID 2011 approved program objectives; CWID 2010 final report; planning and execution of 5 major conferences; network, security and execution of CWID 2011 in coordination with USEUCOM, and USCENTCOM. Beginning with CWID 11 the expansion of the CWID assessment process will be implemented to include; evaluation of national security information assurance requirements, warfighter utility assessments that are tied to metric parameters, measures of effectives and measures of performance as defined in approved JCIDS documents.					
Accomplishments/Planned Programs Subtotals	45.795	45.840	44.139	0.000	44.139

C. Other Program Funding Summary ($ in Millions)

N/A

D. Acquisition Strategy

Not applicable for this item.

E. Performance Metrics

FY09

Exhibit R-2A, RDT&E Project Justification: PB 2011 Office of Secretary Of Defense		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0607828D8Z: *Joint Integration & Interoperability*	**PROJECT** P818: *Joint Integration & Interoperability*

Performance of Joint Integration and Interoperable systems is measured by successful delivery of systems solutions to Combatant Commands by required delivery dates. Six initiatives were developed to address Friendly Force Tracking and Combat Identification capability gaps. Two new Recognition of Combat Vehicles (ROC-V) training software modules (Air-to-Ground and Maritime) were developed. Two designated JTF Headquarters (JTF-South and JTF-E, 20th Support Command) readiness as a JTF Capable Headquarters was improved.

Performance of the C2 Portfolio Manager is measured by the delivery of warfighting capability enhancement recommendations. C2 CPM POM recommendations favorably influenced material and non-material decisions related to: Combat ID and Blue Force Tracking, Adaptive Planning, Deployable C2, Data Strategy and JTF manning and equipping. Capability Definition Packages (CDPs) 1 thru 6 were completed and forwarded to material developers in support of objective C2 requirements for use in the development of Joint net-enabled and agile C2 capabilities. Bold Quest 09 will serve as the primary forum for demonstration and assessment of the Joint Aerial Layer Network and evaluation of Personnel Recovery C2 systems and techniques.

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Office of Secretary Of Defense		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0607828D8Z: *Joint Integration & Interoperability*	PROJECT P818: *Joint Integration & Interoperability*

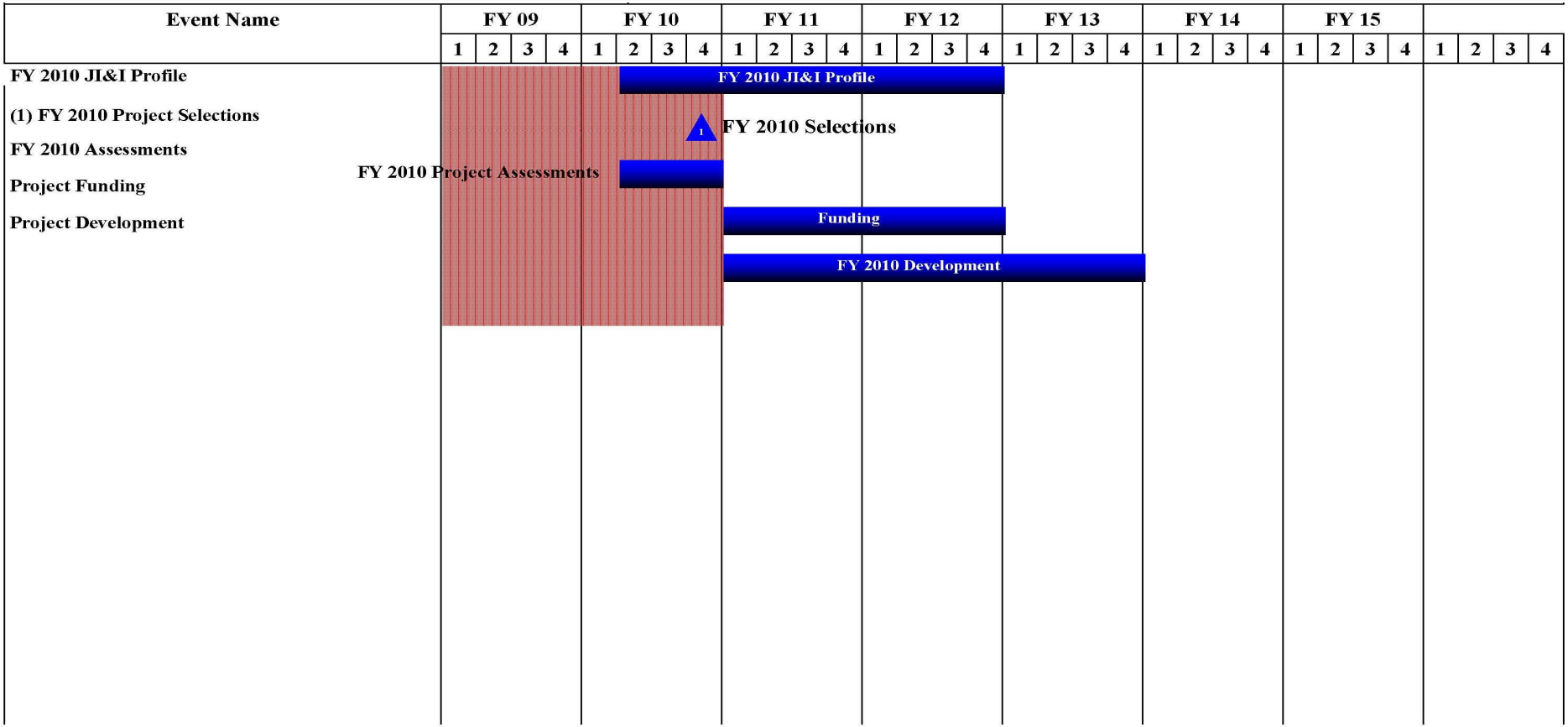

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Office of Secretary Of Defense		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0607828D8Z: *Joint Integration & Interoperability*	**PROJECT** P818: *Joint Integration & Interoperability*

Schedule Details

	Start		End	
Event	**Quarter**	**Year**	**Quarter**	**Year**
FY 2010 JI&I Profile	2	2010	4	2012
FY 2010 Project Selections	4	2010	4	2010
FY 2010 Assessments	2	2010	4	2010
Project Funding	1	2011	1	2013
Project Development	1	2011	4	2013