Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Army										DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*				R-1 ITEM NOMENCLATURE PE 0604201A: *AIRCRAFT AVIONICS*							
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	60.781	89.508	89.210	0.000	89.210	132.787	166.978	204.531	161.059	Continuing	Continuing
C97: *ACFT AVIONICS*	60.781	89.508	89.210	0.000	89.210	132.787	166.978	204.531	161.059	Continuing	Continuing

A. Mission Description and Budget Item Justification

FY 2011 budget request funds the development of Aircraft Avionics systems required to horizontally and vertically integrate the battlefield and the integration of those systems into Army aircraft. Tasks in this PE support research, development, and test efforts in the Engineering and Manufacturing Development (EMD) phases of these systems. Aviation Tactical Communication Systems (ATCS) is an Army Aviation Program to develop, integrate, and test the Alternative Communications (Alt Comms) (ARC-231 and ARC-201D) A-Kit (hardware and software) and the Joint Tactical Radio System (JTRS) hardware onto the CH-47F, AH-64D, and UH-60M modernized aircraft. The JTRS is the transformational system that provides Army Aviation interoperability capability for Future Force and Joint Force operations. A delay in the JTRS Cluster 1 program resulted in a lack of critical communications equipment to support modernized Army Aviation aircraft production line requirements and Alt Comms was initiated to mitigate this issue. Alt Comms provides two ARC-231 and two ARC-201D radios with power amplifiers to meet the minimum interim JTRS requirements for Military Satellite Communications, Single Channel Ground and Airborne Radio System (SINCGARS), HAVEQUICK, Very High Frequency (VHF), Air Traffic Control (ATC), and Land Mobile Radio requirements and funds the integration and test of the radios onto each platform. Alt Comms will be Army Aviation's communication solution until it is supplemented by the JTRS Airborne Maritime Fixed (AMF) Small Airborne (SA) radio set, beginning in FY14. Increment 1 of the AMF SA will provide the Wideband Networking Waveform, Soldier Radio Waveform, and Link-16 required for interoperation with the Future Force. Increment 2 of the AMF SA, planned for FY20, will replace the Alt Comms suite and provide legacy waveforms allowing a single hardware solution. JTRS integration efforts planned for FY11 are defining standardized control and data interfaces, continuing development of reusable control software to be provided to JTRS integrators, and continuing integration into the AH-64D using engineering development models. The Improved Data Modem (IDM) is the common solution for digitizing Army Aviation. It performs as an internet controller and gateway to Tactical Internet (TI) and Fire Support (FS) internet for Army aircraft. With interfaces supporting a six channel transmit/receive terminal, the IDM provides radio connectivity to the ARC-201D/231, ARC-186, ARC-164, and the Blue Force Tracker's (BFT) MT-2011 and AVX-06/203 Transceivers. The IDM provides a connection that meets MIL-STD-1553B and ethernet portals for rapid data transfer. IDM provides a flexible, software driven digital messaging system that is interoperable with existing Army and Joint forces battlefield operating systems. The IDM provides Situational Awareness and Variable Message Format messages capability to the cockpit. FY11 funds are required to commence development and testing of Joint Battle Command-Platform (Aviation) (JBC-P(A)). FY11 funds are also required to continue development of an Open Systems Architecture (OSA) IDM solution compatible with the AH-64D, CH-47F, and HH/UH-60M. This effort provides the foundation to develop and qualify a new hardware architecture to host IDM and Future Combat System (FCS) Unified Battle Command (UBC) and System Of Systems Common Operating Environment (SOSCOE) applications to ensure interoperability on the future digital battlefield. The Joint Precision Approach and Landing System (JPALS) is a precision approach and landing system providing joint operational capability for U.S. forces assigned to conventional and special operations missions including those operating from fixed base, ship, tactical, and special mission environments under a wide range of meteorological and jamming conditions. The JPALS effort in this project evaluates technical approaches, develops the aircraft avionics equipment for operation with the JPALS sea-based and ground systems, and integrates the avionics equipment into the various Army Aviation platforms. Increment 1 has

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now been split into Increment 1A (Sea Based development and test) and Increment 1B (aircraft avionics development, integration, and test). The Army's involvement in Increment 1A is to address Army requirements, participate in program management and provide systems engineering, and participate in the Aircraft Integration Guide effort which will provide early coordination and interface requirements between the sea-based system and the air component. ARC-220 radio improvements are required to increase operational capability and resolve emerging obsolescence issues. Software improvements will provide a quick Automatic Linking Process which will reduce the time for the radio to establish a communication link by more than 50%, improve secure voice reliability, and add automatic position reporting capability. FY11 funds will complete ARC-220 software and test system changes.
The Aviation Mission Planning System (AMPS) is a mission planning/battle synchronization tool that automates aviation mission planning tasks, including tactical command and control, mission planning, and flight planning. It interfaces with Army Battle Command Systems (ABCS) and associated networks which furnish the aviation commander with continuous situational awareness, allowing the commander to rapidly adjust mission plans. The electronic formats are loaded onto the aircraft platforms, initializing the communication, navigation, situational awareness, and weapons systems on modernized fleet aircraft including the AH-64A/D, CH-47D/F, Kiowa Warrior (OH-58D), UH-60A/L/M/Q, HH-60L, and Unmanned Aerial Systems (UAS). This effort will allow for the integration of new route server, calculation engine, and tabular editor components into the AMPS configuration and modifications to the Aircraft Weapons Electronics (AWE) modules to make use of the new components. FY11 funds are required for software development and testing. A requirement exists for Apache Block III to be interoperable through the future force network. Funds are included in this project for the integration of the FCS SOSCOE/UBC middleware into the Apache Block III. This includes the non-recurring engineering for integration, test, and air worthiness qualification. As part of the Army's migration to a net-centric fighting force, it is necessary for aircraft to access certain critical services that enable seamless access and operation on the future force network. At the tactical level, the FCS SOSCOE/UBC provides these services for proper functioning on the Modernized Brigade Combat Team network. FY11 funds are to continue integration of FCS SOSCOE/UBC onto the Apache Block III.
The Aviation Data Exploitation Capability (ADEC) is an Army Aviation program to develop, integrate, and test specific capabilities needed at the Aviation unit level to implement and support improvements within aviation maintenance, operations, safety and training. FY11 funds are required to design, develop, and test an ADEC automated information system.The helicopter terrain awareness and warning system (HTAWS) is an Army Program to develop, integrate, and test technology to reduce the risks of controlled flight into terrain. The system will be fully integrated on CH-47F, AH-64D, and UH60 modernized aircraft.

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B. Program Change Summary ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	71.325	92.977	84.084	0.000	84.084
Current President's Budget	60.781	89.508	89.210	0.000	89.210
Total Adjustments	-10.544	-3.469	5.126	0.000	5.126
• Congressional General Reductions		-0.469			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	-3.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	-8.576	0.000			
• SBIR/STTR Transfer	-1.968	0.000			
• Adjustments to Budget Years	0.000	0.000	5.126	0.000	5.126

Change Summary Explanation

Change Summary Explanation: Funding Changes: FY09 -$10,544K $2.300M reprogrammed to Air Traffic Control (ATC) to proucre 2nd Engineering Develoment Model for MOTS program; $1.423M reprogrammed to ATC to provide development/testing support for TAIS efforts for Weather Deconfliction & Information Svcs, MAYDAY, and Air Tasking Order Execution/Avn Spt Request Svc; $4.853M reprogrammed by HQDA.FY10 Changes: -$0.469M Economic Assumptions & FFRDC decrements; -$3.000M Congressional decrement due to unjustified program growth.FY11 Changes: +$5.126M for Helicopter Terrain Awareness and Warning System

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010
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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
C97: *ACFT AVIONICS*	60.781	89.508	89.210	0.000	89.210	132.787	166.978	204.531	161.059	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1	37.611	37.518	15.282	0.000	15.282
Continue A-Kit Development, Integration and System Testing of Alt Comms for AH-64D, CH-47F, and UH-60M and integration of JTRS AMF-SA onto aviation platforms (ATCS)					
FY 2009 Accomplishments: FY 2009					

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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: FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO					
Program #2 Continue System Engineering, Antenna Support and Logistics Effort (ATCS) *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO	2.050	2.093	2.137	0.000	2.137
Program #3 Program Management Support for A-Kit Development (ATCS)	2.607	2.311	2.199	0.000	2.199

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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: FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO					
Program #4 Continue Test and Evaluation Support (ATCS) *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO	1.286	1.313	1.341	0.000	1.341
Program #5	3.300	8.823	1.657	0.000	1.657

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Develop and qualify OSA hardware to host IDM and FCS SOSCOE and FCS BC (IDM) *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO					
Program #6 Program Management Support (IDM) *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO	0.174	0.250	0.262	0.000	0.262

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #7	1.307	1.153	1.147	0.000	1.147
Continue to provide system engineering, product support, and programmatic, cost, test, and technical documentation for JPALS development efforts (JPALS) *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO					
Program #8	11.763	17.884	16.980	0.000	16.980
Continue JPALS Avionics Risk Reduction (JARR) and develop/define requirements and interfaces between the JPALS Sea-Based system and the air components (Air Integration Guides(AIG))(JPALS) *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base					

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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 OCO Plans: FY 2011 OCO					
Program #9 Continue JPALS Test and Evaluation planning (JPALS) *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO	0.140	0.511	1.962	0.000	1.962
Program #10 Program Management Support (JPALS) *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010	0.543	0.570	0.598	0.000	0.598

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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: FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO					
Program #11 Develop and test software and hardware improvements to the ARC-220 radio *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO	0.000	3.288	0.347	0.000	0.347
Program #12 Upgraded/New component integration and AWE modification (AMPS) *FY 2009 Accomplishments:* FY 2009	0.000	2.354	2.664	0.000	2.664

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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: FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO					
Program #13 Test and Evaluation Support (AMPS) *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO	0.000	0.000	0.340	0.000	0.340
Program #14 Begin FCS SOSCOE development and integration onto Apache Block III	0.000	8.972	15.048	0.000	15.048

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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: FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO					
Program #15 JBC-P(A) development and testing *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO	0.000	0.000	16.000	0.000	16.000
Program #16	0.000	0.000	8.386	0.000	8.386

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Develop and test ADEC software and hardware *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO					
Program #17 Program Management Support (ADEC) *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO	0.000	0.000	0.500	0.000	0.500

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #18	0.000	0.000	2.360	0.000	2.360
System Engineering, Logistics, and Technical Support (ADEC) *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO					
Program #19	0.000	2.468	0.000	0.000	0.000
Small Business Innovative Research/Small Business Technology Transfer (SBIR/STTR) Reduction *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Accomplishments/Planned Programs Subtotals	60.781	89.508	89.210	0.000	89.210

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• Ord. #1: *Airborne Avionics SSN AA0700*	146.974	233.706	219.425	24.983	244.408	267.846	275.095	330.597	349.355	Continuing	Continuing

D. Acquisition Strategy

This project is comprised of multiple systems: 1) ATCS - Alt Comms is required to meet minimum acceptable near-term communications requirements as defined by the U.S. Army Aviation Center of Excellence (USAACE) to mitigate production line communications equipment gaps for modernized Army aircraft (UH-60M, CH-47F, and AH-64D). The Alt Comms acquisition strategy is to use currently available communications equipment to fill these gaps. However, this equipment must be incorporated onto the modernized aviation platforms through A-Kit development, platform hardware and software development/integration, and platform testing of the Alt Comms suite. JTRS is a software programmable radio system that enables net-centric communications capabilities. Army Aviation is now aligned with the Airborne Maritime Fixed (AMF) JTRS program and is planning to initiate JTRS Increment 1 fielding on Apache Block III as the lead aircraft. The CH-47F and UH-60M integration of the Increment 1 capabilities will be delayed, with initial fielding on those platforms beyond FY15. Increment 1 of the AMF JTRS program will provide the Wideband Networking Waveform, Soldier Radio Waveform, and LINK-16 required for interoperation with the Future Force. Increment 2, planned for FY20, replaces Alt Comms and will provide all legacy waveforms. These efforts will be accomplished using host platform development contracts, integration labs, and Airworthiness testing and certification. 2) IDM - Develop and qualify a new hardware architecture and integrate IDM OSA applications onto the new hardware. Develop and test Joint Battle Command-Platform (Aviation) (JBC-P(A)). These development efforts will be accomplished by Aviation and Missile Command (AMCOM) Software Engineering Directorate (SED). 3) JPALS - The Navy is the lead service for this joint program. An updated JPALS acquisition strategy separates Increment 1 into two increments (1A and 1B). Increment 1A provides for development, integration, and test of the shipboard system. Increment 1B provides for development, integration, and testing of the aircraft avionics system. The Army activity in the budget years, focused on the aircraft component, is to complete the current risk reduction effort and Technology Development (TD) phase. Army Aviation avionics TD includes a series of JPALS Avionics Risk Reduction (JARR) sole source, cost-plus fixed fee, firm fixed price, and time and materials contracts to reduce technical risk on critical components. Army will also participate in the Aircraft Integration Guide (AIG) effort which is part of the JPALS Increment 1A EMD contract. The output of the JARR and AIG contracts will be used to evaluate potential technical approaches and define the best solution. Based on that evaluation, contracts will be awarded for development, integration, and test of JPALS avionics beginning in FY12. Development will be done through either a Cost-Plus or Fixed Price Incentive contract. Aircraft platform integration and test will be accomplished using host platform contracts beginning with UH-60M. 4) ARC-220 - The ARC-220 box level software improvements will be done through a sole-source cost-plus fixed fee contract with Rockwell Collins. 5) AMPS - The core Portable Flight Planning Software (PFPS) will be improved by developing new route server,

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calculation engine and tabular editor components in coordination with the Air Force Intelligence, Surveillance, and Reconnaissance Innovations Directorate and Unmanned Aeriel Systems Task Force (AF/A2U) and the Special Operations Forces Mission Planning Office (SOFMPO) to ensure continued interoperability with other DoD components. Army-specific components and platform-specific Aircraft Weapons Electronics modules (AWEs) will be upgraded to work with new components. This contracted effort will be executed through the Army Research and Development Command's (RDECOM) Software Engineering Directorate (SED).6) FCS/UBC Interoperability - As a result of the OUSD-ATL FCS BCT Acquisition Decision Memorandum, system engineering efforts are required to participate in future Modernized Brigade Combat Team joint experimentation, implementation of UBC capabilities as defined by Task Force 120 and the ASAALT Networking Tiger Team, and the implementation of FCS SOSCOE network services to support Apache Block III through FY13.7) ADEC- Develop and qualify new hardware and develop and integrate software applications into the new hardware. This development effort will be accomplished by various contract methods and types.

E. Performance Metrics

Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.

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Product Development ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Develop A-kits, integrate, and test Alt Comms. Integrate JTRS AMF-SA onto aviation platforms (ATCS)	C/Various	Boeing AZ, PA, and CA; Rockwell Collins, Cedar Rapids, I	180.628	37.518		15.282		0.000		15.282	Continuing	Continuing	0
Develop and qualify OSA hardware to host IDM and FCS SOSCOE and FCS BC (IDM)	SS/CPFF	ICI McLean, VA	14.220	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Develop and qualify OSA hardware to host IDM and FCS SOSCOE and FCS BC (IDM) - 2	C/CPFF	Various Location could not be determined.	0.000	8.823		1.657		0.000		1.657	Continuing	Continuing	0
JPALS Avionics Risk Reduction (JARR) and Air Integration Guides (AIG) (JPALS)	C/Various	Honeywell FL (JARR). Boeing, PA; Rockwell Collins, IA; S	6.784	17.884		16.980		0.000		16.980	Continuing	Continuing	0
ARC-220 operational capability improvements	SS/CPFF	Rockwell Collins Cedar Rapids, IA	0.000	1.600		0.000		0.000		0.000	Continuing	Continuing	0
FCS SOSCOE development and integration onto Apache Block III	C/TBD	TBD Location could not be determined.	0.000	8.972		15.048		0.000		15.048	Continuing	Continuing	0
JBC-P(A) development and testing (IDM)	C/CPFF	Various Location could not be determined.	0.000	0.000		16.000		0.000		16.000	Continuing	Continuing	0

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army			DATE: February 2010
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Product Development ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Upgraded/New component integration/AWE modifications (AMPS)	C/Various	TBD Location could not be determined.	0.000	2.354		2.664		0.000		2.664	Continuing	Continuing	0
Develop and test ADEC software and hardware	C/Various	TBD Location could not be determined.	0.000	0.000		8.386		0.000		8.386	Continuing	Continuing	0
		Subtotal	201.632	77.151		76.017		0.000		76.017			0.000

Remarks

Support ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
System Engineering, Antenna Integration Support and Logistics Efforts (ATCS)	C/Various	Westar Quantum, Tecolote, AL; ARINC, CSC, NJ	6.962	2.093		2.137		0.000		2.137	Continuing	Continuing	0
System Engineering, Logistics, and Technical Support (JPALS)	C/Various	Various Location could not be determined.	4.217	1.153		1.147		0.000		1.147	Continuing	Continuing	0
System Engineering, Logistics, and Technical Support (ADEC)	C/Various	Various Location could not be determined.	0.000	0.000		2.360		0.000		2.360	Continuing	Continuing	0

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Support ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	11.179	3.246		5.644		0.000		5.644			0.000

Remarks

Test and Evaluation ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Test and Evaluation (ATCS)	C	Various Location could not be determined.	5.085	1.313		1.341		0.000		1.341	Continuing	Continuing	0
Test and Evaluation (JPALS)	C	Various Location could not be determined.	0.000	0.511		1.962		0.000		1.962	Continuing	Continuing	0
Test and Evaluation (ARC-220)	C	Various Location could not be determined.	0.000	1.688		0.347		0.000		0.347	Continuing	Continuing	0
Test and Evaluation (AMPS)	C	Various Location could not be determined.	0.000	0.000		0.340		0.000		0.340	Continuing	Continuing	0
		Subtotal	5.085	3.512		3.990		0.000		3.990			0.000

Remarks

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Management Services ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
PM Spt (ATCS)	C	AMCOM Redstone Arsenal, AL/PM AME	8.560	2.311		2.199		0.000		2.199	Continuing	Continuing	0
PM Spt (IDM)	C	AMCOM Redstone Arsenal, AL/PM AME	1.671	0.250		0.262		0.000		0.262	Continuing	Continuing	0
PM Spt (JPALS)	C	AMCOM Redstone Arsenal, AL/PM AME	0.667	0.570		0.598		0.000		0.598	Continuing	Continuing	0
PM Spt (ADEC)	C	AMCOM Redstone Arsenal, AL/PD ANMP, PEO AVN	0.000	0.000		0.500		0.000		0.500	Continuing	Continuing	0
SBIR/STTR	C	Nothing entered for Activity and Location. Location could not be determined.	0.000	2.468		0.000		0.000		0.000	Continuing	Continuing	0
		Subtotal	10.898	5.599		3.559		0.000		3.559			0.000

Remarks

	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	228.794	89.508		89.210		0.000		89.210			0.000

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	Total Prior Years Cost	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract

Remarks

Exhibit R-4, **RDT&E Schedule Profile:** PB 2011 Army			**DATE:** February 2010
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	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
ARC-220 Software Development and Testing				#	#	#	#	#	#	#																		
FCS SOSCOE Integration on Apache Blk III					#	#	#	#	#	#	#	#	#	#	#	#	#	#	#									
Upgraded/New Component Integration/AWE modules (AMPS)					#	#	#	#	#	#	#	#	#	#	#													
JBC-P(A) Development and Testing								#	#	#	#	#	#	#	#	#	#											
Develop Hardware and Software (ADEC)								#	#	#	#																	

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Army		DATE: February 2010
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Schedule Details

	Start		End	
Event	**Quarter**	**Year**	**Quarter**	**Year**
ARC-220 Software Development and Testing	4	2009	2	2011
FCS SOSCOE Integration on Apache Blk III	1	2010	3	2013
Upgraded/New Component Integration/AWE modules (AMPS)	1	2010	3	2012
JBC-P(A) Development and Testing	4	2010	1	2013
Develop Hardware and Software (ADEC)	4	2010	3	2011