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Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Army										Date: February 2015		
Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army I BA 7: Operational Systems Development					R-1 Program Element (Number/Name) PE 0203728A I Joint Automated Deep Operation Coordination System (JADOCS)							
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
Total Program Element	-	-	36.658	35.719	-	35.719	37.078	34.229	34.468	36.605	Continuing	Continuing
EF6: JADOCS	-	-	15.433	13.002	-	13.002	2.496	-	-	-	-	30.931
EF7: Pocket-Sized Forward Entry Device (PFED) Inc 2	-	-	3.503	3.494	-	3.494	3.560	3.628	3.431	3.474	Continuing	Continuing
EF8: AFATDS Increment 1	-	-	17.722	19.223	-	19.223	31.022	30.601	31.037	33.131	-	162.736

Note

Project code EF6 (JADOCS) and EF8 (AFATDS) were previously funded in OSD program element 0203726A project codes F19 and 322 (PB2014 BLIN 161) up to FY2014. Due to Major Automated Information System (MAIS) transparency requirements, beginning in FY2015, all non-MAIS funds were transferred out of 0203726A into 0203728A. Beginning in FY2015, JADOCS funding is justified in project code EF6 and AFATDS funding in project code EF8.

The Army Acquisition Executive (AAE) determined that AFATDS Increment 2 (program element 0203726A project code DU5) is a software modernization effort of the existing AFATDS program. Therefore, the Army moved funding for AFATDS Increment 2 from program element 0203726A project code DU5 (PB2015 BLIN 163), to the current AFATDS funding (program element 0203728A project code EF8) as AFATDS version 7.0. Previous "AFATDS Increment 1" efforts are delineated as V6.x in program element 0203728A project code EF8.

A. Mission Description and Budget Item Justification

There are three developmental efforts that are being executed concurrently: Joint Automated Deep Operations Coordination System (JADOCS) (project code EF6); Pocket-sized Forward Entry Device (Increment II) (project code EF7) and Advanced Field Artillery Tactical Data System (AFATDS) (Increment I) (project code EF8).

Joint Automated Deep Operations Coordination System (JADOCS) is a Joint and Coalition targeting, coordination mission management software application. It links Command and Control (C2), Intelligence, and Air operations information with execution systems using real time collaborative targeting managers, customized for each service or specific functional area. JADOCS is used to significantly enhance the Joint Force and Component Command's capability to simultaneously develop, coordinate and execute Dynamic and Time Sensitive targets and fire missions, as well as battle space coordination, search and rescue, and disaster relief/recover operations worldwide. JADOCS provides coordination and de-confliction of targeting information at all levels of command structure for the military. JADOCS system-to-system interfaces enables automated communications with Joint and Coalition systems to minimize targeting process time and increase dynamic targeting accuracy. JADOCS coordination managers provide operators and commanders with a clear definition of the targeting cycle's workflow process steps, responsibilities and status. JADOCS is used by Air, Ground, Maritime, and Special Operations forces. It provides horizontal (across Services) as well as vertical (within Services) coordination of missions to ensure a common picture of targeting operational status across the entire joint force. As a software application, JADOCS can be configured and customized for each user and location. The client and server software can be installed on typical Windows Operating System.

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Pocket-sized Forward Entry Device (PFED) Increment II will be a software only application that operates on the Nett Warrior End User Device (EUD). It will provide the dismounted Forward Observer (FO) and Fire Support Teams (FISTs) the capability and functionality to accurately and rapidly locate ground targets and enable the Nett Warrior ensemble to digitally process a Call For Fire. PFED Increment II aligns with the Army's Fires and Effects Concept of Operation and contributes to Networked Fires as part of the combined arms teams in Army, Special Operations Forces (SOF), and Joint operations. PFED Increment II answers the Mobile Handheld Computing Environment requirement that all handheld applications reside on the Nett Warrior End User Device. Project code EF7 funds the evolutionary software development of this handheld Fires Command and Control (C2) system.						
The Advanced Field Artillery Tactical Data System (AFATDS) provides the Army, Navy, and Marine Corps automated fire support command, control and communications. AFATDS is used to plan, execute, and deliver lethal and non-lethal effects. AFATDS provides Joint/Coalition Situational Awareness for fires execution and mission management. The system interoperates and integrates with over 80 different battlefield systems, including Navy and Air Force command and control weapon systems; and the German, French, Turkish, and Italian fire support systems. AFATDS automates the planning, coordination, and control of all fire support assets (field artillery, mortars, close air support, naval gunfire, attack helicopters, offensive electronic warfare, fire support meteorological systems, forward observers, and fire support radars). AFATDS provides eleven core services that manage user input and handle dissemination of complex fires processes. These core services are: Attack/Engagement Analysis, Fire Support Planning, Mission Guidance, Target Definition, Mission Area Definition, Cross-System Graphics/Mapping management, Unit Task Organization Data, Fires Conflict Detection, Mobile Air/Ground Tracking, Mission Execution and Mission Trigger Events. These AFATDS services promote situational awareness of data, intelligence information and targeting data, in near real time, in order to effectively manage target selection and target engagement in accordance with the Maneuver Commanders guidance and priorities.						
B. Program Change Summary (\$ in Millions)		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget		-	24.371	16.522	-	16.522
Current President's Budget		-	36.658	35.719	-	35.719
Total Adjustments		-	12.287	19.197	-	19.197
• Congressional General Reductions		-	-			
• Congressional Directed Reductions		-	-			
• Congressional Rescissions		-	-			
• Congressional Adds		-	-			
• Congressional Directed Transfers		-	-			
• Reprogrammings		-	-			
• SBIR/STTR Transfer		-	-			
• Other Adjustments 1		-	12.297	19.223	-	19.223
• Other Adjustments 2		-	-0.008	-0.026	-	-0.026
• Other Adjustments 3		-	-0.002	-	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Army										Date: February 2015		
Appropriation/Budget Activity 2040 / 7					R-1 Program Element (Number/Name) PE 0203728A / Joint Automated Deep Operation Coordination System (JADOCS)				Project (Number/Name) EF6 / JADOCS			
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
EF6: JADOCS	-	-	15.433	13.002	-	13.002	2.496	-	-	-	-	30.931
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
Note Project code EF6 was previously funded in program element 0203726A project code F19 (PB2014 BLIN 161) from FY2010 – FY2014. Due to Major Automated Information System (MAIS) transparency requirements, beginning in FY2015, all non-MAIS funds were transferred out of 0203726A into 0203728A. Beginning in FY2015, JADOCS funding is justified in project EF6.												
A. Mission Description and Budget Item Justification Joint Automated Deep Operations Coordination System (JADOCS) is a Joint and Coalition targeting, coordination mission management software application. It links Command and Control (C2), Intelligence, and Air operations information with execution systems using real time collaborative targeting managers, customized for each service or specific functional area. JADOCS is used to significantly enhance the Joint Force and Component Command's capability to simultaneously develop, coordinate and execute Dynamic and Time Sensitive targets and fire missions, as well as battle space coordination, search and rescue, and disaster relief/recover operations worldwide. JADOCS provides coordination and de-confliction of targeting information at all levels of command structure for the military. JADOCS system-to-system interfaces enables automated communications with Joint and Coalition systems to minimize targeting process time and increase dynamic targeting accuracy. JADOCS coordination managers provide operators and commanders with a clear definition of the targeting cycle's workflow process steps, responsibilities and status. JADOCS is used by Air, Ground, Maritime, and Special Operations forces. It provides horizontal (across Services) as well as vertical (within Services) coordination of missions to ensure a common picture of targeting operational status across the entire joint force. As a software application, JADOCS can be configured and customized for each user and location. The client and server software can be installed on typical Windows Operating System. JADOCS CPD was approved in April 2012. Project EF6 funds development of JADOCS software version 2.0 to meet the CPD and Joint Users and COCOMs requirements. JADOCS fires and targeting capabilities will migrate to AFATDS Version 7.0. JADOCS capabilities will be sustained until AFATDS meets the Joint Users requirements. JADOCS v 2.0 software is being developed by CECOM Life Cycle Management Command, Software Engineering Center (SEC).												
B. Accomplishments/Planned Programs (\$ in Millions)								FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: JADOCS Software Development Efforts								-	13.693	11.902	-	11.902
Description: Software development of JADOCS v2.0 software.												
FY 2015 Plans: Continue with Software Development Process; conduct capability coordination meeting with Joint stakeholders; conduct software requirement review; develop requirement definition document. There will be three incremental												

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Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0203728A / Joint Automated Deep Operation Coordination System (JADOCS)	Project (Number/Name) EF6 / JADOCS				
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
software (SW) builds. Begin and complete software build 1 and begin software build 2. Begin activities required for material release (e.g. program protection plan, safety assessment, training analysis and documentations). FY 2016 Base Plans: Continue development of JADOCS v2.0 software. Complete software builds 2 and 3. Test each build to meet all requirements. Complete all required software and testing documentations.						
Title: Program Support Costs for JADOCS Software Development Efforts Description: Program support for JADOCS v2.0 software development efforts. FY 2015 Plans: Continue program support for JADOCS version 2.0 software development. FY 2016 Base Plans: Continue program support for JADOCS version 2.0 software development.		-	0.700	0.700	-	0.700
Title: Army and Joint Testing Activities Description: Conduct and support Army and Joint Testing Activities. FY 2015 Plans: Continue support of Army and Joint testing activities; conduct Independent Validation and Verification (IV&V) of the JADOCS version 2.0 software. FY 2016 Base Plans: Continue support of Army and Joint testing activities; conduct Independent Validation and Verification (IV&V) of the JADOCS version 2.0 software.		-	0.300	0.400	-	0.400
Title: Contractor Management Services and Support Description: Funds Systems Engineering and Technical Assistance support provided by Liaison Officers (LNO) and JADOCS training managers. FY 2015 Plans: Continues program support for JADOCS training activities.		-	0.740	-	-	-
Accomplishments/Planned Programs Subtotals		-	15.433	13.002	-	13.002

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C. Other Program Funding Summary (\$ in Millions) N/A		
Remarks		
D. Acquisition Strategy JADOCS Version (v) 2.0 is a software only development effort which includes software updates to address Joint Users technical requirements that align with the approved CPD. JADOCS v2.0 will be the last major version of JADOCS software. JADOCS v2.0 will interoperate with AFATDS. JADOCS v 2.0 will be maintained and sustained until the Joint Users requirements are met by AFATDS and other systems. Program Executive Officer, Command, Control, Communications -Tactical (PEO C3T) signed the JADOCS Milestone C Acquisition Decision Memorandum (ADM) on 2 December 2013. The ADM approved MS C and authorized entrance into the Production and Deployment phase. The ADM also approved the acquisition strategy, APB and established the MS C exit criteria. JADOCS v2.0 reflects continued software enhancements to meet joint requirements.		
E. Performance Metrics N/A		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Army												Date: February 2015			
Appropriation/Budget Activity 2040 / 7						R-1 Program Element (Number/Name) PE 0203728A / Joint Automated Deep Operation Coordination System (JADOCS)				Project (Number/Name) EF6 / JADOCS					
Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Business/Technical Services	MIPR	Chenega Federal Systems : Alexandria, VA	0.000	-		0.740		-		-		-	-	0.740	-
Subtotal			0.000	-		0.740		-		-		-	-	0.740	-
Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Software Development	Various	CECOM LCMC SEC FD : APG, MD	0.000	-		13.693	Feb 2014	11.902		-		11.902	-	25.595	-
Subtotal			0.000	-		13.693		11.902		-		11.902	-	25.595	-
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	Various	PM Mission Command (MC) : APG, MD	0.000	-		0.700		0.700		-		0.700	-	1.400	-
Subtotal			0.000	-		0.700		0.700		-		0.700	-	1.400	-
Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Army and Joint Test Support	Various	Joint Service Testing : Various	0.000	-		0.300		0.400		-		0.400	-	0.700	-
Subtotal			0.000	-		0.300		0.400		-		0.400	-	0.700	-

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		Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals		0.000	-		15.433		13.002		-		13.002	-	28.435	-

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Army																		Date: February 2015										
Appropriation/Budget Activity 2040 / 7										R-1 Program Element (Number/Name) PE 0203728A / Joint Automated Deep Operation Coordination System (JADOCS)								Project (Number/Name) EF6 / JADOCS										
Event Name	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	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
(1) Award - Support Agreement (DD1144) - v2.0 SW Development				▲1																								
Software Development v2.0																												
Independent Validation & Verification (IV&V) v2.0																												
(2) Test Readiness Review (TRR) - v2.0																▲2												
Formal Qualification Test (FQT) - v2.0																												
Army Operational Test (OT) - v2.0																												
AF Developmental Test - v2.0																												
(3) Army Interoperability Certification - v2.0																												
AF Operational Test & JITC - v2.0																												
(4) Initial Operational Capability - v2.0																												
(5) Materiel Release - v2.0																												
(6) Deployment Decision - v2.0																												
Filing - v2.0																												

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Army																		Date: February 2015										
Appropriation/Budget Activity 2040 / 7										R-1 Program Element (Number/Name) PE 0203728A / Joint Automated Deep Operation Coordination System (JADOCS)								Project (Number/Name) EF6 / JADOCS										
Event Name	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	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
(1) Full Operational Capability (FOC) - v2.0																	1											

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Army			Date: February 2015
Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0203728A / <i>Joint Automated Deep Operation Coordination System (JADOCS)</i>	Project (Number/Name) EF6 / JADOCS	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Award - Support Agreement (DD1144) - v2.0 SW Development	3	2014	3	2014
Software Development v2.0	3	2014	4	2016
Independent Validation & Verification (IV&V) v2.0	3	2015	4	2016
Test Readiness Review (TRR) - v2.0	4	2016	4	2016
Formal Qualification Test (FQT) - v2.0	4	2016	4	2016
Army Operational Test (OT) - v2.0	1	2017	1	2017
AF Developmental Test - v2.0	1	2017	2	2017
Army Interoperability Certification - v2.0	2	2017	2	2017
AF Operational Test & JITC - v2.0	2	2017	3	2017
Initial Operational Capability - v2.0	2	2017	2	2017
Materiel Release - v2.0	3	2017	3	2017
Deployment Decision - v2.0	3	2017	3	2017
Filing - v2.0	3	2017	4	2020
Full Operational Capability (FOC) - v2.0	2	2018	2	2018

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Army										Date: February 2015		
Appropriation/Budget Activity 2040 / 7					R-1 Program Element (Number/Name) PE 0203728A / Joint Automated Deep Operation Coordination System (JADOCS)				Project (Number/Name) EF7 / Pocket-Sized Forward Entry Device (PFED) Inc 2			
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
EF7: Pocket-Sized Forward Entry Device (PFED) Inc 2	-	-	3.503	3.494	-	3.494	3.560	3.628	3.431	3.474	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
Pocket-sized Forward Entry Device (PFED) Increment II will be a software-only application that operates on the Nett Warrior End User Device (EUD). It will provide the dismounted Forward Observer (FO) and Fire Support Teams (FISTs) the capability and functionality to accurately and rapidly locate ground targets and digitally process a Call For Fire. PFED Increment II answers the Mobile Handheld Computing Environment requirement that all handheld applications reside on the Nett Warrior End User Device.												
Project code EF7 funds the evolutionary software development of this handheld Fires Command and Control (C2) system.												
B. Accomplishments/Planned Programs (\$ in Millions)								FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: PFED INC II Software Development								-	2.800	2.634	-	2.634
Description: PFED INC II software development												
FY 2015 Plans: Undergo a Milestone B decision. Transition Complete Block 1.0 software development. Software development will include removing capabilities from the S&T software that cannot be traced to the PFED Increment II CPD as well as redundant capabilities that will be provided by the Nett Warrior software. The resulting software will be repackaged and delivered to the Nett Warrior software developers for integration onto the Nett Warrior End User Device. Complete Milestone B statutory and regulatory requirements.												
FY 2016 Base Plans: Complete software development for the Block 1.0 capability. Conduct developmental test events, Independent Verification and Validation testing. Conduct a Preliminary Deployment Decision for Block 1.0, to include development of required program documentation, in order to field to the Operational Test unit. Conduct operational test and evaluation events. Conduct a Full Deployment Decision in order to obtain a Full Materiel Release of the Block 1.0 capability. Develop the performance specification for Block 2.0 capabilities based on validated requirements. Conduct a Preliminary Design Review for the Block 2.0 capability.												
Title: Program Support Costs for PFED Increment II Software Development Efforts								-	0.403	0.600	-	0.600

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Army			Date: February 2015		
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B. Accomplishments/Planned Programs (\$ in Millions)					
	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Description: Program support for PFED INC II software development efforts. FY 2015 Plans: Program support for PFED INC II software development. FY 2016 Base Plans: Continue program support for PFED INC II software development.					
Title: Testing Description: Conduct and Support Army Testing Activities FY 2015 Plans: Begin Developmental Testing and Evaluation of the Block 1.0 capability. FY 2016 Base Plans: Continue Developmental Testing and begin Operational Testing and Evaluation of the Block 1.0 capability.	-	0.300	0.260	-	0.260
Accomplishments/Planned Programs Subtotals	-	3.503	3.494	-	3.494
C. Other Program Funding Summary (\$ in Millions)					
N/A					
Remarks					
D. Acquisition Strategy					
On 29 January 2014, the Army Acquisition Executive (AAE) signed the Acquisition Decision Memorandum (ADM) approving the PFED Increment II Materiel Development Decision (MDD). The Acquisition Decision Memorandum (ADM) officially approved entry into the acquisition management system at the Technology Development phase as an Acquisition Category (ACAT) III program with the Program Executive Officer (PEO), Command, Control and Communications-Tactical (C3T) as the Materiel Developer and Milestone Decision Authority.					
PFED Increment II leverages an Army Science and Technology investment by transitioning a software application that has been developed and used in proponent experimentation events (i.e. Army Expeditionary Warrior Experiment (AEWE) and Bold Quest). Upon a successful Milestone B decision in FY2015, this software application will be transitioned to PM Mission Command to conduct all Army developmental and operational test and evaluation requirements. PFED Increment II will be integrated onto the Nett Warrior End User Devices (EUDs) and will be fielded by PM Soldier Warrior (PM SWAR). Training on the PFED Increment II software will be conducted by PM Mission Command as units are fielded the capability.					

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<p>The PFED Increment II CPD, dated 6 September 2012, was approved as an "Information Technology (IT) Box" requirement. As such, evolutionary development of the software will continue in order to meet emerging requirements that fall within the bounds of the approved IT Box. PM Mission Command will continue to manage future capability Blocks of software development. PM Mission Command will continue to coordinate with PM Soldier Warrior to field and train future versions of the software, as described above.</p> <p><u>E. Performance Metrics</u> N/A</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Army													Date: February 2015		
Appropriation/Budget Activity 2040 / 7				R-1 Program Element (Number/Name) PE 0203728A / Joint Automated Deep Operation Coordination System (JADOCS)						Project (Number/Name) EF7 / Pocket-Sized Forward Entry Device (PFED) Inc 2					
Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
PFED Increment II Software Development efforts	MIPR	AMRDEC : Redstone, AL	0.000	-		2.603	Oct 2015	2.634		-		2.634	Continuing	Continuing	Continuing
Subtotal			0.000	-		2.603		2.634		-		2.634	-	-	-
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	Various	PM Mission Command (MC) : APG, MD	0.000	-		0.600		0.600		-		0.600	Continuing	Continuing	Continuing
Subtotal			0.000	-		0.600		0.600		-		0.600	-	-	-
Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Test Support	Various	Testing : Various	0.000	-		0.300		0.260		-		0.260	Continuing	Continuing	Continuing
Subtotal			0.000	-		0.300		0.260		-		0.260	-	-	-
			Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			0.000	-		3.503		3.494		-		3.494	-	-	-
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Army																Date: February 2015												
Appropriation/Budget Activity										R-1 Program Element (Number/Name)								Project (Number/Name)										
2040 / 7										PE 0203728A / Joint Automated Deep Operation Coordination System (JADOCS)								EF7 / Pocket-Sized Forward Entry Device (PFED) Inc 2										
Event Name	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	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
(1) Milestone B																												
Software Development & Testing Block 1.0																												
Developmental Test (DT) Block 1.0																												
(2) Preliminary Deployment Decision (PDD) Block 1.0																												
Operational Test (OT) Block 1.0																												
(3) Initial Operational Capability (IOC) Block 1.0																												
(4) Full Deployment Decision (FDD) Block 1.0																												
(5) Materiel Release Block 1.0																												
Fielding Block 1.0																												
Software Development & Testing Block 2.0																												
Developmental Test (DT) Block 2.0																												
(6) Preliminary Deployment Decision (PDD) Block 2.0																												
(7) Operational Test (OT) Block 2.0																												

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Army																Date: February 2015																					
Appropriation/Budget Activity 2040 / 7										R-1 Program Element (Number/Name) PE 0203728A / Joint Automated Deep Operation Coordination System (JADOCS)								Project (Number/Name) EF7 / Pocket-Sized Forward Entry Device (PFED) Inc 2																			
Event Name										FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
										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
(1) Full Deployment Decision (FDD) Block 2.0																										▲											
(2) Materiel Release Block 2.0																										▲											
Fielding Block 2.0																																					
Additional SW Capability Development & Testing																																					

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Army			Date: February 2015
Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0203728A / Joint Automated Deep Operation Coordination System (JADOCS)	Project (Number/Name) EF7 / Pocket-Sized Forward Entry Device (PFED) Inc 2	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Milestone B	2	2015	2	2015
Software Development & Testing Block 1.0	2	2015	4	2016
Developmental Test (DT) Block 1.0	4	2015	1	2016
Preliminary Deployment Decision (PDD) Block 1.0	2	2016	2	2016
Operational Test (OT) Block 1.0	3	2016	3	2016
Initial Operational Capability (IOC) Block 1.0	3	2016	3	2016
Full Deployment Decision (FDD) Block 1.0	4	2016	4	2016
Materiel Release Block 1.0	4	2016	1	2017
Fielding Block 1.0	1	2017	4	2017
Software Development & Testing Block 2.0	1	2017	3	2018
Developmental Test (DT) Block 2.0	2	2018	2	2018
Preliminary Deployment Decision (PDD) Block 2.0	3	2018	3	2018
Operational Test (OT) Block 2.0	4	2018	4	2018
Full Deployment Decision (FDD) Block 2.0	4	2018	4	2018
Materiel Release Block 2.0	1	2019	1	2019
Fielding Block 2.0	1	2019	1	2021
Additional SW Capability Development & Testing	1	2019	1	2021

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Army										Date: February 2015		
Appropriation/Budget Activity 2040 / 7					R-1 Program Element (Number/Name) PE 0203728A / Joint Automated Deep Operation Coordination System (JADOCS)				Project (Number/Name) EF8 / AFATDS Increment 1			
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
EF8: AFATDS Increment 1	-	-	17.722	19.223	-	19.223	31.022	30.601	31.037	33.131	-	162.736
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

Effective for PB2015: funds (\$5.425 million) were transferred to program element 0203728A project code EF8 from program element 0203726A project code 322 (PB2014 BLIN 161) due to Major Automated Information System (MAIS) transparency requirements; funds (\$12.300 million) were transferred to program element 0203728A project code EF8 from program element 0203726A project code DU5 (PB2015 BLIN 163) due to Army requested transfer.

The Army Acquisition Executive (AAE) determined that AFATDS Increment 2 (program element 0203726A project code DU5) is a software modernization effort of the existing AFATDS program. Therefore, the Army moved funding for AFATDS Increment 2 from program element 0203726A project code DU5, to the current AFATDS funding (program element 0203728A project code EF8) as AFATDS version 7.0. Previous "AFATDS Increment 1" efforts are delineated as V6.x in program element 0203728A project code EF8.

A. Mission Description and Budget Item Justification

The Advanced Field Artillery Tactical Data System (AFATDS) provides the Army, Navy, and Marine Corps automated fire support command, control and communications. AFATDS is used to plan, execute, and deliver lethal and non-lethal effects. AFATDS provides Joint/Coalition Situational Awareness for fires execution and mission management. The system interoperates and integrates with over 80 different battlefield systems, including Navy and Air Force command and control weapon systems; and the German, French, Turkish, and Italian fire support systems. AFATDS automates the planning, coordination, and control of all fire support assets (field artillery, mortars, close air support, naval gunfire, attack helicopters, offensive electronic warfare, fire support meteorological systems, forward observers, and fire support radars).

AFATDS provides eleven core services that manage user input and handle dissemination of complex fires processes. These core services are: Attack/Engagement Analysis, Fire Support Planning, Mission Guidance, Target Definition, Mission Area Definition, Cross-System Graphics/Mapping management, Unit Task Organization Data, Fires Conflict Detection, Mobile Air/Ground Tracking, Mission Execution and Mission Trigger Events. These AFATDS services promote situational awareness of data, intelligence information and targeting data, in near real time, in order to effectively manage target selection and target engagement in accordance with the Maneuver Commanders guidance and priorities.

AFATDS FY15 funding in the amount of \$17.722 million is for the continued development and testing of the AFATDS 6.8.X Software Release which will align with the Command Post Computing Environment (CPCE) as it fits into the Army's overarching Common Operating Environment (COE) construct. The COE has been directed by the AAE to align all Army networks, procurements, and enhancements.

Network Assisted GPS for Precision Fires (NA GPS) is a development effort to improve performance and mission reliability for GPS-guided munitions. Regardless of terrain-constrained operational conditions and GPS degraded environments, NA GPS will permit Precision Fires Mission availability. NA GPS is tailored to support

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Army			Date: February 2015				
Appropriation/Budget Activity 2040 / 7		R-1 Program Element (Number/Name) PE 0203728A / Joint Automated Deep Operation Coordination System (JADOCS)	Project (Number/Name) EF8 / AFATDS Increment 1				
standardized messaging with Joint Battle Command-Platform (JBC-P), AFATDS, M777A2 Towed Howitzer Digital Fire Control System and Mortar Fire Control System. Network Assisted GPS for Precision Fires will complete the developmental effort in FY15.							
Funding in FY16 through FY20 was moved from program element 0203726A project code DU5 (PB2015 BLIN 163), formerly known as AFATDS Increment 2. The Army Acquisition Executive (AAE) decided that AFATDS Increment 2 was a software modernization effort instead of a new acquisition program. Project Manager (PM) Mission Command presented a Software Change Proposal for the current AFATDS as the appropriate approach to execute this effort. PM Mission Command will execute AFATDS software version 7.0 development effort as a continuation of the current AFATDS program.							
FY16 funding in the amount of \$19.219 will be used to initiate efforts on AFATDS version 7.0. This will include preliminary design reviews for the application and architectural infrastructure, human factors studies, and contracting (Request For Proposal, contract award). Software development will reorganize and optimize the technical foundation to provide a more adaptable baseline to accommodate future Army Common Operating Environment (COE) requirements while maintaining Joint Command and Control (JC2) interoperability. PM Mission Command will develop a role/duty-based functional architecture (Fire Support, Fire Control, and Fire Direction) that reduces training workload and simplifies usage. AFATDS version7.0 will also provide embedded computer based training to decrease classroom burden and increase system usability.							
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: Program Support Costs for AFATDS software development			-	1.747	3.100	-	3.100
Description: Provide program support for AFATDS software development efforts.							
FY 2015 Plans:							
Provide matrix support and Program Management Office (PMO) efforts. Conduct Risk Reduction Analysis, Solution Refinement, Requirements Development, Request for Proposal (RFP) Development. Continue development and testing of V6.8.x.							
FY 2016 Base Plans:							
Provide matrix support and Program Management Office (PMO) efforts. Conduct Risk Reduction Analysis, Solution Refinement, Requirements Development, Request for Proposal (RFP) Development, Program Design Review (PDR), Human Factors Study.							
Title: AFATDS software development efforts cost			-	12.600	14.733	-	14.733
Description: Development of AFATDS software - including Version 6.8.1 and V7.0							
FY 2015 Plans:							

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Army				Date: February 2015		
Appropriation/Budget Activity 2040 / 7		R-1 Program Element (Number/Name) PE 0203728A / Joint Automated Deep Operation Coordination System (JADOCS)		Project (Number/Name) EF8 / AFATDS Increment 1		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Continue the development on V6.8.1.1. This completes the addition of further JADOCS-like requirements/capabilities into AFATDS.						
FY 2016 Base Plans: Initiate development on V7.0. V7.0 will focus on architecture modernization to provide role/duty-based functionality for Fire Support, Fire Control, and Fire Direction Capabilities, support for net-centric operations, web-enabled network interoperability, execution of Joint critical operational activities, embedded training, and exploitation of Army Common Operating Environment (COE) Computing Environment.						
Title: Network Assisted GPS for Precision Fires		-	1.000	-	-	-
Description: Define system architecture and standardize tactical GPS Satellite data exchange solutions. Initiate WAN and LAN based system-of-systems Network Assisted GPS capability for PGMs.						
FY 2015 Plans: Develop and test Network-Assisted (NA) GPS for Precision Fires Capability as part of AFATDS COE v2 software: Verification component system's software interoperability in the network, algorithmic corrections to supplement the ephemeris navigation data incorporated into M777A2 Towed Howitzer Digital Fire Control System and Mortar Fire Control System software, conduct field test demonstration on standard message exchange of navigation data from the Air Force GPS Operations Center through all NA GPS capable systems, develop Capability Insertion Plan to document the results of developing and testing the system of systems Network Assisted GPS capability for Precision Fires.						
Title: Operational and Developmental Testing		-	2.375	1.390	-	1.390
Description: Conduct and support test activities for AFATDS development.						
FY 2015 Plans: For AFATDS Version V6.8.1.1, conduct Army Interoperability Certification (AIC), Government Confidence Demonstration (GCD), Network Integration Evaluation (NIE) and Air Force Operation Testing; Development Testing (DT): Independent Verification and Validation (IV&V), System-of-system (SoS) testing, and Air Force Developmental Testing.						
FY 2016 Base Plans:						

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Army						Date: February 2015					
Appropriation/Budget Activity 2040 / 7			R-1 Program Element (Number/Name) PE 0203728A / Joint Automated Deep Operation Coordination System (JADOCS)			Project (Number/Name) EF8 / AFATDS Increment 1					

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
For AFATDS Version 7.0, conduct Army Interoperability Certification (AIC), Development Testing (DT), System of Systems (SoS) Scrum (developmental) Tests, and Army Warfighting Assessment (AWA).					
Accomplishments/Planned Programs Subtotals	-	17.722	19.223	-	19.223

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
• B28620: MOD OF IN-SVC EQUIP, AFATDS	14.701	8.163	-	0.048	0.048	2.829	2.776	2.280	-	-	30.797

Remarks

D. Acquisition Strategy

AFATDS version 6.7 is the current fielded version of software. Product Director, Fire Support Command and Contral (PdD FSC2) fielded AFATDS version 6.8.0 to the International Security Assistance Force (ISAF) in June 2013. PdD FSC2 fielded AFATDS version 6.8.0.1 in September 2014 to maintain compatibility with the fielded Joint Automated Deep Operations Coordination System (JADOCS) version 1.0.5.2. AFATDS version 6.8.1.1 remains under development with a Full Materiel Release projected for 3QFY2016. The PM projects that AFATDS version 6.8.1.1, the final software improvement under the superseded AFATDS Operational Requirements Document (ORD), will achieve Full Operational Capability (FOC) in 4QFQ2016.

Based on the approved AFATDS Increment 2 Capability Development Document (CDD), the Army Acquisition Executive approved the development of AFATDS version 7.0. This is a modernization of the existing software code to meet the approved key performance parameters as well as meet Army Common Operating Environment (COE) standards. The PM will re-design AFATDS version 7.0 to provide the operator role/duty-based interaction, a dynamic embedded training capability, and allowance for more efficient insertion of future capabilities. The PM will competitively award this contract for this effort in 3QFY2016 with fielding projected for FY2019.

Development of future AFATDS capabilities will be considered based on requirements approved through the Fires Center of Excellence (FCoE) Tactical Software Requirements Governance Board.

E. Performance Metrics

N/A


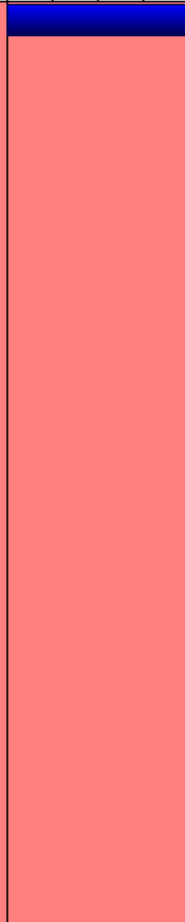



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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Army												Date: February 2015			
Appropriation/Budget Activity 2040 / 7						R-1 Program Element (Number/Name) PE 0203728A / Joint Automated Deep Operation Coordination System (JADOCS)				Project (Number/Name) EF8 / AFATDS Increment 1					
Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management for AFATDS Development Support	Sub Allot	PM Mission Command (MC) : APG, MD	0.000	-		1.747		1.594		-		1.594	-	3.341	-
Risk Reduction Analysis, Solution Refinement, Requirements Development, RFP Development.	TBD	PM Mission Command (MC) : APG, MD	0.000	-		-		1.506		-		1.506	-	1.506	-
Subtotal			0.000	-		1.747		3.100		-		3.100	-	4.847	-
Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Network Assisted GPS for Precision Fires Development	IA	PM Combat Ammunition Systems, PM Mission Command, and various Army agencies : Various Locations	0.000	-		1.000		-		-		-	-	1.000	-
Software Development of AFATDS Version 7.0	C/CPFF	TBD : TBD	0.000	-		-		14.733	May 2016	-		14.733	-	14.733	-
Software Development of AFATDS Version 6.8.1	C/CPFF	Raytheon Systems Corp. : Ft. Wayne, IN	0.000	-		12.600		-		-		-	-	12.600	33.188
Subtotal			0.000	-		13.600		14.733		-		14.733	-	28.333	33.188
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Information Assurance and Engineering Support	C/CPFF	CSC : Various Locations	0.000	-		1.060		-		-		-	-	1.060	0.405

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Army													Date: February 2015		
Appropriation/Budget Activity 2040 / 7						R-1 Program Element (Number/Name) PE 0203728A / Joint Automated Deep Operation Coordination System (JADOCS)				Project (Number/Name) EF8 / AFATDS Increment 1					
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
for AFATDS V6.8.x requirements															
Subtotal			0.000	-		1.060		-		-		-	-	1.060	0.405
Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test Support for AFATDS V7.0 requirements	C/CPFF	Engility : Various Locations	0.000	-		0.615		1.390		-		1.390	-	2.005	-
Government Confidence Demo for AFATDS V6.8.x requirements.	IA	Army Test & Evaluation Command (ATEC)/Fires Test Directorate (FTD) : Various Locations	0.000	-		0.700		-		-		-	-	0.700	-
Subtotal			0.000	-		1.315		1.390		-		1.390	-	2.705	-
			Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			0.000	-		17.722		19.223		-		19.223	-	36.945	33.593
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Army																Date: February 2015																									
Appropriation/Budget Activity 2040 / 7										R-1 Program Element (Number/Name) PE 0203728A / Joint Automated Deep Operation Coordination System (JADOCS)								Project (Number/Name) EF8 / AFATDS Increment 1																							
Event Name										FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020							
										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				
Development and Testing V6.8.1.1																																									
(1) Materiel Release V6.8.1.1																																									
Fielding V6.8.1.1 (OPA Funding)																																									

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Army			Date: February 2015
Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0203728A / Joint Automated Deep Operation Coordination System (JADOCS)	Project (Number/Name) EF8 / AFATDS Increment 1	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Development and Testing V6.8.1.1	1	2015	1	2016
Materiel Release V6.8.1.1	3	2016	3	2016
Fielding V6.8.1.1 (OPA Funding)	3	2016	1	2017