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Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Army										Date: March 2014		
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 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	-	-	-	24.371	-	24.371	16.522	6.083	3.655	3.456	Continuing	Continuing
EF6: JADOCS	-	-	-	15.441	-	15.441	13.002	2.496	-	-	-	30.939
EF7: Pocket-Sized Forward Entry Device (PFED) Increment 2	-	-	-	3.505	-	3.505	3.520	3.587	3.655	3.456	Continuing	Continuing
EF8: AFATDS Increment 1	-	-	-	5.425	-	5.425	-	-	-	-	-	5.425

The FY 2015 OCO Request will be submitted at a later date.

Note
Project code EF6 (JADOCS) and EF8 (AFATDS Incr I) were previously funded under AFATDS PE 0203726A (PB2014 BLIN 161).

Project code EF7 - PFED Increment 2 is a new start in PB2015 (\$3.505 million) to justify Pocket-sized Forward Entry Device (Increment 2) software development.

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 2) (project code EF7); and Advanced Field Artillery Tactical Data System (AFATDS) (Increment 1) (project code EF8).

Joint Automated Deep Operations Coordination System (JADOCS) software provides joint fire support management, and common operational picture (COP) capabilities. JADOCS complements the Mission Command architecture with joint and collaborative capabilities that can be employed and tailored based on the unit mission and operational situation. JADOCS software provides integration between multiple joint command and control (C2) systems of the uniformed services involved in the targeting process at US Air Force (USAF), US Navy (USN), and US Marine Corps (USMC) Air Operations Centers (AOCs), Marine Expeditionary Forces (MEFs), Fleet Maritime Operations Centers (MOCs), and staff sections at the regional Combatant Commands (COCOMs), Special Operations Command (SOCOM), and Army Battlefield Coordination Detachments (BCDs), Army Service Component Commands (ASCC), Corps and Divisions. Project EF6 funds development of JADOCS Version 2.0 which is the final version of JADOCS to be developed with new functionality. JADOCS V2.0 is required to incorporate critical Joint requirements into JADOCS. These requirements include modification and updates for joint interfaces, updates to databases, and creation of non kinetic fires targeting. JADOCS V2.0 development is slated to be developed by a government agency with work beginning in FY2014.

The Pocket-sized Forward Entry Device (PFED) Increment 2 will be a software only application that operates on the existing 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; linking the sensor to the shooter with an efficient integration of multiple acquisition programs. PFED Increment 2 aligns with the Army's Fires and Effects Concept of Operation and describes how fires and effects contribute to Networked Fires as part of the combined arms teams in Army, Special Operations Forces (SOF), and Joint operations. PFED Increment 2 answers the Mobile Handheld Computing Environment requirement

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Appropriation/Budget Activity 2040: <i>Research, Development, Test & Evaluation, Army I BA 7: Operational Systems Development</i>	R-1 Program Element (Number/Name) PE 0203728A / <i>Joint Automated Deep Operation Coordination System (JADOCS)</i>
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that all handheld applications reside on the Nett Warrior End User Device. PFED Increment 2 will provide Category 1 target mensuration via Precision Fires Imagery enabling the effective use of new precision munitions. Project code EF7 funds the evolutionary software development of this handheld Fires Command and Control (C2) system.

AFATDS Increment 1 provides Army, Navy, and Marine Corps automated fire support command, control and communications and functions as the land component's automated Fire Support Command and Control (FSC2) system. AFATDS is used in the Fires Warfighting Function to plan, execute, and deliver lethal and non-lethal fires within the overall Mission Command and Control (MC2) enterprise. The system interoperates and integrates with: over 80 different battlefield systems from Army, Marine Corps, Navy, and Air Force; and the German, French, Turkish, and Italian fire support command and control systems. AFATDS fuses the essential situational awareness 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 and to safely execute against friendly situational picture. AFATDS pairs targets to weapons to provide optimum use of fire support assets and timely execution of fire missions. AFATDS automates the planning, coordinating, and controlling 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 automatically implements detailed commander's guidance in the automation of operational planning, movement control, targeting, target value analysis, and fire support planning. AFATDS is being used in operations in Afghanistan. Project EF8 funds development of AFATDS Version 6.8.1. AFATDS 6.8.1 fires capabilities are being enhanced to meet JADOCS ground fires requirements in order to remove JADOCS from the ground forces inventory. With the completion of AFATDS Version 6.8.1, the program office will complete the AFATDS Increment 1 development and will start the Increment 2 development in 4Q FY2014. Final engineering reviews will be conducted and Government Confidence Testing, Information Assurance testing, and Certification testing will be completed. Full materiel release of the software will be completed in 3Q FY2015 and universal fielding and training of the software will be conducted.

B. Program Change Summary (\$ in Millions)	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015 Base</u>	<u>FY 2015 OCO</u>	<u>FY 2015 Total</u>
Previous President's Budget	-	-	-	-	-
Current President's Budget	-	-	24.371	-	24.371
Total Adjustments	-	-	24.371	-	24.371
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments 1	-	-	5.425	-	5.425
• Other Adjustments 2	-	-	15.441	-	15.441
• Other Adjustments 3	-	-	3.505	-	3.505

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army										Date: March 2014		
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 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
EF6: JADOCS	-	-	-	15.441	-	15.441	13.002	2.496	-	-	-	30.939
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
# The FY 2015 OCO Request will be submitted at a later date.												
Note												
Project code EF6 was previously justified in OSD program element 0203726A project code F19 (PB2014 BLIN 161). Due to OSD Major Automated Information System (MAIS) transparency requirements, all non-MAIS funds were transferred out of 0203726A into 0203728A.												
A. Mission Description and Budget Item Justification												
Joint Automated Deep Operations Coordination System (JADOCS) software provides joint fire support management, and common operational picture (COP) capabilities. JADOCS complements the Mission Command architecture with joint and collaborative capabilities that can be employed and tailored based on the unit mission and operational situation. JADOCS software provides integration between multiple joint command and control (C2) systems of the uniformed services involved in the targeting process at US Air Force (USAF), US Navy (USN), and US Marine Corps (USMC) Air Operations Centers (AOCs), Marine Expeditionary Forces (MEFs), Fleet Maritime Operations Centers (MOCs), and staff sections at the regional Combatant Commands (COCOMs), Special Operations Command (SOCOM), and Army Battlefield Coordination Detachments (BCDs), Army Service Component Commands (ASCC), Corps and Divisions.												
Project EF6 funds development of JADOCS Version 2.0 which is the final version of JADOCS to be developed with new functionality. JADOCS V2.0 is required to incorporate critical Joint requirements into JADOCS. These requirements include modification and updates for joint interfaces, updates to databases, and creation of non kinetic fires targeting. JADOCS V2.0 development is slated to be developed by a government agency with work beginning in FY2014.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2013	FY 2014	FY 2015	
Title: JADOCS Software Development Efforts									-	-	12.380	
Description: Software development of JADOCS Increment 1 (JADOCS Version 2.0 software).												
FY 2015 Plans: Continues development of JADOCS Version 2.0 software.												
Title: Program Support Costs for JADOCS Software Development Efforts									-	-	1.061	
Description: Program support for JADOCS software development efforts for Version 2.0.												
FY 2015 Plans:												

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army		Date: March 2014	
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 2013	FY 2014
Continues program support for JADOCS Version 2.0 software development.			FY 2015
Title: Testing		-	0.300
Description: Conduct and support Army and Joint Testing Activities.		-	
FY 2015 Plans: Continues support of Army and Joint testing activities; conduct Independent Validation and Verification (IV&V) of the JADOCS Version 2.0 software.			
Title: Contractor Management Services and Support		-	1.700
Description: Funds Systems Engineering and Technical Assistance support provided by Liaison Officers and JADOCS training managers.		-	
FY 2015 Plans: Continues program support for JADOCS training activities.			
Accomplishments/Planned Programs Subtotals		-	15.441
C. Other Program Funding Summary (\$ in Millions)			
N/A			
Remarks			
D. Acquisition Strategy			
Joint Automated Deep Operations Coordination System (JADOCS) began as a Defense Advanced Research Projects Agency technology demonstration, and has evolved through a series of Army-led Joint Advanced Concept Technology Demonstrations (ACTDs), culminating in a joint and combined deployed operational capability. The Vice Chief of Staff of the Army approved JADOCS for acquisition program status under the Capabilities Development for Rapid Transition (CDRT) process. The approved JADOCS Capability Production Document (CPD) dated 16 April 2012, documents the current JADOCS threshold capabilities that are in the field today. As the lead agency for managing JADOCS capabilities within the Department of Defense, the Fires Center of Excellence, tailored the JADOCS CPD to incorporate Field Artillery tasks not included in the currently fielded version (v 1.0.5.1) of the software. JADOCS retirement will occur when system capabilities are individually or collectively incorporated into Army, Service, or Joint programs or are no longer needed as determined by its multi-Service users. JADOCS Inc 1 is a software only development effort that will produce JADOCS v2.0 software, which will resolve technical requirements generated by the Joint Services that align with the CPD capabilities. JADOCS v2.0 will be the last major version of JADOCS software and will be the follow-on version to the development and fielding of the JADOCS 1.0.5.2 software versions. JADOCS v2.0 will be interoperable with AFATDS Increments 1 and 2.			

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The current fielded version of JADOCS software is 1.0.5.1. The targeting and fires functionality of this version are being incorporated into the AFATDS v6.8.1 software baseline. The fielding of the AFATDS v6.8.1 software (planned for Fiscal Year (FY) 15) will represent the initial merge of the JADOCS/AFATDS capabilities. This software will be provided to users to evaluate AFATDS software's ability to adequately perform the functions provided by the JADOCS software. Any changes, improvements, or further enhancements identified by the Services will be made to the AFATDS software. The JADOCS Joint fires and targeting features will continue to be incorporated into the AFATDS software and will be provided to users with the initial fielding of AFATDS Inc II, v7.0 software (planned to start in FY18 timeframe). JADOCS v2.0 software (planned for fielding in the 4QFY17 timeframe). Users will continue to use JADOCS v2.0 until AFATDS v7.0 meets the total Joint Users requirements (expected with the full fielding of AFATDS v7.0 in FY18). 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. <u>E. Performance Metrics</u> N/A		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army												Date: March 2014			
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 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 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	Various	Chenega Federal Systems : Alexandria, VA	0.000	-		-		1.700	Mar 2015	-		1.700	-	1.700	-
Subtotal			0.000	-		-		1.700		-		1.700	-	1.700	-
Product Development (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 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	TBD	MOA with a Government Developer : TBD	0.000	-		-		12.380	Mar 2014	-		12.380	-	12.380	-
Subtotal			0.000	-		-		12.380		-		12.380	-	12.380	-
Support (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 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	Various	PM Mission Command (MC) : APG, MD	0.000	-		-		1.061		-		1.061	-	1.061	-
Subtotal			0.000	-		-		1.061		-		1.061	-	1.061	-
Test and Evaluation (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 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		-		0.300	-	0.300	-
Subtotal			0.000	-		-		0.300		-		0.300	-	0.300	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army										Date: March 2014			
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				
	Prior Years	FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	-		-		15.441		-		15.441	-	15.441	-
Remarks													

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Army			Date: March 2014		
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

	FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019			
	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
Award - Memorandum of Agreement (MOA) for SW Development - V2.0																												
Software Development V2.0																												
Independent Validation & Verification (IV&V)																												
Developmental Test V2.0																												
Operational Test & JITC																												
Government Confidence Demonstration (GCD) V2.0																												
Army Interoperability Certification - V2.0																												
Material Release - V2.0																												
Fielding - V2.0																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2015 Army			Date: March 2014
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 - Memorandum of Agreement (MOA) for SW Development - V2.0	2	2014	2	2014
Software Development V2.0	3	2014	3	2016
Independent Validation & Verification (IV&V)	4	2014	2	2017
Developmental Test V2.0	3	2016	4	2016
Operational Test & JITC	1	2017	4	2017
Government Confidence Demonstration (GCD) V2.0	2	2017	2	2017
Army Interoperability Certification - V2.0	3	2017	3	2017
Material Release - V2.0	4	2017	4	2017
Fielding - V2.0	4	2017	1	2018

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army										Date: March 2014		
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) Increment 2			
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
EF7: Pocket-Sized Forward Entry Device (PFED) Increment 2	-	-	-	3.505	-	3.505	3.520	3.587	3.655	3.456	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
# The FY 2015 OCO Request will be submitted at a later date.												
Note Project code EF7 is a new start program in PB2015 to justify the Pocket-Sized Forward Entry Device (PFED) Increment 2 software development effort.												
A. Mission Description and Budget Item Justification The Pocket-sized Forward Entry Device (PFED) Increment 2 will be a software only application that operates on the existing 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; linking the sensor to the shooter with an efficient integration of multiple acquisition programs. PFED Increment 2 aligns with the Army's Fires and Effects Concept of Operation and describes how fires and effects contribute to Networked Fires as part of the combined arms teams in Army, Special Operations Forces (SOF), and Joint operations. PFED Increment 2 answers the Mobile Handheld Computing Environment requirement that all handheld applications reside on the Nett Warrior End User Device. PFED Increment 2 will provide Category 1 target mensuration via Precision Fires Imagery enabling the effective use of new precision munitions. Project code EF7 funds the evolutionary software development of this handheld Fires Command and Control (C2) system.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2013	FY 2014	FY 2015	
Title: PFED Incr 2 Software Development Description: PFED Incr 2 software development FY 2015 Plans: Complete version 1.0 software development. Software development will include removing capabilities from the S&T software that cannot be traced to the PFED Increment 2 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									-	-	2.598	
Title: Program Support Costs for PFED Increment 2 Software Development Efforts Description: Program support for PFED Incr 2 software development effects.									-	-	0.602	

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army		Date: March 2014	
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) Increment 2	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2013	FY 2014
FY 2015 Plans: Program support for PFED Increment 2 software development.			
Title: Testing Description: Conduct and Support Army Testing Activities		-	-
FY 2015 Plans: Conduct Developmental Testing and Evaluation. Support participation in Network Integration Experiment (NIE) 15.2.			0.305
Accomplishments/Planned Programs Subtotals		-	3.505
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 2 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 2 leverages an Army Science and Technology investment by transitioning a software application that has been developed and used in proponent experimentation events. Upon a successful Milestone B, this software application will be transitioned to PM Mission Command, the assigned project manager, to conduct all Army developmental and operational test and evaluation requirements. Upon approval for Software Materiel Release, PM Mission Command will work together with PM Soldier Warrior to integrate the software application on Nett Warrior End User Devices (EUDs) and field to units based on the Nett Warrior fielding schedule. Training on the PFED Increment 2 software will be conducted by PM Mission Command as units are fielded the capability. Sustainment of the fielded software is the responsibility of PM Mission Command. The PFED Increment 2 CPD 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 this aspect of software development, to be conducted by a Government organization. PM Mission Command will continue to work in tandem with PM Soldier Warrior to field and train future versions of the software, as described above. Likewise, sustainment of future software versions will continue to be managed by PM Mission Command.			

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army		Date: March 2014
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) Increment 2
E. Performance Metrics N/A		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army												Date: March 2014			
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) Increment 2					
Product Development (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 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 2 Software Development efforts	TBD	AMRDEC : Redstone, AL	0.000	-		-		2.598		-		2.598	Continuing	Continuing	Continuing
Subtotal			0.000	-		-		2.598		-		2.598	-	-	-
Support (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 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	-		-		0.602		-		0.602	Continuing	Continuing	Continuing
Subtotal			0.000	-		-		0.602		-		0.602	-	-	-
Test and Evaluation (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 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	-		-		0.305		-		0.305	Continuing	Continuing	Continuing
Subtotal			0.000	-		-		0.305		-		0.305	-	-	-
			Prior Years	FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			0.000	-		-		3.505		-		3.505	-	-	-
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Army										Date: March 2014	
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) Increment 2			

	FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019			
	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
Milestone B																												
Software Development & Testing V1.0																												
Developmental Test (DT) V1.0																												
Preliminary Deployment Decision (PDD) V1.0																												
Operational Test (OT) V1.0																												
Initial Operational Capability (IOC) V1.0																												
Full Deployment Decision (FDD) V1.0																												
Materiel Release V1.0																												
Fielding V1.0																												
Software Development & Testing V2.0																												
Full Operational Capability (FOC) V1.0																												
Developmental Test (DT) V2.0																												
Preliminary Deployment Decision (PDD) V2.0																												
Operational Test (OT) V2.0																												
Full Deployment Decision (FDD) V2.0																												
Materiel Release V2.0																												
Additional SW Capability Development & Testing																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2015 Army			Date: March 2014
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) Increment 2	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Milestone B	2	2015	2	2015
Software Development & Testing V1.0	2	2015	2	2016
Developmental Test (DT) V1.0	3	2015	3	2015
Preliminary Deployment Decision (PDD) V1.0	4	2015	4	2015
Operational Test (OT) V1.0	1	2016	1	2016
Initial Operational Capability (IOC) V1.0	1	2016	1	2016
Full Deployment Decision (FDD) V1.0	2	2016	2	2016
Materiel Release V1.0	2	2016	2	2016
Fielding V1.0	2	2016	4	2016
Software Development & Testing V2.0	3	2016	4	2017
Full Operational Capability (FOC) V1.0	4	2016	4	2016
Developmental Test (DT) V2.0	2	2017	2	2017
Preliminary Deployment Decision (PDD) V2.0	2	2017	2	2017
Operational Test (OT) V2.0	3	2017	3	2017
Full Deployment Decision (FDD) V2.0	3	2017	3	2017
Materiel Release V2.0	4	2017	4	2017
Additional SW Capability Development & Testing	1	2018	1	2021

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army										Date: March 2014		
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 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
EF8: AFATDS Increment 1	-	-	-	5.425	-	5.425	-	-	-	-	-	5.425
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

The FY 2015 OCO Request will be submitted at a later date.

Note

Project code EF8 was previously justified in PB2014, program element 0203726A project code 322 (PB2014 BLIN 161). Due to OSD Major Automated Information System (MAIS) transparency requirements, all non-MAIS funds were transferred out of 0203726A into 0203728A.

A. Mission Description and Budget Item Justification

There are two developmental efforts that are being executed concurrently on this budget item. They are Advanced Field Artillery Tactical Data System (AFATDS) and Network Assisted Global Positioning System (GPS) for Precision Fires.

AFATDS Increment 1 provides Army, Navy, and Marine Corps automated fire support command, control and communications and functions as the land component's automated Fire Support Command and Control (FSC2) system. AFATDS is used in the Fires Warfighting Function to plan, execute, and deliver lethal and non-lethal fires within the overall Mission Command and Control (MC2) enterprise. The system interoperates and integrates with: over 80 different battlefield systems from Army, Marine Corps, Navy, and Air Force; and Coalition Forces fire support command and control systems. AFATDS fuses the essential situational awareness 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 and to safely execute against friendly situational picture. AFATDS pairs targets to weapons to provide optimum use of fire support assets and timely execution of fire missions. AFATDS automates the planning, coordinating, and controlling 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 automatically implements detailed commander's guidance in the automation of operational planning, movement control, targeting, target value analysis, and fire support planning. AFATDS is being used in operations in Afghanistan. Project 322 funds development of AFATDS Version 6.8.1. AFATDS 6.8.1 fires capabilities are being enhanced to meet JADOCS ground fires requirements in order to remove JADOCS from the ground forces inventory. With the completion of AFATDS Version 6.8.1, the program office will complete the AFATDS Increment 1 development and will start the Increment 2 development in 4Q FY2014. Final engineering reviews will be conducted and Government Confidence Testing, Information Assurance testing, and Certification testing will be completed. Full materiel release of the software will be completed in 3Q FY2015 and universal fielding and training of the software will be conducted.

Network Assisted GPS for Precision Fires is a developmental effort to improve performance of GPS-guided munitions. It requires pre-launch loading of target location and sufficient GPS satellite-related data at the weapon platform level to enable flight path and delivery of precision capable fires. This hot start capability allows for rapid post-launch time-to-first-fix of GPS signal and maximum utilization of Precision Guided Munition (PGM) maneuver authority to ensure required target engagement performance. This is especially critical for short flight times and steer-early solutions such as mortar and cannon based PGMs. Local GPS Satellite visibility challenges due to vertical terrain/complex environment issues during normal combat operations can prohibit precision capable fires when using GPS Satellite data generated

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army										Date: March 2014		
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				
exclusively at the firing weapon platform. A system-of-systems Network Assisted GPS capability will be developed, integrated, and validated to overcome local GPS Satellite masking problems through the sharing of sufficient timely required GPS Satellite data via Wide-Area Network (WAN) and Local-Area Network (LAN) based materiel solutions that effectively and efficiently leverage mature technologies and taxpayer investments of existing acquisition programs.												
B. Accomplishments/Planned Programs (\$ in Millions)										FY 2013	FY 2014	FY 2015
Title: Program Support Costs for AFATDS software development										-	-	0.750
Description: Provide program support for AFATDS software development efforts for Versions 6.8 and 6.8.1.												
FY 2015 Plans: Program Support Costs for AFATDS Increment 1 software development efforts												
Title: AFATDS software development efforts cost										-	-	0.925
Description: Development of AFATDS Increment 1 requirements - including Version 6.8 and 6.8.1												
FY 2015 Plans: Complete development and testing of AFATDS Version 6.8.1												
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: Complete the development of Network Assisted GPS for Precision Fires												
Title: Testing										-	-	2.750
Description: Conduct and support test activities for AFATDS development of Increment 1 requirements												
FY 2015 Plans: Conduct and support test activities for AFATDS Increment 1 software												
Accomplishments/Planned Programs Subtotals										-	-	5.425
C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost	
• B28620: MOD OF IN-SVC EQUIP, AFATDS	36.966	17.702	8.163	-	8.163	8.435	3.912	3.971	4.049	-	83.198	

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army										Date: March 2014	
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			
C. Other Program Funding Summary (\$ in Millions)											
			<u>FY 2015</u>	<u>FY 2015</u>	<u>FY 2015</u>					<u>Cost To</u>	
<u>Line Item</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>Base</u>	<u>OCO</u>	<u>Total</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>Complete</u>	<u>Total Cost</u>
Remarks											
D. Acquisition Strategy											
AFATDS version 6.8 was fielded only to the International Security Assistance Force (ISAF) in June 2013. PM will universally field AFATDS Version 6.8 in March 2014 to ensure compatibility with JADOCS Version 1.0.5.2. AFATDS Version 6.8.1 is under development. PM expects Full Materiel Release in 3Q FY2015. AFATDS Version 6.8.1, AFATDS Increment 1 will have achieved Full Operational Capability (FOC).											
E. Performance Metrics											
N/A											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army												Date: March 2014			
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 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 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 Increment 1 Support	SS/BA	PM Mission Command (MC) : APG, MD	0.000	-		-		0.590		-		0.590	-	0.590	-
Subtotal			0.000	-		-		0.590		-		0.590	-	0.590	-
Product Development (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 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	C/CPFF	PM Combat Ammunition Systems, PM Mission Command, and various Army agencies : Various Locations	0.000	-		-		1.000		-		1.000	-	1.000	-
Software Development of AFATDS Version 6.8.1	C/CPFF	Raytheon Systems Corp. : Ft. Wayne, IN	0.000	-		-		0.925		-		0.925	-	0.925	33.188
Subtotal			0.000	-		-		1.925		-		1.925	-	1.925	33.188
Support (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 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 for AFATDS Increment 1 requirements	C/CPFF	CSC : Various Locations	0.000	-		-		0.160		-		0.160	-	0.160	0.405
Subtotal			0.000	-		-		0.160		-		0.160	-	0.160	0.405

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army												Date: March 2014			
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					
Test and Evaluation (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 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 for AFATDS Increment 1 requirements	C/CPFF	Engility : Various Locations	0.000	-		-		0.825		-		0.825	-	0.825	-
Limited User Test/ Government Confidence Demo for AFATDS Increment 1 requirements.	SS/BA	Army Test & Evaluation Command (ATEC)/Fires Test Directorate (FTD) : Various Locations	0.000	-		-		1.925		-		1.925	-	1.925	-
Subtotal			0.000	-		-		2.750		-		2.750	-	2.750	-
			Prior Years	FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			0.000	-		-		5.425		-		5.425	-	5.425	33.593
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Army			Date: March 2014		
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

	FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019			
	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																												
Materiel Release V6.8.1																												
Fielding V6.8.1																												
Development /Testing Network Assisted GPS for Precision Fires																												
Materiel Release Network Assisted GPS for Precision Fires																												
Fielding Network Assisted GPS for Precision Fires																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2015 Army			Date: March 2014
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) EF8 / <i>AFATDS Increment 1</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Development and Testing V6.8.1	3	2012	3	2015
Materiel Release V6.8.1	3	2015	3	2015
Fielding V6.8.1	3	2015	4	2015
Development /Testing Network Assisted GPS for Precision Fires	3	2012	3	2015
Materiel Release Network Assisted GPS for Precision Fires	3	2015	3	2015
Fielding Network Assisted GPS for Precision Fires	3	2015	4	2015