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Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Army **Date:** February 2020

Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army / BA 7: Operational Systems Development	R-1 Program Element (Number/Name) PE 0203728A / Joint Automated Deep Operation Coordination System (JADOCs)
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COST (\$ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	-	29.782	47.398	44.691	-	44.691	26.114	18.890	4.800	4.073	0.000	175.748
EF7: Precision Fires Warrior Dismounted & Mounted	-	3.493	3.500	3.320	-	3.320	3.312	3.307	3.305	2.692	0.000	22.929
EF8: AFATDS Increment 1	-	26.289	43.898	41.371	-	41.371	22.802	15.583	1.495	1.381	0.000	152.819

A. Mission Description and Budget Item Justification

The Fire Support Command & Control (FSC2) funding line supports the Long Range Precision Fires (LRPF) Cross Functional Team (CFT), the #1 priority in the Army Modernization Strategy and the Common Operating Environment (COE). Efforts are aligned to support the Network-CFT capability set approach.

FSC2 supports the development of Advanced Field Artillery Tactical Data System (AFATDS), LRPF CFT, Extended Range Canon Artillery (ERCA), Extended Range Guided Multiple Launch Rocket System (ER-GMLRS), Precision Strike Missile System (PRSM) initiatives. In order to support these initiatives, AFATDS will serve as the key sensor to shooter link for the Army and USMC providing fully automated support for planning, coordinating, controlling and executing fires and effects. AFATDS also began supporting Long Range Hypersonic Weapons (LRHW) in FY 2020. Fire Support Command and Control (FSC2) systems automate the planning and execution of fire support operations so that a suitable weapon or group of weapons adequately cover targets. Fire support is the effect of lethal and non-lethal weapons (fires) that directly support land, maritime, amphibious and special operation forces to engage enemy forces, combat formations, and facilities in pursuit of tactical and operational objectives. FSC2 family consists of Advanced Field Artillery Tactical Data System (AFATDS), Joint Automated Deep Operations Coordination System (JADOCs), and Precision Fires Dismounted and Mounted (PF-D/M), formerly known as Pocket-sized Forward Entry Device (PFED).

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 weapons systems. As a member of the Artillery System Cooperation Agreement (ASCA), AFATDS is interoperable with coalition partner 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 7.0 modernizes the existing AFATDS software currently in the field. AFATDS 7.0 enhances the existing AFATDS baseline by: (1) Providing a modernized web service based backend that will simplify long-term maintenance of the software, (2) Bringing AFATDS into full compliance with the Army's COE, Command Post Computing Environment (CPCE) initiative, and (3) Enhancing overall usability of the system through the implementation of a role-based capability architecture with embedded training that allows the AFATDS operator to receive on-the-spot training for any aspect of AFATDS via interactive instruction.

Precision Fires Dismounted and Mounted (PF-D/M), is a software 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

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Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Army	Date: February 2020
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Appropriation/Budget Activity 2040: <i>Research, Development, Test & Evaluation, Army / 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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for Fire. PF-D answers the Mobile Handheld Computing Environment requirement that all handheld applications reside on the Nett Warrior EUD. PF-M answers the mounted computing environment requirement and will reside on Mounted Family of Computer Systems (MFoCS) computers.

B. Program Change Summary (\$ in Millions)	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Previous President's Budget	30.915	47.398	34.289	-	34.289
Current President's Budget	29.782	47.398	44.691	-	44.691
Total Adjustments	-1.133	0.000	10.402	-	10.402
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-1.133	-			
• Adjustments to Budget Years	-	-	10.402	-	10.402

Change Summary Explanation

FY 2021 Base appropriation was increased by \$10.4 million to fund AFATDS 7.0 development for Common Operating Environment (COE) compliance.

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Exhibit R-2A, RDT&E Project Justification: PB 2021 Army										Date: February 2020		
Appropriation/Budget Activity 2040 / 7					R-1 Program Element (Number/Name) PE 0203728A / Joint Automated Deep Operation Coordination System (JADOCS)				Project (Number/Name) EF7 / Precision Fires Warrior Dismounted & Mounted			
COST (\$ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
EF7: Precision Fires Warrior Dismounted & Mounted	-	3.493	3.500	3.320	-	3.320	3.312	3.307	3.305	2.692	0.000	22.929
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

PF-D/M, formerly known as Pocket-sized Forward Entry Device (PFED) Increment II is a software application that operates on the Nett Warrior (NW) 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. PF-D answers the Mobile Handheld Computing Environment requirement that all handheld applications reside on the NW EUD. PF-M answers the mounted computing environment requirement and will reside on Mounted Family of Computer Systems (MFoCS).

FY 2021 funding of \$3.320 million is to complete development, testing of Block 2 capabilities and continue hardware/software integration with NW EUD. Begin the development of Block 3 capabilities with MFoCS vehicle integration.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2019	FY 2020	FY 2021
Title: Program Management Support Costs for PF-D/M	0.390	0.438	0.411
Description: Program support for PF-D/M software development efforts.			
FY 2020 Plans: Will provide Program Management Office (PMO) support (Matrix, and SETA) for all aspects of the PF-D/M program including requirements development, software development efforts, logistics, and business management support.			
FY 2021 Plans: Will provide Program Management Office (PMO) support (Matrix, and SETA) for all aspects of the PF-D/M program including requirements development, software development efforts, logistics, and business management support.			
FY 2020 to FY 2021 Increase/Decrease Statement: Decrease due to sharing of PMMC division assets for IA efforts.			
Title: PF-D/M Software Development	2.853	2.895	2.742
Description: PF-D/M Software Development			
FY 2020 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2021 Army **Date:** February 2020

Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0203728A / Joint Automated Deep Operation Coordination System (JADOCS)	Project (Number/Name) EF7 / Precision Fires Warrior Dismounted & Mounted
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2019	FY 2020	FY 2021
<p>Will continue development and testing of Block 2 capabilities. Complete hardware/software integration with Nett Warrior EUD and MFOCS. Complete software Information Assurance certification.</p> <p>FY 2021 Plans: Will complete development and testing of Block 2 capabilities. Complete HW and SW integrating with NW EUD. Begin the development of block 3 capabilities with vehicle integration onto MFOCS.</p> <p>FY 2020 to FY 2021 Increase/Decrease Statement: Software development costs reduced.</p>			
<p>Title: Testing for PF-D/M</p> <p>Description: Conduct and Support Army Testing Activities for PF-D/M</p> <p>FY 2020 Plans: Continue to prepare and execute Engineering Release Evaluation/Testing.</p> <p>FY 2021 Plans: DT/OT and AIC testing.</p>	0.250	0.167	0.167
Accomplishments/Planned Programs Subtotals	3.493	3.500	3.320

C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u> <u>Base</u>	<u>FY 2021</u> <u>OCO</u>	<u>FY 2021</u> <u>Total</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• BZ9851: POCKET FORWARD ENTRY DEVICE (PFED)	10.644	8.620	3.896	-	3.896	2.897	2.098	2.198	2.297	Continuing	Continuing

Remarks

D. Acquisition Strategy
On 18 May 2015, the Milestone Decision Authority (PEO C3T) signed the Acquisition Decision Memorandum (ADM) approving the PFED Increment II Milestone B. The ADM officially approved entry into the Development phase as an Acquisition Category (ACAT) III program. The system received a Limited Deployment Decision in Jan 2017, to enter into operational test and in Jan 2018 received Full Deployment Decision for Block 1 and Full Material Release.

PF-D/M leverages an Army Science and Technology investment by transitioning a software application that has been developed and used in proponent experimentation events (e.g. Army Expeditionary Warrior Experiment (AEWE) and Bold Quest). Upon a successful Milestone B decision in FY15, this software application transitioned to PM Mission Command (PMMC) to conduct all Army developmental and operational test and evaluation requirements. PF-D/M will be integrated onto the Nett Warrior

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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) EF7 / <i>Precision Fires Warrior Dismounted & Mounted</i>
<p>(NW) End User Devices (EUDs) and will be fielded by PM Soldier Warrior (PM SWAR). Training on the PF-D/M software will be conducted by PMMC as units are fielded the capability. PF-M will be developed on the MCE baseline and co-hosted on the Military Family of Computer Systems (MFoCS).</p> <p>PF-D/M is developed using a block approach where capability is incrementally added to the overall baseline over the course of four blocks. PF-D/M Block 2 focuses on transitioning from a standalone Android application to a plugin on the ATAK architecture. Capabilities include Sensor Interoperability, Digital Precision Strike Suite, and Digitally Aided Close Air Support over the Link 16 network. PF-D/M Block 3 focuses on the transition to the mounted environment. This will move the PF-D Block 2 baseline onto the MFoCS, which is a complete replacement for the LFED/FOS and offers enhanced interoperability to Fire Support Sensors mounted on the platform and offer capabilities of interacting with Net-Enabled munitions. PF-D/M Block IV will be determined by the FCoE Governance Board under the IT Box policy.</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Army												Date: February 2020			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
2040 / 7				PE 0203728A / Joint Automated Deep Operation Coordination System (JADOCS)				EF7 / Precision Fires Warrior Dismounted & Mounted							
Management Services (\$ in Millions)				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 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 for PF-D/M (CORE)	Sub Allot	PM Mission Command (MC) : APG, MD	0.100	-		-		-		-		-	0.000	0.100	-
Program Management Support for PF-D/M (Matrix)	IA	Various Mix Orgs (Govt) : APG, MD	0.301	0.190		0.226		0.226		-		0.226	0.000	0.943	-
Program Management Support for PF-D/M (SETA)	C/FFP	CRSA : APG, MD	0.450	0.200		0.212		-		-		-	0.000	0.862	-
Program Management Support for PF-D/M (SETA)	C/FFP	CACI : APG, MD	-	-		-		0.185	Mar 2021	-		0.185	0.000	0.185	-
Subtotal			0.851	0.390		0.438		0.411		-		0.411	0.000	2.090	N/A
Product Development (\$ in Millions)				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 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
PF-D/M Software Development efforts	IA	AMRDEC : Redstone, AL	10.448	2.853		2.895		-		-		-	Continuing	Continuing	Continuing
PF-D/M Software Development efforts	IA	DOTC : Piccatinny, NJ	-	-		-		2.742	Nov 2020	-		2.742	0.000	2.742	-
Subtotal			10.448	2.853		2.895		2.742		-		2.742	Continuing	Continuing	N/A
Support (\$ in Millions)				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 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	1.517	-		-		-		-		-	Continuing	Continuing	Continuing
Subtotal			1.517	-		-		-		-		-	Continuing	Continuing	N/A

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Exhibit R-4, RDT&E Schedule Profile: PB 2021 Army		Date: February 2020
Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0203728A / Joint Automated Deep Operation Coordination System (JADOCS)	Project (Number/Name) EF7 / Precision Fires Warrior Dismounted & Mounted

Event Name	FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025			
	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
Software Development Block 2																												
LDD Block 2									▲ 2																			
Software Development Block 3																												
OT&E Block 3																				■								
FDD Block 3																								▲ 6				
OT&E Block 2										■																		
FDD Block 2												▲ 3																
IOC Block 2															▲ 4													
BD Block 3								▲ 1																				
LDD Block 3																								▲ 5				
IOC Block 3																												▲ 7

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Exhibit R-4A, RDT&E Schedule Details: PB 2021 Army		Date: February 2020
Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0203728A / Joint Automated Deep Operation Coordination System (JADOCS)	Project (Number/Name) EF7 / Precision Fires Warrior Dismounted & Mounted

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Milestone B	3	2015	3	2015
Initial Operational Capability (IOC) Block 1	3	2018	3	2018
Software Development Block 2	2	2018	2	2021
LDD Block 2	1	2021	1	2021
Software Development Block 3	2	2021	1	2025
OT&E Block 3	3	2023	4	2023
FDD Block 3	1	2024	1	2024
Limited Deployment Decision (LDD) Block 1	1	2016	1	2016
OT&E Block 1	1	2017	2	2017
Full Deployment Decision (FDD) Block 1	2	2018	2	2018
Build Decision (BD) Block 2	2	2018	2	2018
OT&E Block 2	1	2021	2	2021
FDD Block 2	1	2022	1	2022
IOC Block 2	2	2022	2	2022
BD Block 3	4	2020	4	2020
LDD Block 3	4	2023	4	2023
IOC Block 3	4	2024	4	2024

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Exhibit R-2A, RDT&E Project Justification: PB 2021 Army										Date: February 2020		
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 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
EF8: AFATDS Increment 1	-	26.289	43.898	41.371	-	41.371	22.802	15.583	1.495	1.381	0.000	152.819
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Advanced Field Artillery Tactical Data System (AFATDS) funding line supports the Army Modernization Strategy Common Operating Environment. Efforts are aligned to support the Network-Cross Functional Team (CFT) capability set approach to achieve the network modernization strategy. AFATDS 7.0 modernizes the existing AFATDS software currently in the field. AFATDS 7.0 enhances the existing AFATDS baseline by: (1) Providing a modernized web service based backend that will simplify long-term maintenance of the software, (2) Bringing AFATDS into full compliance with the Army's Common Operating Environment (COE) Command Post Computing Environment (CPCE) initiative and (3) Enhancing overall usability of the system through the implementation of a role-based capability architecture with embedded training that allows the AFATDS operator to receive on-the-spot training for any aspect of AFATDS via interactive instruction.

FY 2021 funding of \$41.371 million will be used to facilitate development and continue to focus on the AFATDS v7.0 effort to include building fire support, fire control and fire direction role-based capabilities, integrating available CPCE common components, and updating the user interface for the Software.

AFATDS supports Long Range Precision Fires (LRPF) CFT, Extended Range Canon Artillery (ERCA), Extended Range Guided Multiple Launch Rocket System (ER-GMLRS), Precision Strike Missile System (PRSM) and emerging sensor to shooter initiatives. To support these initiatives, AFATDS will serve as the key sensor to shooter link for the Army and US Marine Corps providing fully automated support for planning, coordinating, controlling and executing fires and effects. AFATDS began supporting Long Range Hypersonic Weapons in FY 2020.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2019	FY 2020	FY 2021
Title: Program Management Costs for AFATDS software development	2.193	5.413	5.250
Description: Provide program support for AFATDS software development efforts.			
FY 2020 Plans: Continue to provide Program Management Office (PMO) support (Matrix, and SETA) for all aspect of the AFATDS program including requirements analysis, software development efforts, logistics, and business management support.			
FY 2021 Plans: Continue to provide Program Management Office (PMO) support (Matrix, and SETA) for all aspect of the AFATDS program including requirements analysis, software development efforts, logistics, and business management support.			
FY 2020 to FY 2021 Increase/Decrease Statement:			

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Exhibit R-2A, RDT&E Project Justification: PB 2021 Army **Date:** February 2020

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
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2019	FY 2020	FY 2021
Reduction of manpower requirements.			
Title: AFATDS software development efforts Description: Development of AFATDS 7.0 software FY 2020 Plans: Development will continue to focus on the AFATDS v7.0 effort to include building fire support, fire control and fire direction role based capabilities, integrating available CP CE v3 common components, and updating the user interface for the application. FY 2021 Plans: Development will continue to focus on the AFATDS v7.0 effort to include building fire support, fire control and fire direction role-based capabilities, integrating available CPCE common components, and updating the user interface for the application. FY 2020 to FY 2021 Increase/Decrease Statement: No Engineering Change Proposals/surge anticipated in FY 2021.	24.096	38.317	34.081
Title: AFATDS 7.0 test events Description: IV&V and developmental testing. FY 2020 Plans: IV&V testing. FY 2021 Plans: Development and Independent Validation and verification tests planned for AFATDS 7.0. FY 2020 to FY 2021 Increase/Decrease Statement: Live Fire, PVT and IV&V testing/support in FY 2021.	-	0.168	2.040
Accomplishments/Planned Programs Subtotals	26.289	43.898	41.371

C. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u> <u>Base</u>	<u>FY 2021</u> <u>OCO</u>	<u>FY 2021</u> <u>Total</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• B28620: MOD OF IN-SVC EQUIP, AFATDS	7.401	4.083	5.494	-	5.494	7.292	7.392	6.693	0.900	0.000	39.255
Remarks											

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D. Acquisition Strategy

The AFATDS v7.0 requirement was validated by the Joint Requirements Oversight Council (JROC) under the AFATDS Increment 2 Capability Definition Document (CDD) in June 2011. On 13 May 2015, the Army Acquisition Executive (AAE) approved AFATDS as a modification to the existing program baseline, continuing as an Acquisition Category (ACAT) II defense acquisition program (DAP) (non-Automated Information System) with PEO C3T oversight. The AFATDS 7.0 is a software only modification/modernization effort that will be hosted on already fielded hardware used for legacy AFATDS software.

The overall acquisition approach to delivering AFATDS 7.0 is to modernize and redesign the software to create a single software baseline featuring web services and a suite of Common Operating Environment (COE) applications that meet threshold values of all key performance parameters identified in the AFATDS Increment 2 CDD. The AFATDS Increment 2 CDD was approved under an IT Box construct, which promotes evolutionary development by facilitating requirement refinement and the incorporation of the latest technology. While the JROC Memorandum (JROCM) 083-11 validated the AFATDS 7.0 performance parameters, it also delegated authority for identifying and approving future capability requirements that fall within the CDD's scope to the Fires Support Command and Control (FSC2) Tactical Software Requirements Governance Board.

AFATDS 7.0 will be modernized using an incremental approach where capability is added to the overall baseline over the course of five (5) blocks. This approach provides the PM opportunity to deliver capabilities to users earlier in the process instead of waiting until AFATDS 7.0 is functionally complete, and also allows for feedback obtained during Product Validation Tests (PVTs) and Limited User Tests (LUTs) to be factored into later builds before the conclusion of the development contract. The overall concept behind AFATDS 7.0 is to re-build AFATDS legacy software using the latest software development technologies and methodologies to ensure a strong technical foundation is in place for continued expansion of capability (to address Long Range Precision Fires initiatives) and adoption of emerging technology initiatives, such as COE.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Army **Date:** February 2020

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
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Management Services (\$ in Millions)				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Program Management Support for AFATDS (Core)	Sub Allot	PM Mission Command (MC) : APG, MD	4.008	-		-		-		-		-	0.000	4.008	-
Program Management Support for AFATDS (Matrix)	IA	Various Matrix Orgs (Govt) : Aberdeen PG, MD	2.800	0.969		1.993		0.817		-		0.817	0.000	6.579	-
Program Management Support for AFATDS (SETA Contr)	C/FFP	CRSA : Aberdeen PG, MD	1.783	0.827		1.634		1.919	Mar 2021	-		1.919	0.000	6.163	-
Program Management Support for AFATDS (FFRDC)	FFRDC	MITRE : APG, MD	0.200	0.183		0.761		1.545		-		1.545	0.000	2.689	-
Taxes	TBD	PEO C3T : APG, MD	-	0.214		1.025		0.969		-		0.969	0.000	2.208	-
Subtotal			8.791	2.193		5.413		5.250		-		5.250	0.000	21.647	N/A

Product Development (\$ in Millions)				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Software Development of AFATDS Version 6.8.1.1	C/CPFF	Raytheon Systems Corp. : Ft. Wayne, IN	21.636	-		-		-		-		-	0.000	21.636	33.188
Software Development of AFATDS Version 7.0	C/CPFF	Leidos : Aberdeen, MD	47.272	24.096		38.317		33.290	Jul 2021	-		33.290	0.000	142.975	-
Subtotal			68.908	24.096		38.317		33.290		-		33.290	0.000	164.611	N/A

Support (\$ in Millions)				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Information Assurance and Engineering Support for AFATDS requirements	C/CPFF	CSC : Various Locations	1.060	-		-		-		-		-	0.000	1.060	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Army **Date:** February 2020

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
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Support (\$ in Millions)				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Defensive Cyber Tools (T-PKI)	TBD	TBD : TBD	1.100	-		-		-		-		-	0.000	1.100	-
Subtotal			2.160	-		-		-		-		-	0.000	2.160	N/A

Test and Evaluation (\$ in Millions)				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Government Confidence Demo for AFATDS V6.8.x requirements.	IA	Army Test & Evaluation Command (ATEC)/Fires Test Directorate (FTD) : Various Locations	0.626	-		-		-		-		-	0.000	0.626	-
Independent Verification and Validation of AFATDS V7.0 requirements	C/CPFF	Engility : Various Locations	1.538	-		0.168		0.718		-		0.718	0.000	2.424	-
Developmental Testing for AFATDS v7.0	IA	Multiple Govt Test Agencies (ATEC, ATC, EPG) : Multiple	0.750	-		-		2.113		-		2.113	0.000	2.863	-
Subtotal			2.914	-		0.168		2.831		-		2.831	0.000	5.913	N/A

	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract	
Project Cost Totals		82.773	26.289	43.898	41.371	-	41.371	0.000	194.331	N/A

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2021 Army			Date: February 2020
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 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025			
	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
V6.8.1.1 P2 Development	█																											
V6.8.1.1 P2 Customer Test		█																										
V7.0 Development Block 1	█																											
Limited Deployment Decision Block 1								▲1																				
V7.0 Development Block 2								█																				
V7.0 Product Verification Test Block 2												█																
V7.0 Independent Verification and Validation Block 2												█																
Limited Deployment Decision Block 2								▲2																				
V7.0 Development Block 3												█																
Limited Deployment Decision Block 3																▲4												
V7.0 Development Block 4												█																
Limited Deployment Decision Block 5																▲3												
V7.0 Development Block 5																				█								

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Exhibit R-4, RDT&E Schedule Profile: PB 2021 Army		Date: February 2020
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 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025			
	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
V7.0 Product Verification Test Block 3													■															
V7.0 Independent Verification and Validation Block 3													■															
V7.0 FOTE Block 3													■															
Limited Deployment Decision Block 4													▲ 5															
V7.0 Independent Verification and Validation Block 4													■															
V7.0 Product Verification Test Block 4													■															
V7.0 Limited User Test Block 4													■															

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Exhibit R-4A, RDT&E Schedule Details: PB 2021 Army		Date: February 2020
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
V6.8.1.1 P2 Development	1	2019	1	2019
V6.8.1.1 P2 Customer Test	2	2019	2	2019
V7.0 Development Block 1	1	2019	1	2021
Limited Deployment Decision Block 1	3	2020	3	2020
V7.0 Development Block 2	3	2020	1	2021
V7.0 Product Verification Test Block 2	2	2021	3	2021
V7.0 Independent Verification and Validation Block 2	1	2021	2	2021
Limited Deployment Decision Block 2	4	2020	4	2020
V7.0 Development Block 3	1	2021	4	2021
Limited Deployment Decision Block 3	4	2022	4	2022
V7.0 Development Block 4	4	2021	3	2022
Limited Deployment Decision Block 5	3	2022	3	2022
V7.0 Development Block 5	1	2023	3	2023
V7.0 Product Verification Test Block 3	4	2021	1	2022
V7.0 Independent Verification and Validation Block 3	1	2022	2	2022
V7.0 FOTE Block 3	2	2022	3	2022
Limited Deployment Decision Block 4	3	2023	3	2023
V7.0 Independent Verification and Validation Block 4	3	2022	4	2022
V7.0 Product Verification Test Block 4	4	2022	1	2023
V7.0 Limited User Test Block 4	1	2023	1	2023