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Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Army **Date:** March 2019

Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)					R-1 Program Element (Number/Name) PE 0605380A / AMF Joint Tactical Radio System (JTRS)							
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
Total Program Element	-	18.639	15.964	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	34.603
EG6: <i>Small Airborne Networking Radio (SANR)</i>	-	18.639	15.964	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	34.603

A. Mission Description and Budget Item Justification

The AMF radios are software programmable, multi-band, multi-mode, mobile ad hoc networking radios, providing simultaneous voice and data communications for Army Aviation platforms. The radios will operate in networks supporting the Common Operating Picture, Situational Awareness, and interoperability of Mission Command systems throughout the battlefield. AMF radios will ensure the Soldier's ability to communicate both horizontally and vertically via voice and data within all mission areas and Common Operating Environment. AMF radios will operate waveforms that are deployed by Joint Forces today, and will introduce networking waveforms to the Aviation community that will enable interoperability between air and ground forces and transport operational and Mission Command information through the tactical network. AMF radios will help close capability gaps by extending data networking to company and below echelons, enabling network services to the platform and connecting Army Aviation platforms to Army ground and Joint air network domains.

On 17 July 18, the Army Acquisition Executive signed both the SANR Closeout Acquisition Decision Memorandum (ADM) and SANR Termination plan. This ADM and plan initiates a program termination action and directs an orderly shutdown of the SANR program.

The SANR subprogram (Project EG6) has no approved requirement and all funding has been withdrawn in FY 2020 and beyond.

B. Program Change Summary (\$ in Millions)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Previous President's Budget	8.965	15.984	43.457	-	43.457
Current President's Budget	18.639	15.964	0.000	-	0.000
Total Adjustments	9.674	-0.020	-43.457	-	-43.457
• Congressional General Reductions	-0.007	-0.020			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	10.000	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.319	-			
• Adjustments to Budget Years	-	-	-43.457	-	-43.457

Change Summary Explanation

The SANR subprogram (Project EG6) has no approved requirement.

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COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
EG6: Small Airborne Networking Radio (SANR)	-	18.639	15.964	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	34.603
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

Prior to FY 2014, the Airborne Maritime/Fixed Station (AMF) Joint Tactical Radio System (JTRS) was funded under Navy PE 0604280N, aligned under the Navy JTRS Programs. In accordance with a July 11, 2012 Acquisition Decision Memorandum (ADM), the JTRS Program of Record transitioned to a Military Department-managed program. AMF is now managed by Program Executive Office Command, Control and Communications-Tactical, under Project Manager Tactical Radios, and funded by Army PE 0605380A. On May 2, 2014, the Milestone Decision Authority (MDA), Under Secretary of Defense for Acquisition, Technology, and Logistics, issued an ADM that designated Small Airborne Link 16 Terminal (SALT) and Small Airborne Networking Radio (SANR) as subprograms under the AMF Program. In FY 2015, Project EA9 represented the total Airborne Maritime Fixed Small Airborne (AMF-SA, or SALT) RDT&E budget. In FY 2016, funding was allocated between the SALT (Project EA9) and SANR (Project EG6) subprograms. The SANR subprogram (Project EG6) has no approved requirement and funding has been withdrawn in FY 2020 and beyond.

A. Mission Description and Budget Item Justification

Per MDA direction, AMF JTRS will procure SANR radios as Non-Developmental Items (NDI). The SANR is a two-channel, software-defined, National Security Agency Type 1 certified networking radio providing seamless real-time information for operation in mobile and dynamic combat environments that will meet tactical communications requirements as validated by the Army Aviation community. SANR will provide increased data throughput to Army Aviation platforms via advanced networking capabilities supporting Mid-Tier and Lower Tier tactical networks, and maintain Single Channel Ground and Airborne Radio System (SINCGARS) capability. SANR will replace the current SINCGARS radios on Army Aviation platforms. SANR is planned for implementation on the following platforms: Apache (AH-64E), Black Hawk (UH-60V, UH-60M, HH-60M, and MH-60M), Chinook (CH-47F and MH-47G), and Gray Eagle Unmanned Aircraft System (MQ-1C) aircraft. SANR will enhance and further enable the ability of the maneuver commander to integrate and synchronize aviation forces with land based operational forces. SANR, employed on Army aviation platforms, will enable aviation combat elements (Combat Aviation Brigades, Theater Aviation Brigades, and Special Operations Aviation Regiment) to better utilize the inherent versatility of airborne communications as a complement to the unique capabilities of the other combat arms. SANR will give commanders enhanced Situational Awareness and Mission Command in a package that provides a more responsive means of directing aircraft to match changing maneuver forces situations and missions.

On 17 July 18, the Army Acquisition Executive signed both the SANR Closeout Acquisition Decision Memorandum (ADM) and SANR Termination plan. This ADM and plan initiates a program termination action and directs an orderly shutdown of the SANR program.

The SANR subprogram (Project EG6) has no approved requirement and funding has been withdrawn in FY 2020 and beyond.

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Army		Date: March 2019		
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605380A / AMF Joint Tactical Radio System (JTRS)	Project (Number/Name) EG6 / Small Airborne Networking Radio (SANR)		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2018	FY 2019	FY 2020
Title: Small Airborne Networking Radio (SANR) Description: Small Airborne Networking Radio (SANR) FY 2019 Plans: FY 2019 provides funding necessary to conduct source selection testing and acquisition activities in support of contract award. SANR source selection efforts include evaluation of proposals (document review), test article integration and test execution for each offeror (source selection testing), and evaluation of all selection factors. The program will also continue to develop documentation to support Milestone C. These planned program activities may be influenced by the CSA Network Review and Network Cross Functional Team (CFT) review of the SANR program path forward. FY 2019 to FY 2020 Increase/Decrease Statement: The SANR subprogram (Project EG6) has no approved requirement and funding has been withdrawn in FY 2020 and beyond.		8.639	5.379	-
Title: Air-Ground Integration Experimentation Description: The Army is considering the expanded use of Link-16 to enable Army aviation to enter the joint/coalition air picture; to create low-latency, fused, air-ground pictures in the command post environment; and to provide Joint fires observers the ability to conduct jam-resistant, digital, coalition, close air support coordination. The Army will buy Link-16 handheld radios to conduct experimentation and develop concepts of operation in order to refine requirement for an objective capability. FY 2019 Plans: With FY 2019 RDTE funds, the Army will procure 160 Link-16 handheld radios to equip four brigades, enabling them to conduct experimentation and develop concepts of operation in order to refine requirement for an objective capability. FY 2019 to FY 2020 Increase/Decrease Statement: The SANR subprogram (Project EG6) has no approved requirement and funding has been withdrawn in FY 2020 and beyond.		10.000	10.000	-
Title: FY 2019 SBIR/ STTR Transfer FY 2019 Plans: Accounting for FY 2019 SBIR/ STTR Transfer FY 2019 to FY 2020 Increase/Decrease Statement: FY19 Decrease to account for SBIR/ STTR transfer		-	0.585	-
Accomplishments/Planned Programs Subtotals		18.639	15.964	-

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C. Other Program Funding Summary (\$ in Millions) N/A		
Remarks N/A		
D. Acquisition Strategy On 17 July 18, the Army Acquisition Executive signed both the SANR Closeout Acquisition Decision Memorandum (ADM) and SANR Termination plan. This ADM and plan initiates a program termination action and directs an orderly shutdown of the SANR program.		
E. Performance Metrics N/A		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Army												Date: March 2019			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605380A / AMF Joint Tactical Radio System (JTRS)						Project (Number/Name) EG6 / Small Airborne Networking Radio (SANR)			
Management Services (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
AMF-SA Business Operations Management and Support	Various	Various : Various	4.136	3.830		1.174		-		-		-	0.000	9.140	-
Subtotal			4.136	3.830		1.174		-		-		-	0.000	9.140	N/A
Product Development (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
AMF-SA - System Engineering and Requirements Validation	Various	Various : Various	2.329	2.587		2.552		-		-		-	0.000	7.468	-
AMF-SA - Air-Ground Integration Experimentation	Various	Various : Various	-	10.000		10.000		-		-		-	0.000	20.000	-
FY 2019 SBIR/ STTR Transfer	TBD	Various : Various	-	-		0.585		-		-		-	0.000	0.585	-
Subtotal			2.329	12.587		13.137		-		-		-	0.000	28.053	N/A
Support (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
AMF-SA - Logistics Support	Various	Various : Various	0.967	0.634		0.344		-		-		-	0.000	1.945	-
Subtotal			0.967	0.634		0.344		-		-		-	0.000	1.945	N/A

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Test and Evaluation (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
AMF-SA - Test and Evaluation and Test Support	Various	Various : Various	1.614	1.588		1.309		-		-		-	0.000	4.511	-
AMF-SA- WNW Demonstration	Various	Various/AWA 17.1 : EPG	3.072	-		-		-		-		-	0.000	3.072	-
Subtotal			4.686	1.588		1.309		-		-		-	0.000	7.583	N/A

	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	12.118	18.639	15.964	-	-	-	0.000	46.721	N/A

Remarks

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Appropriation/Budget Activity
2040 / 5

Project (Number/Name)
EG6 / Small Airborne Networking Radio
(SANR)

R-1 Program Element (Number/Name)
PE 0605380A / *AMF Joint Tactical Radio System (JTRS)*

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Exhibit R-4A, RDT&E Schedule Details: PB 2020 Army		Date: March 2019
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605380A / AMF Joint Tactical Radio System (JTRS)	Project (Number/Name) EG6 / Small Airborne Networking Radio (SANR)

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Procurement of Link-16 Handheld Radios	2	2018	4	2019
Experimentation and CONOPS Development	3	2018	4	2019