Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Army

Date: May 2017

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

2040: Research, Development, Test & Evaluation, Army I BA 5: System

PE 0605380A I AMF Joint Tactical Radio System (JTRS)

Development & Demonstration (SDD)

,												
COST (\$ in Millions)	Prior			FY 2018	FY 2018	FY 2018					Cost To	Total
COST (\$ III WIIIIOIIS)	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Cost
Total Program Element	-	10.143	5.028	8.965	-	8.965	44.938	25.140	9.018	0.000	Continuing	Continuing
EA9: Airborne Maritime Fixed - Small Airborne (AMF-SA)	-	2.113	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	2.113
EG6: Small Airborne Networking Radio (SANR)	-	8.030	5.028	8.965	-	8.965	44.938	25.140	9.018	0.000	Continuing	Continuing

Note

Army

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 (USD AT&L), 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.

On August 31, 2015, the SALT MDA issued an ADM tasking an orderly close out of the SALT subprogram (Project EA9). SALT subprogram close out was completed during FY 2016. Only the SANR subprogram (Project EG6) will be funded in FY 2017 and beyond under AMF JTRS.

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.

Per MDA direction, the AMF Program will procure radios as Non-Developmental Items. The MDA, USD AT&L, signed the Acquisition Program Baseline along with an ADM in May of 2014, which identified SALT (Project EA9) and SANR (Project EG6) as subprograms.

On August 31, 2015, the SALT MDA issued an ADM tasking an orderly close out of the SALT subprogram (Project EA9). SALT subprogram close out was completed during FY 2016.

PE 0605380A: AMF Joint Tactical Radio System (JTRS)

Page 1 of 7

R-1 Line #137

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Army **Date:** May 2017

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

2040: Research, Development, Test & Evaluation, Army I BA 5: System Development & Demonstration (SDD)

PE 0605380A I AMF Joint Tactical Radio System (JTRS)

R-1 Line #137

Total FY 2018 RDTE funding is \$8.965 million, all of which is allocated to SANR (Project EG6). This provides funding necessary to continue and complete source selection activities in support of contract award and continuing development of documentation to support Milestone C.

B. Program Change Summary (\$ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	11.455	5.028	35.927	-	35.927
Current President's Budget	10.143	5.028	8.965	-	8.965
Total Adjustments	-1.312	0.000	-26.962	-	-26.962
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	-	-			
 SBIR/STTR Transfer 	-1.312	-			
 Adjustments to Budget Years 	0.000	0.000	-26.962	-	-26.962

Change Summary Explanation

FY 2018 program funding was reduced by 26.962 million given contract award is now planned for 2QFY19.

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Ju	ıstification	: FY 2018 A	ırmy							Date: May	2017	
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605380A I AMF Joint Tactical Radio System (JTRS) Project (Number/Name) EA9 I Airborne Maritime Fixed - Airborne (AMF-SA)						mall
COST (\$ in Millions) Prior Years FY 2018 FY 2018 Base				FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
EA9: Airborne Maritime Fixed - Small Airborne (AMF-SA)	-	2.113	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	2.113
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.

A. Mission Description and Budget Item Justification

On August 31, 2015, the SALT MDA issued an ADM tasking an orderly close out of the SALT subprogram. The SALT subprogram was closed out during FY 2016.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018
Title: Airborne Maritime Fixed Small Airborne (AMF-SA).	2.113	-	-
Description: Airborne Maritime Fixed Small Airborne (AMF-SA) Small Airborne Link 16 Terminal (SALT)			
FY 2016 Accomplishments: FY 2016 funded PMO Support and System Engineering support. The SALT subprogram was closed out during FY 2016.			
Accomplishments/Planned Programs Subtotals	2.113	-	-

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

			FY 2018	FY 2018	FY 2018					Cost To	
Line Item	FY 2016	FY 2017	Base	OCO	<u>Total</u>	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total Cost
B90902: Airborne Maritime	-	-	-	-	-	-	-	-	-	0.000	0.000
Fire at One all Ainterna (AAAF OA)											

UNCLASSIFIED

Fixed - Small Airborne (AMF-SA)

PE 0605380A: AMF Joint Tactical Radio System (JTRS)

Army Page 3 of 7 R-1 Line #137

Exhibit R-2A, RDT&E Project	Justification: FY	2018 Army							Date: Ma	y 2017	
Appropriation/Budget Activit 2040 / 5	у			PE 06	rogram Elei 605380A / Al m (JTRS)	•	•	EA9 / Air	Number/Na borne Marit (AMF-SA)	ime) ime Fixed - Si	mall
C. Other Program Funding St	ummary (\$ in Milli	ons)									
Line Item	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost

Remarks

SALT subprogram close out was completed during FY 2016.

D. Acquisition Strategy

N/A

E. Performance Metrics

N/A

Exhibit R-2A, RDT&E Project Ju	stification	: FY 2018 A	ırmy							Date: May	2017	
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0605380A I AMF Joint Tactical Radio System (JTRS) Project (Number/Name) EG6 I Small Airborne Netwo					,	Radio				
COST (\$ in Millions) Prior Years FY 2018 FY 2017 Base					FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
EG6: Small Airborne Networking Radio (SANR)	-	8.030	5.028	8.965	-	8.965	44.938	25.140	9.018	0.000	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	_	-	-	-	-	-	-		

Note

Army

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.

Only the SANR subprogram (Project EG6) will be funded in FY 2017 and beyond under AMF JTRS.

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 the Soldier Radio Waveform (SRW) and Wideband Networking Waveform (WNW) capabilities, 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.

FY 2018 provides funding necessary to continue and complete source selection activities in support of contract award and continue development of documentation to support Milestone C.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018
Title: Small Airborne Networking Radio (SANR)	8.030	5.028	8.965

PE 0605380A: AMF Joint Tactical Radio System (JTRS)

UNCLASSIFIED
Page 5 of 7

R-1 Line #137

Exhibit R-2A, RDT&E Project Justification: FY 2018 Army			Date: N	lay 2017	
Appropriation/Budget Activity 2040 / 5			lame) ne Networkin	g Radio	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2016	FY 2017	FY 2018
Description: Small Airborne Networking Radio (SANR)					
FY 2016 Accomplishments: With FY 2016 funding, the SANR subprogram resumed acquisition the Acquisition Strategy, Capability Production Document (CPD) released a Draft Request for Proposal and conducted source selected demonstration at the Army Warfighting Assessment 17.1, in accomplishments:	and associated required documentation; developed and ection planning. The program also planned and resourced	а			
FY 2017 Plans: With FY 2017 funding, the program will continue and complete Adrevision and staffing, develop documentation to support release of selection activities in support of contract award.	• • • • • • • • • • • • • • • • • • • •				
FY 2018 Plans: With FY 2018 funding, the program will continue and complete so of contract award. SANR source selection efforts include evaluatest execution for each offeror (source selection testing), and evaluatest develop documentation to support Milestone C.	tion of proposals (document review), test article integration	and			
	Accomplishments/Planned Programs Su	btotals	8.030	5.028	8.965

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

			FY 2018	FY 2018	FY 2018					Cost To	
<u>Line Item</u>	FY 2016	FY 2017	Base	<u>000</u>	<u>Total</u>	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total Cost
• B90904: <i>JTRS (AMF) Small</i>	-	-	-	-	-	-	65.560	74.649	85.048	Continuing	Continuing

Airborne Networking Radio (SANR)

Remarks

Army

D. Acquisition Strategy

The SANR acquisition strategy is to procure small airborne networking radios for the Apache, Blackhawk, Chinook, and Gray Eagle aircraft. SANR will be capable of operating the SRW, WNW, and SINCGARS waveforms. SANR will replace Army Aviation platform SINCGARS ARC-201D radios. The SANR acquisition strategy employs full and open competition using an NDI procurement approach that leverages prior industry and Government investment in software-defined radios. The strategy supports a concept in which NDI radios can be selected from a qualified vendor that meet the AMF SANR CPD requirements.

PE 0605380A: AMF Joint Tactical Radio System (JTRS)

UNCLASSIFIED
Page 6 of 7

R-1 Line #137

Exhibit R-2A, RDT&E Project Justification: FY 2018 Arr	Date: May 2017	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605380A I AMF Joint Tactical Radio System (JTRS)	Project (Number/Name) EG6 I Small Airborne Networking Radio (SANR)
E. Performance Metrics N/A		

PE 0605380A: *AMF Joint Tactical Radio System (JTRS)* Army