Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Army

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

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

PE 0605380A: Airborne Maritime Fixed Small Airborne (AMF-SA)

,												
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	-	0.000	0.000	33.219	-	33.219	64.574	21.415	5.100	0.000	Continuing	Continuing
EA9: Airborne Maritime Fixed Small Airborne (AMF-SA)	-	0.000	0.000	33.219	-	33.219	64.574	21.415	5.100	0.000	Continuing	Continuing

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

Note

In FY 2014-FY 2017, Project No. EA9 represents the total Airborne Maritime/Fixed Station Joint Tactical Radio Systems (AMF JTRS) RDT&E budget for those years. In FY 2014, RDT&E funding for AMF JTRS transitions from a Navy Program Element (PE) 0604280N to Army PE 0605380A.

A. Mission Description and Budget Item Justification

The Airborne & Maritime/Fixed Station Joint Tactical Radio System (AMF JTRS) radios are software programmable, multi-band, multi-mode, mobile ad hoc networking radios, providing simultaneous voice, data, and video communications. The radios will operate in networks supporting the Common Operational Picture, situational awareness, and interoperability of Mission Command (MC) systems throughout the battlefield. AMF JTRS must ensure the Warfighter's ability to communicate both horizontally and vertically via voice and data within all mission areas and Combat Operational Environments. AMF JTRS helps 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 Milestone Decision Authority (MDA) direction, the redefined AMF JTRS Program will procure radios as Non-Developmental Items (NDI).

AMF JTRS will operate networking waveforms and select waveforms that are widely deployed by Joint Forces today, enable interoperability between different types of platforms, and transport operational and MC information through the tactical network to joint network member nodes. The system will also reach back to access Global Information Grid (GIG) services, where required. The need for interoperable systems, including common waveforms, software applications, and network operations is critical to the mobile tactical network capability. AMF JTRS is relevant to the Joint Functional Concept (Net-Centric Environment), Joint Operating Concept (Major Combat Operations, Stability Operations), and JTRS Concept of Operations (Tactical Wireless Joint Networks). AMF JTRS shall support and enhance three principal Warfighter outcomes: Information Superiority, Joint Force Interoperability, and Networking.

^{##} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Army

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 5: System Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0605380A: Airborne Maritime Fixed Small Airborne (AMF-SA)

B. Program Change Summary (\$ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	0.000	0.000	0.000	-	0.000
Current President's Budget	0.000	0.000	33.219	-	33.219
Total Adjustments	0.000	0.000	33.219	-	33.219
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	-	-			
SBIR/STTR Transfer	-	-			
 Adjustments to Budget Years 	-	-	33.219	-	33.219

Exhibit R-2A, RDT&E Project Ju	ustification	: PB 2014 A	\rmy							DATE: Apr	il 2013	
APPROPRIATION/BUDGET AC 2040: Research, Development, To BA 5: System Development & De	PE 060538	NOMENCLA 30A: Airborr orne (AMF-	ne Maritime	T orne Maritime Fixed Small (AMF-SA)								
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
EA9: Airborne Maritime Fixed Small Airborne (AMF-SA)	-	0.000	0.000	33.219	-	33.219	64.574	21.415	5.100	0.000	Continuing	Continuing
Quantity of RDT&E Articles												

^{*}FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

Note

In FY 2014-FY 2017, Project No. EA9 represents the total Airborne Maritime/Fixed Station Joint Tactical Radio Systems (AMF JTRS) RDT&E budget for those years. In FY 2014, RDT&E funding for AMF JTRS transitions from a Navy Program Element (PE) 0604280N to Army PE 0605380A.

A. Mission Description and Budget Item Justification

The Airborne & Maritime/Fixed Station Joint Tactical Radio System (AMF JTRS) radios are software programmable, multi-band, multi-mode, mobile ad hoc networking radios, providing simultaneous voice, data, and video communications. The radios will operate in networks supporting the Common Operational Picture, situational awareness, and interoperability of Mission Command (MC) systems throughout the battlefield. AMF JTRS must ensure the Warfighter's ability to communicate both horizontally and vertically via voice and data within all mission areas and Combat Operational Environments. AMF JTRS helps 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 Milestone Decision Authority (MDA) direction, the redefined AMF JTRS Program will procure radios as Non-Developmental Items (NDI).

AMF JTRS will operate networking waveforms and select waveforms that are widely deployed by Joint Forces today, enable interoperability between different types of platforms, and transport operational and MC information through the tactical network to joint network member nodes. The system will also reach back to access Global Information Grid (GIG) services, where required. The need for interoperable systems, including common waveforms, software applications, and network operations is critical to the mobile tactical network capability. AMF JTRS is relevant to the Joint Functional Concept (Net-Centric Environment), Joint Operating Concept (Net-Centric Operational Environment), Joint Operating Concept (Major Combat Operations, Stability Operations), and JTRS Concept of Operations (Tactical Wireless Joint Networks). AMF JTRS shall support and enhance three principal Warfighter outcomes: Information Superiority, Joint Force Interoperability, and Networking.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2012	FY 2013	FY 2014
<i>Title:</i> In FY 2014-2017, Project No. EA9 represents the total Airborne Maritime/Fixed Station Joint Tactical Radio Systems (AMF JTRS) RDT&E budget for those years.	0.000	0.000	33.219
Description: The Airborne & Maritime/Fixed Station Joint Tactical Radio System (AMF JTRS) radios are software programmable, multi-band, multi-mode, mobile ad hoc networking radios, providing simultaneous voice, data, and video communications. The radios will operate in networks supporting the Common Operational Picture, situational awareness, and interoperability of Mission Command (MC) systems throughout the battlefield. AMF JTRS must ensure the Warfighter's ability to communicate both			

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^{##} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army			DATE: /	April 2013			
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	-				
2040: Research, Development, Test & Evaluation, Army	PE 0605380A: Airborne Maritime Fixed	EA9: Airborne Maritime Fixed Small					
BA 5: System Development & Demonstration (SDD)	Small Airborne (AMF-SA)	Airborne (AMF-SA)				
B. Accomplishments/Planned Programs (\$ in Millions)		F	/ 2012	FY 2013	FY 2014		
horizontally and vertically via voice and data within all mission areas and Comclose capability gaps by extending data networking to company and below ecand connecting Army Aviation platforms to Army ground and Joint air network direction, the redefined AMF JTRS Program will procure radios as Non-Devel AMF JTRS will operate networking waveforms and select waveforms that are interoperability between different types of platforms, and transport operational joint network member nodes. The system will also reach back to access Glob The need for interoperable systems, including common waveforms, software to the mobile tactical network capability. AMF JTRS is relevant to the Joint Fu Joint Integrating Concept (Net-Centric Operational Environment), Joint Opera Operations), and JTRS Concept of Operations (Tactical Wireless Joint Netwo principal Warfighter outcomes: Information Superiority, Joint Force Interopera	nelons, enabling network services to the platform domains. Per Milestone Decision Authority (MD opmental Items (NDI). widely deployed by Joint Forces today, enable and MC information through the tactical networmal Information Grid (GIG) services, where require applications, and network operations is critical netional Concept (Net-Centric Environment), ting Concept (Major Combat Operations, Stabilityks). AMF JTRS shall support and enhance thre	n DA) k to ed.					
FY 2014 Plans: Conduct Source Selections for a Link 16 radio (Small Airborne Link 16 Termir capability radio (Small Airborne Networking Radio [SANR]). Conduct Program Integration and Test units. Award post-Milestone C contracts for the SALT ratest to support Operational Assessment, as well as SALT radio Low Rate Init Block III helicopter Follow-on Operational Test & Evaluation (FOT&E) to suppexternal agencies (e.g., Army Test and Evaluation Command [ATEC], Joint In and Doctrine Command [TRADOC]) to support program test & evaluation and	n Support Review (PSR) for the Networking Rac dio units and SANR radio units for Integration ar ial Production (LRIP) units. Leverage Apache ort Operational Assessment of SALT radio. Fur teroperability Test Command [JITC], and Trainin	dio nd					
	Accomplishments/Planned Programs Subt	otals	0.000	0.000	33.219		
C. Other Program Funding Summary (\$ in Millions)			'	·			

			FY 2014	FY 2014	FY 2014					COST 10	
<u>Line Item</u>	FY 2012	FY 2013	Base	<u>000</u>	<u>Total</u>	FY 2015	FY 2016	FY 2017	FY 2018	Complete	Total Cost
• B90110: <i>B90110 JTRS (AMF)</i>		74.041				8.808	164.977	153.677	160.810	0.000	562.313

Remarks

D. Acquisition Strategy

PE 0605380A: Airborne Maritime Fixed Small Airborne (AMF-SA)

AMF JTRS underwent a program restructure in accordance with Milestone Decision Authority (MDA) direction. The program is revising its material solution strategy to leverage commercially available Non-Developmental Item (NDI) tactical radios in order to rapidly deliver AMF JTRS capabilities to the warfighter. The strategy will

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Army		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
2040: Research, Development, Test & Evaluation, Army	PE 0605380A: Airborne Maritime Fixed	EA9: Airborne Maritime Fixed Small
BA 5: System Development & Demonstration (SDD)	Small Airborne (AMF-SA)	Airborne (AMF-SA)
support a concept in which NDI radios can be selected from the veradios for Airborne platforms, one with Link 16 (Small Airborne Lin Networking Radio [SANR]). Maritime/Fixed Station sites will not be	k 16 Terminal [SALT]) and another with wideband netw	
E. Performance Metrics		
Performance metrics used in the preparation of this justification ma	aterial may be found in the FY 2010 Army Performance	e Budget Justification Book, dated May 2010.

PE 0605380A: Airborne Maritime Fixed Small Airborne (AMF-SA) Army

DATE: April 2013 Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 2040: Research, Development, Test & Evaluation, Army PE 0605380A: Airborne Maritime Fixed EA9: Airborne Maritime Fixed Small BA 5: System Development & Demonstration (SDD) Small Airborne (AMF-SA) Airborne (AMF-SA) FY 2014 FY 2014 FY 2014 Management Services (\$ in Millions) FY 2012 FY 2013 Base oco Total Contract Target Method Performing All Prior Award Award Award Award **Cost To** Total Value of & Type **Cost Category Item** Activity & Location Years Cost Date Date Cost Date Cost Date Complete Cost Contract Cost Cost AMF Business Operations TBD Various:Various 0.000 7.998 Oct 2013 7.998 0.000 7.998 0.000 Management and Support Subtotal 0.000 0.000 0.000 7.998 0.000 7.998 0.000 7.998 0.000 FY 2014 FY 2014 FY 2014 **Product Development (\$ in Millions)** FY 2012 FY 2013 Base oco Total Contract Target Award Method Performing All Prior Award Award Award Cost To Total Value of **Cost Category Item** & Type Activity & Location Years Cost Date Cost Date Cost Date Cost Date Cost Complete Cost Contract AMF JTRS - System Engineering and WR Various:Various 0.000 Oct 2013 3.511 0.000 3.511 0.000 3.511 Requirements Validation AMF JTRS - NDI 0.000 0.000 14.420 Integration and **TBD** Various:Various 14.420 Jul 2014 14.420 0.000 Certification Subtotal 0.000 0.000 0.000 17.931 0.000 17.931 0.000 17.931 0.000 FY 2014 FY 2014 FY 2014 Support (\$ in Millions) FY 2012 FY 2013 Base oco Total Contract Target Method Performing All Prior Award Award Award Cost To Total Value of Award **Cost Category Item** & Type **Activity & Location** Years Cost Date Cost Date Cost Date Cost Date Cost Complete Cost Contract AMF JTRS - Integrated WR Various: Various 0.000 1.646 Oct 2013 0.000 0.000 1.646 1.646 Logistics Support Subtotal 0.000 0.000 0.000 1.646 0.000 1.646 0.000 1 646 0.000 FY 2014 FY 2014 FY 2014 Test and Evaluation (\$ in Millions) FY 2012 FY 2013 Base oco Total Contract Target Method Performing All Prior Award Award Cost To Value of Award Award Total Cost Category Item & Type Activity & Location Years Cost Date Cost Date Cost Date Cost Date Cost Complete Cost Contract AMF JTRS - Test and WR 0.000 Oct 2013 5.644 0.000 5.644 0.000 **Evaluation and Test** Various:Various 5 644 Support

PE 0605380A: Airborne Maritime Fixed Small Airborne (AMF-SA) Army

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R-1 Line #121

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army

R-1 ITEM NOMENCLATURE PROJECT

APPROPRIATION/BUDGET ACTIVITY

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

PE 0605380A: Airborne Maritime Fixed Small Airborne (AMF-SA)

EA9: Airborne Maritime Fixed Small

DATE: April 2013

Airborne (AMF-SA)

Test and Evaluation	(\$ in Milli	ons)		FY 2	2012	FY 2	2013		2014 ise		2014 CO	FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	0.000	0.000		0.000		5.644		0.000		5.644	0.000	5.644	0.000
			All Prior Years	FY 2	2012	FY 2	2013		2014 ise	FY 2	2014 CO	FY 2014 Total	Cost To	Total Cost	Target Value of Contract
		Project Cost Totals	0.000	0.000		0.000		33.219		0.000		33.219	0.000	33.219	0.000

Remarks

ibit R-4, RDT&E Schedule Profile: PB 2014	Army																I	DATE	:: A	pril 20	013		
PROPRIATION/BUDGET ACTIVITY D: Research, Development, Test & Evaluation,	Army							NOM I 80A: <i>A</i>					ivod	1		OJE		no M	oriti	me F	ivad	Smal	ı
5: System Development & Demonstration (SDI								porne (iiiie ri	xeu		I .			MF-S		ine r	ixeu ·	Siliai	
	F	Y 2012	,	FY	2013	3	F	Y 2014	4		FY 2	015		FY	2016			FY 20	117		FY	2018	3
		2 3		1 2	_			2 3	_	1		3 4	. 1	1 2		1	1		3	4	1 2		4
Milestone C																							
Small Airborne Link 16 Terminal (SALT) Full Rate Production (FRP)																							-
Program Support Review (Small Airborne Networking Radio [SANR] LRIP)																							
Program Support Review (SANR FRP)																							_
nitial Operational Capability																							

PE 0605380A: Airborne Maritime Fixed Small Airborne (AMF-SA) Army

DATE: April 2013 Exhibit R-4A, RDT&E Schedule Details: PB 2014 Army

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE **PROJECT**

2040: Research, Development, Test & Evaluation, Army PE 0605380A: Airborne Maritime Fixed EA9: Airborne Maritime Fixed Small BA 5: System Development & Demonstration (SDD)

Small Airborne (AMF-SA) Airborne (AMF-SA)

Schedule Details

	St	art	E	nd
Events	Quarter	Year	Quarter	Year
Milestone C	3	2014	3	2014
Small Airborne Link 16 Terminal (SALT) Full Rate Production (FRP)	3	2016	3	2016
Program Support Review (Small Airborne Networking Radio [SANR] LRIP)	1	2016	1	2016
Program Support Review (SANR FRP)	3	2017	3	2017
Initial Operational Capability	3	2018	3	2018