Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-421

Airborne & Maritime/Fixed Station Joint Tactical Radio System (AMF JTRS)

As of FY 2015 President's Budget

Defense Acquisition Management
Information Retrieval
(DAMIR)

Report Documentation Page

Form Approved
OMB No. 0704-0188

1. REPORT DATE	2. REPORT TYPE	3. DATES COVERED
DEC 2013		**00-00-2013 to 00-00-2013**

4. TITLE AND SUBTITLE	5a. CONTRACT NUMBER
Airborne & Maritime/Fixed Station Joint Tactical Radio System (AMFJTRS)	5b. GRANT NUMBER
	5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S)	5d. PROJECT NUMBER
	5e. TASK NUMBER
	5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) **U. S. Army,Aberdeen Proving Ground,Aberdeen,,MD,21005**	8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S)
	11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT
Approved for public release; distribution unlimited

13. SUPPLEMENTARY NOTES
Selected Acquisition Report-SAR

14. ABSTRACT

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT **unclassified**	b. ABSTRACT **unclassified**	c. THIS PAGE **unclassified**	**Same as Report (SAR)**	**36**	

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Common Acronyms and Abbreviations

Acq O&M - Acquisition-Related Operations and Maintenance
APB - Acquisition Program Baseline
APPN - Appropriation
APUC - Average Procurement Unit Cost
BA - Budget Authority/Budget Activity
BY - Base Year
DAMIR - Defense Acquisition Management Information Retrieval
Dev Est - Development Estimate
DoD - Department of Defense
DSN - Defense Switched Network
Econ - Economic
Eng - Engineering
Est - Estimating
FMS - Foreign Military Sales
FY - Fiscal Year
IOC - Initial Operational Capability
$K - Thousands of Dollars
LRIP - Low Rate Initial Production
$M - Millions of Dollars
MILCON - Military Construction
N/A - Not Applicable
O&S - Operating and Support
Oth - Other
PAUC - Program Acquisition Unit Cost
PB - President's Budget
PE - Program Element
Proc - Procurement
Prod Est - Production Estimate
QR - Quantity Related
Qty - Quantity
RDT&E - Research, Development, Test, and Evaluation
SAR - Selected Acquisition Report
Sch - Schedule
Spt - Support
TBD - To Be Determined
TY - Then Year
UCR - Unit Cost Reporting

Program Information

Program Name

Airborne & Maritime/Fixed Station Joint Tactical Radio System (AMF JTRS)

DoD Component

Army

Army is the lead Component per Secretary of Defense Memo dated August 31, 2009. There is no other Service or Joint participation.

Responsible Office

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References

SAR Baseline (Development Estimate)

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated October 14, 2008

Approved APB

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated October 14, 2008

Mission and Description

Airborne & Maritime/Fixed Station Joint Tactical Radio System (AMF JTRS) products are software programmable, multi-band, multi-mode, mobile ad hoc networking radios, providing simultaneous voice, data, and video communications for Army aviation platforms. The radios will operate in networks supporting the Common Operational Picture, situational awareness, and interoperability of Mission Command systems throughout the battlefield. AMF JTRS must ensure the soldier'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 echelons and below, enabling network services to the platform and connecting Army Aviation platforms to Army ground and Joint air network domains. Per Milestone Decision Authority direction, the restructured AMF JTRS Program will procure radios as Non-Developmental Items (NDI).

AMF JTRS will provide two types of NDI radios: the Small Airborne Networking Radio (SANR) and the Small Airborne Link 16 Terminal (SALT). The fielding of SANR will follow the deployment of ground network capabilities. The SANR radio will provide Soldier Radio Waveform (SRW), Single Channel Ground and Airborne Radio System and the Wideband Networking Waveform capability for Army Aviation platforms. SALT will address Joint airborne Link 16 and SRW network requirements by providing Link 16 and SRW capability to the Army Apache aircraft.

Executive Summary

The AMF JTRS program was restructured in accordance with Milestone Decision Authority (MDA) Acquisition Decision Memoranda (ADM) dated September 12, 2011, May 7, 2012, and July 11, 2012. The July 2012 ADM approved a Non-Developmental Item (NDI) acquisition approach leveraging previous industry investment in tactical radio technology. The restructured AMF JTRS program will procure two NDI radios to meet user needs. The Small Airborne Link 16 Terminal (SALT) radio, will possess Link 16 and Soldier Radio Waveform (SRW) capability. The Small Airborne Networking Radio (SANR) will provide a multi-channel software-defined radio that will support two simultaneous waveform operations consisting of either a Single Channel Ground and Airborne Radio System, SRW, or Wideband Networking Waveform to interoperate with ground forces and maintain connectivity for combat operations.

The MDA has approved an Army Acquisition Executive request to satisfy program requirements with the SALT and SANR radio products. Congressional notification of the Department's intent to establish subprograms for this purpose was issued on July 29, 2013. Initial funding within the SANR program will be used to conduct market research until funding within the Future Years Defense Program (FYDP) (FY 2016 - FY 2020) is restored.

AMF JTRS is currently in the pre-solicitation stage for the SALT procurement. AMF JTRS is developing pre-award documentation in anticipation of an AMF SALT Request for Proposals release in 3rd Quarter FY 2014. The SANR solicitation activities are being reassessed as a result of FY 2015 PB controls.

AMF JTRS, in the anticipation of splitting the program into subprograms, has developed two Acquisition Strategies (AS). The SALT AS is in staffing at the Office of the Assistant Secretary of the Army for Acquisition, Logistics and Technology and is awaiting further guidance before obtaining approval. The SALT AS is expected to be approved in FY 2014. The SANR AS is currently on hold pending restoration of funds.

The SALT solicitation is full and open competition. The SALT NDI procurement is a C-Type (definitive quantity contract) to be awarded to a single vendor. The contract is planned to be comprised of one base year with three options. SANR contract efforts will resume upon restoration of funding within the FYDP (FY 2016 - FY 2020).

On August 20, 2013, a change of charter occurred in which Colonel Russ Wygal assumed command replacing Captain Nigel Nurse. On August 22, 2013, a change of responsibility occurred with Lieutenant Colonel Marcus Varnadore assuming the duties and position of Product Manager of AMF JTRS.

There are no significant software-related issues with this program at this time.

Threshold Breaches

APB Breaches		
Schedule		☑
Performance		☐
Cost	RDT&E	☐
	Procurement	☐
	MILCON	☐
	Acq O&M	☐
O&S Cost		☐
Unit Cost	PAUC	☐
	APUC	☐

Nunn-McCurdy Breaches		
Current UCR Baseline		
	PAUC	None
	APUC	None
Original UCR Baseline		
	PAUC	None
	APUC	None

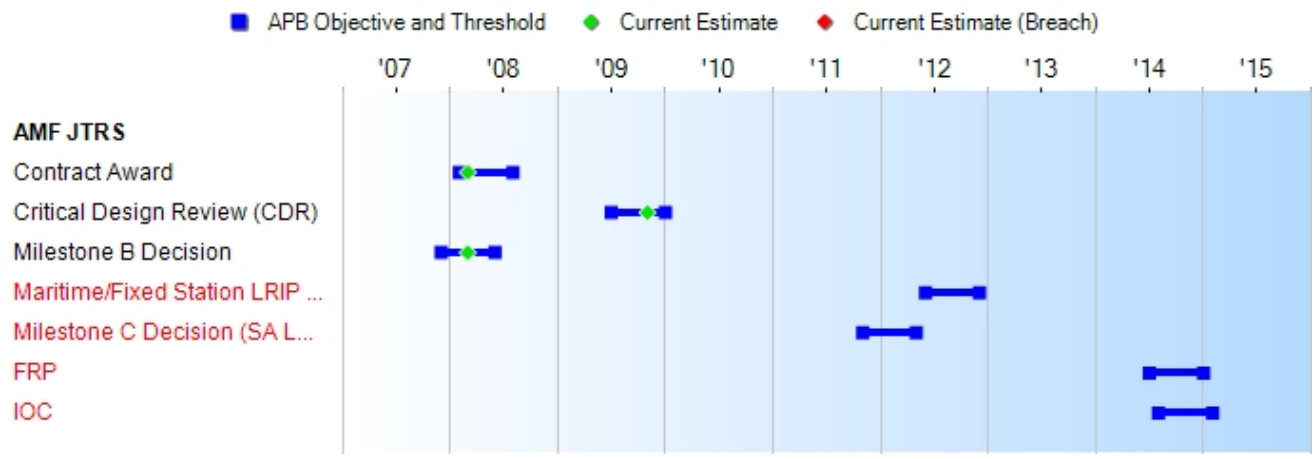
Explanation of Breach

The Maritime/Fixed Station LRIP authorization schedule breach was previously reported in the December 2011 SAR and the Exception SAR in September 2012.

The dates in the current APB are no longer applicable. The breaches to the Milestone C Decision, the Full Rate Production and IOC are due to the restructuring of the program from the System Development and Demonstration contract supporting Army, Air Force and Navy platforms to a Non-Developmental Item procurement approach to support Army Aviation platforms only.

An updated proposed APB is pending to rectify the current schedule breach in the system.

Schedule



Milestones	SAR Baseline Dev Est	Current APB Development Objective/Threshold		Current Estimate
Contract Award	FEB 2008	FEB 2008	AUG 2008	MAR 2008
Critical Design Review (CDR)	JUL 2009	JUL 2009	JAN 2010	NOV 2009
Milestone B Decision	DEC 2007	DEC 2007	JUN 2008	MAR 2008
Maritime/Fixed Station LRIP Authorization	JUN 2012	JUN 2012	DEC 2012	N/A [1]
Milestone C Decision (SA LRIP Authorization)	NOV 2011	NOV 2011	MAY 2012	N/A [1]
FRP	JUL 2014	JUL 2014	JAN 2015	N/A [1]
IOC	AUG 2014	AUG 2014	FEB 2015	N/A [1]

[1] *APB Breach*

Change Explanations

None

Memo

The current APB baseline schedule is out of date. Per MDA direction, the Program Office acquisition strategy has been restructured. The restructured strategy is to procure two variations of NDI radios for Airborne platforms. Maritime/Fixed station sites will not be part of the revised procurement.

The breaches to the Milestone C Decision, FRP and IOC are due to the restructuring of the program from the System Development and Demonstration contract supporting Army, Air Force and Navy platforms to an NDI procurement approach to support Army Aviation platforms only.

An updated proposed APB is pending to rectify the current schedule breach in the system.

Acronyms and Abbreviations

CDR - Critical Design Review
FRP - Full Rate Production
MDA - Milestone Decision Authority
NDI - Non-Developmental Items
SA - Small Airborne

Performance

Characteristics	SAR Baseline Dev Est	Current APB Development Objective/Threshold		Demonstrated Performance	Current Estimate	
Have an internal Growth Capability	Open system architecture IAW DISR; Modular, Scaleable, Flexible Form Factors	Open system architecture IAW DISR; Modular, Scaleable, Flexible Form Factors	Open system architecture IAW DISR; Modular, Scaleable, Flexible Form Factors	TBD	Non Applicable.	(Ch-1)
JTR Set modes/capabilities configuration and reconfiguration via software	By operators in their operational environment	By operators in their operational environment	By operators in their operational environment	TBD	Non Applicable.	(Ch-1)
Multi-channel routing and retransmission	Objective waveforms that are in the same mode (voice, data, or video) and use like data rates and operate at permissible security classification levels.	Objective waveforms that are in the same mode (voice, data, or video) and use like data rates and operate at permissible security classification levels.	KPP waveforms that are same in mode (voice, data, or video) and use like data rates and operate at permissible security classification levels.	TBD	Non Applicable.	(Ch-1)
Support Waveforms	Maritime/Fixed; Same as Threshold Small Airborne: Threshold plus UHF SATCOM, SINCGARS, Havequick II, EPLRS	Maritime/Fixed; Same as Threshold Small Airborne: Threshold plus UHF SATCOM, SINCGARS, Havequick II, EPLRS	Maritime/Fixed: UHF SATCOM, MUOS Small Airborne: MUOS, SRW, WNW, Link 16	TBD	Non Applicable.	(Ch-1)
Operate on designated number of channels at the same time.	Airborne 10 Channels Martime/Fixed (full duplex) 10	Airborne 10 Channels Maritime/Fixed (full duplex) 10	Airborne 2 channels Maritime/Fixed (full duplex) 4	TBD	Non Applicable.	(Ch-1)

	Channels	Channels	channels			
Scaleable Networking services	All Domains.	All Domains.	All Domains	TBD	Non Applicable.	(Ch-1)
Network extension/coverage.	Across organization-al boundar-ies.	Across organization-al boundar-ies.	Across organization-al boundar-ies.	TBD	Non Applicable.	(Ch-1)
JTR System network interoperability.	Interoperate with Allied/ Coalition and commercial networks; satisfy 100% of top-level IERs.	Interoperate with Allied/ Coalition and commercial networks; satisfy 100% of top-level IERs.	Interoperate with Service and Joint networks; satisfy 100% of critical top-level IERs.	TBD	Non Applicable.	(Ch-1)
Operational Availability A(o)	0.99 (channel)	0.99 (channel)	0.96 (channel)	TBD	Non Applicable.	(Ch-1)

Requirements Source

Operational Requirements Document (ORD) 3.2.1 dated August 28, 2006

Change Explanations

(Ch-1) The current APB is no longer valid. Per MDA direction, the Program Office acquisition strategy has been restructured to procure radios as Non-Developmental Items.

Memo

The current APB represents the Milestone B Acquisition Strategy. A revised CPD is currently in staffing with Training & Doctrine Command and Army Capabilities Integration Center. The Program Office anticipates that a subset of the approved KPPs will apply to the approved CPD. The CPD is currently in formal routing and is expected to be approved in 1st Quarter FY 2015.

An updated proposed APB is pending to rectify the current schedule breach in the system.

Acronyms and Abbreviations

A(o) - Operational Availability
CPD - Capability Production Document
DISR - DoD Information Technology (IT) Standards Registry
EPLRS - Enhanced Position Location Reporting System
IAW - In Accordance With
IER - Information Exchange Requirement
JTR - Joint Tactical Radio
KPP - Key Performance Parameter
MDA - Milestone Decision Authority
MUOS - Mobile User Objective System
ORD - Operational Requirements Document
SATCOM - Satellite Communication
SINCGARS - Single Channel Ground and Airborne Radio System
SRW - Soldier Radio Waveform
UHF - Ultra High Frequency
WNW - Wideband Networking Waveform

Track to Budget

General Memo

Starting in FY 2014, all AMF JTRS RDT&E funding resides in Army PE 0605380A.

RDT&E

Appn		BA	PE		
Navy	1319	05	0604280N		
	Project		**Name**		
	3073		AMF JTRS	(Shared)	(Sunk)
Army	2040	05	0604280A		
	Project		**Name**		
	162		Joint Tactical Radio / Network Enterprise Domain	(Shared)	(Sunk)
Army	2040	05	0605380A		
	Project		**Name**		
	EA9		Airborne Maritime Fixed Small Airborne (AMF-SA)		
Air Force	3600	05	0604280F		
	Project		**Name**		
	655068		Joint Tactical Radio System (JTRS)	(Shared)	(Sunk)

Procurement

Appn		BA	PE
Army	2035	02	0204380A
	Line Item		**Name**
	B90902		AMF JTRS

The parent Line Item for the AMF JTRS procurement (B90902) is B90900.

Cost and Funding

Cost Summary

Total Acquisition Cost and Quantity

	BY2008 $M			BY2008 $M	TY $M		
Appropriation	SAR Baseline Dev Est	Current APB Development Objective/Threshold		Current Estimate	SAR Baseline Dev Est	Current APB Development Objective	Current Estimate
RDT&E	1850.7	1850.7	2035.8	1500.6	1941.8	1941.8	1554.9
Procurement	5907.9	5907.9	6498.7	1619.9	7092.5	7092.5	2399.9
Flyaway	--	--	--	1334.2	--	--	1981.6
Recurring	--	--	--	1334.2	--	--	1981.6
Non Recurring	--	--	--	0.0	--	--	0.0
Support	--	--	--	285.7	--	--	418.3
Other Support	--	--	--	163.3	--	--	235.5
Initial Spares	--	--	--	122.4	--	--	182.8
MILCON	0.0	0.0	--	0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0	--	0.0	0.0	0.0	0.0
Total	7758.6	7758.6	N/A	3120.5	9034.3	9034.3	3954.8

Costs do not reflect platform installation and integration funding. Army requirements by platform and year, including installation and integration of the AMF JTRS on host platforms, are documented separately.

Quantity	SAR Baseline Dev Est	Current APB Development	Current Estimate
RDT&E	224	224	212
Procurement	26878	26878	15440
Total	27102	27102	15652

Fielding plan and procurement funding are based on current Army requirements of 690 Small Airborne Link 16 Terminals (SALT) (1,380 channels) and 7,030 Small Airborne Networking Radios (SANR) (14,060 channels) for a total of 7,720 AMF JTRS radios (15,440 channels).

RDT&E unit quantities of 20 SALT and 192 SANR channels reflect planned deliveries to the Army for integration onto platforms. These numbers do not include units required for testing.

AMF JTRS PAUC and APUC measures are per channel. Quantities are channels with the assumption of two channels per radio.

Cost and Funding

Funding Summary

Appropriation and Quantity Summary
FY2015 President's Budget / December 2013 SAR (TY$ M)

Appropriation	Prior	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	To Complete	Total
RDT&E	1425.3	10.2	6.9	12.3	0.0	0.0	0.0	100.2	1554.9
Procurement	0.0	0.0	0.0	15.5	23.7	19.0	20.0	2321.7	2399.9
MILCON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PB 2015 Total	1425.3	10.2	6.9	27.8	23.7	19.0	20.0	2421.9	3954.8
PB 2014 Total	1682.4	33.2	73.4	186.4	158.8	160.8	219.5	1245.4	3759.9
Delta	-257.1	-23.0	-66.5	-158.6	-135.1	-141.8	-199.5	1176.5	194.9

Small Airborne Networking Radio funding and quantities are deferred beyond the Future Years Defense Program FY 2015 - FY 2019.

Quantity	Undistributed	Prior	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	To Complete	Total
Development	212	0	0	0	0	0	0	0	0	212
Production	0	0	0	0	48	96	56	48	15192	15440
PB 2015 Total	212	0	0	0	48	96	56	48	15192	15652
PB 2014 Total	212	220	0	48	1598	1188	1204	1924	9258	15652
Delta	0	-220	0	-48	-1550	-1092	-1148	-1876	5934	0

Cost and Funding

Annual Funding By Appropriation

Annual Funding TY$
1319 | RDT&E | Research, Development, Test, and Evaluation, Navy

Fiscal Year	Quantity	End Item Recurring Flyaway TY $M	Non End Item Recurring Flyaway TY $M	Non Recurring Flyaway TY $M	Total Flyaway TY $M	Total Support TY $M	Total Program TY $M
2003	--	--	--	--	--	--	8.4
2004	--	--	--	--	--	--	43.0
2005	--	--	--	--	--	--	54.3
2006	--	--	--	--	--	--	55.9
2007	--	--	--	--	--	--	56.3
2008	--	--	--	--	--	--	99.8
2009	--	--	--	--	--	--	212.6
2010	--	--	--	--	--	--	304.7
2011	--	--	--	--	--	--	304.8
2012	--	--	--	--	--	--	122.2
2013	--	--	--	--	--	--	9.2
Subtotal	**--**	**--**	**--**	**--**	**--**	**--**	**1271.2**

Annual Funding BY$
1319 | RDT&E | Research, Development, Test, and Evaluation, Navy

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2008 $M	Non End Item Recurring Flyaway BY 2008 $M	Non Recurring Flyaway BY 2008 $M	Total Flyaway BY 2008 $M	Total Support BY 2008 $M	Total Program BY 2008 $M
2003	--	--	--	--	--	--	9.4
2004	--	--	--	--	--	--	47.0
2005	--	--	--	--	--	--	57.8
2006	--	--	--	--	--	--	57.7
2007	--	--	--	--	--	--	56.7
2008	--	--	--	--	--	--	98.8
2009	--	--	--	--	--	--	207.7
2010	--	--	--	--	--	--	293.3
2011	--	--	--	--	--	--	286.4
2012	--	--	--	--	--	--	112.9
2013	--	--	--	--	--	--	8.4
Subtotal	**--**	**--**	**--**	**--**	**--**	**--**	**1236.1**

Twenty-six Small Airborne Channels previously reported as delivered under the System Development and Demonstration contract, which has since been closed out as directed in the May 7, 2012 Acquisition Decision Memorandum cannot be considered "fully-configured" and are not included in our current RDT&E quantities.

All RDT&E funding and associated channels prior to FY 2014 were transferred to Navy PE 0604280N in each execution year, consistent with the JTRS Joint Program Acquisition Strategy. Starting in FY 2014, all AMF JTRS RDT&E funding resides in Army PE 0605380A.

Annual Funding TY$
3600 | RDT&E | Research, Development, Test, and Evaluation, Air Force

Fiscal Year	Quantity	End Item Recurring Flyaway TY $M	Non End Item Recurring Flyaway TY $M	Non Recurring Flyaway TY $M	Total Flyaway TY $M	Total Support TY $M	Total Program TY $M
2003	--	--	--	--	--	--	12.8
2004	--	--	--	--	--	--	28.1
2005	--	--	--	--	--	--	36.1
2006	--	--	--	--	--	--	77.1
Subtotal	**--**	**--**	**--**	**--**	**--**	**--**	**154.1**

Annual Funding BY$
3600 | RDT&E | Research, Development, Test, and Evaluation, Air Force

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2008 $M	Non End Item Recurring Flyaway BY 2008 $M	Non Recurring Flyaway BY 2008 $M	Total Flyaway BY 2008 $M	Total Support BY 2008 $M	Total Program BY 2008 $M
2003	--	--	--	--	--	--	14.4
2004	--	--	--	--	--	--	30.8
2005	--	--	--	--	--	--	38.6
2006	--	--	--	--	--	--	80.0
Subtotal	**--**	**--**	**--**	**--**	**--**	**--**	**163.8**

Annual Funding TY$
2040 | RDT&E | Research, Development, Test, and Evaluation, Army

Fiscal Year	Quantity	End Item Recurring Flyaway TY $M	Non End Item Recurring Flyaway TY $M	Non Recurring Flyaway TY $M	Total Flyaway TY $M	Total Support TY $M	Total Program TY $M
2014	--	--	--	--	--	--	10.2
2015	--	--	--	--	--	--	6.9
2016	--	--	--	--	--	--	12.3
2017	--	--	--	--	--	--	--
2018	--	--	--	--	--	--	--
2019	--	--	--	--	--	--	--
2020	--	--	--	--	--	--	5.7
2021	--	--	--	--	--	--	7.2
2022	--	--	--	--	--	--	43.9
2023	--	--	--	--	--	--	37.1
2024	--	--	--	--	--	--	6.3
Subtotal	**212**	**--**	**--**	**--**	**--**	**--**	**129.6**

Annual Funding BY$
2040 | RDT&E | Research, Development, Test, and Evaluation, Army

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2008 $M	Non End Item Recurring Flyaway BY 2008 $M	Non Recurring Flyaway BY 2008 $M	Total Flyaway BY 2008 $M	Total Support BY 2008 $M	Total Program BY 2008 $M
2014	--	--	--	--	--	--	9.0
2015	--	--	--	--	--	--	6.0
2016	--	--	--	--	--	--	10.5
2017	--	--	--	--	--	--	--
2018	--	--	--	--	--	--	--
2019	--	--	--	--	--	--	--
2020	--	--	--	--	--	--	4.5
2021	--	--	--	--	--	--	5.5
2022	--	--	--	--	--	--	33.1
2023	--	--	--	--	--	--	27.5
2024	--	--	--	--	--	--	4.6
Subtotal	**212**	**--**	**--**	**--**	**--**	**--**	**100.7**

RDT&E-funded units reflect planned deliveries to the Army of 20 Small Airborne Link 16 Terminal channels (10 radios) and 192 Small Airborne Networking Radio (SANR) channels (96 radios) for integration onto platforms. These numbers do not include units for testing.

SANR funding and quantities are deferred beyond the Future Years Defense Program FY 2015 - FY 2019.

Annual Funding TY$
2035 | Procurement | Other Procurement, Army

Fiscal Year	Quantity	End Item Recurring Flyaway TY $M	Non End Item Recurring Flyaway TY $M	Non Recurring Flyaway TY $M	Total Flyaway TY $M	Total Support TY $M	Total Program TY $M
2016	48	10.1	--	--	10.1	5.4	15.5
2017	96	17.3	--	--	17.3	6.4	23.7
2018	56	12.2	--	--	12.2	6.8	19.0
2019	48	11.4	--	--	11.4	8.6	20.0
2020	192	27.7	--	--	27.7	6.5	34.2
2021	192	26.6	--	--	26.6	7.0	33.6
2022	192	27.1	--	--	27.1	7.2	34.3
2023	282	44.1	--	--	44.1	17.4	61.5
2024	786	100.7	--	--	100.7	27.2	127.9
2025	1136	140.1	--	--	140.1	34.7	174.8
2026	1700	206.2	--	--	206.2	51.8	258.0
2027	2028	241.4	--	--	241.4	45.3	286.7
2028	2032	246.8	--	--	246.8	36.0	282.8
2029	1656	206.8	--	--	206.8	33.0	239.8
2030	1564	199.7	--	--	199.7	31.6	231.3
2031	1200	158.5	--	--	158.5	26.8	185.3
2032	1196	161.2	--	--	161.2	27.0	188.2
2033	1036	143.7	--	--	143.7	24.7	168.4
2034	--	--	--	--	--	14.9	14.9
Subtotal	**15440**	**1981.6**	**--**	**--**	**1981.6**	**418.3**	**2399.9**

Annual Funding BY$
2035 | Procurement | Other Procurement, Army

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2008 $M	Non End Item Recurring Flyaway BY 2008 $M	Non Recurring Flyaway BY 2008 $M	Total Flyaway BY 2008 $M	Total Support BY 2008 $M	Total Program BY 2008 $M
2016	48	8.6	--	--	8.6	4.6	13.2
2017	96	14.4	--	--	14.4	5.3	19.7
2018	56	10.0	--	--	10.0	5.5	15.5
2019	48	9.1	--	--	9.1	6.9	16.0
2020	192	21.7	--	--	21.7	5.1	26.8
2021	192	20.4	--	--	20.4	5.4	25.8
2022	192	20.4	--	--	20.4	5.4	25.8
2023	282	32.6	--	--	32.6	12.8	45.4
2024	786	72.9	--	--	72.9	19.7	92.6
2025	1136	99.5	--	--	99.5	24.6	124.1
2026	1700	143.6	--	--	143.6	36.0	179.6
2027	2028	164.8	--	--	164.8	30.9	195.7
2028	2032	165.2	--	--	165.2	24.1	189.3
2029	1656	135.7	--	--	135.7	21.6	157.3
2030	1564	128.5	--	--	128.5	20.3	148.8
2031	1200	100.0	--	--	100.0	16.9	116.9
2032	1196	99.7	--	--	99.7	16.7	116.4
2033	1036	87.1	--	--	87.1	15.0	102.1
2034	--	--	--	--	--	8.9	8.9
Subtotal	**15440**	**1334.2**	**--**	**--**	**1334.2**	**285.7**	**1619.9**

Costs do not reflect platform installation and integration funding. Army requirements by platform and year, including installation and integration of AMF JTRS radios onto host platforms, are documented separately.

Future Years Defense Program (FYDP, FY 2015 – FY 2019) only represents Small Airborne Link 16 Terminal (SALT) radios. The SALT quantities within the FYDP FY 2015 – FY 2019 are adjusted to available funding. FY 2020 and beyond SALT quantities are adjusted to reflect total Army requirements.

Small Airborne Networking Radio (SANR) funding and quantities are deferred beyond the Future Years Defense Program FY 2015 - FY 2019.

Quantities are channels with the assumption of two channels per radio.

Channel and radio quantities in accordance with planned funding are:
Total Channels -- 15,440 (1,380 SALT and 14,060 SANR)
Total Radios -- 7,720 (690 SALT and 7,030 SANR)

FY 2034 procurement funding is for costs associated with fielding of quantities procured in FY 2033.

Low Rate Initial Production

There is no LRIP for this Program.

Foreign Military Sales

Foreign Military Sales (FMS)
The AMF JTRS Program Office (PO) received a $60M reduction in FY 2011 that eliminated all funding for International Cooperation and FMS. There are currently no cases open with the PO and no plans for FMS exchanges with the program in the future. The PO will revisit FMS and Coalition Interoperability issues at a later date should funds become available.

AMF JTRS currently does not have any Memorandums of Agreement (MOAs) in place with foreign governments or cognizant organizations. In addition, other Coalition waveforms (e.g. Bowman Waveform) are currently unfunded and not planned to be supported at this time.

Coalition Interoperability
AMF JTRS has an objective requirement to include AMF JTRS Non-Development Item interoperability with Allied/Coalition networks.

AMF JTRS is procuring Link 16 capability for the Apache Program. The PO and contractors will maintain International Link 16 standards to ensure Coalition interoperability. AMF JTRS currently does not have any MOAs in place with foreign governments or cognizant organizations. Other coalition waveforms, such as the Bowman waveform, are currently unfunded and not planned to be supported at this time.

Nuclear Costs

None

Unit Cost

Unit Cost Report

Unit Cost	BY2008 $M Current UCR Baseline (OCT 2008 APB)	BY2008 $M Current Estimate (DEC 2013 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	7758.6	3120.5	
Quantity	27102	15652	
Unit Cost	0.286	0.199	-30.42
Average Procurement Unit Cost (APUC)			
Cost	5907.9	1619.9	
Quantity	26878	15440	
Unit Cost	0.220	0.105	-52.27

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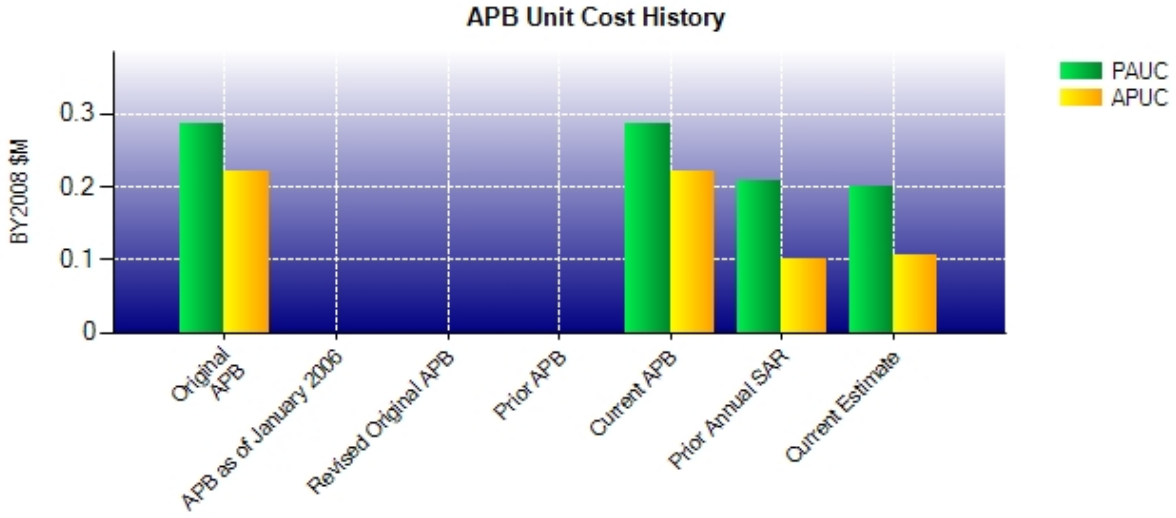
AMF JTRS PAUC and APUC calculations are per channel.

Unit Cost History



		BY2008 $M		TY $M	
	Date	PAUC	APUC	PAUC	APUC
Original APB	OCT 2008	0.286	0.220	0.333	0.264
APB as of January 2006	N/A	N/A	N/A	N/A	N/A
Revised Original APB	N/A	N/A	N/A	N/A	N/A
Prior APB	N/A	N/A	N/A	N/A	N/A
Current APB	OCT 2008	0.286	0.220	0.333	0.264
Prior Annual SAR	DEC 2012	0.207	0.102	0.240	0.131
Current Estimate	DEC 2013	0.199	0.105	0.253	0.155

SAR Unit Cost History

Current SAR Baseline to Current Estimate (TY $M)

Initial PAUC Dev Est	Changes								PAUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.333	-0.002	0.056	0.022	0.001	-0.181	0.000	0.024	-0.080	0.253

Current SAR Baseline to Current Estimate (TY $M)

Initial APUC Dev Est	Changes								APUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.264	-0.001	0.006	0.032	0.000	-0.171	0.000	0.025	-0.109	0.155

SAR Baseline History

Item/Event	SAR Planning Estimate (PE)	SAR Development Estimate (DE)	SAR Production Estimate (PdE)	Current Estimate
Milestone A	N/A	N/A	N/A	N/A
Milestone B	N/A	DEC 2007	N/A	MAR 2008
Milestone C	N/A	NOV 2011	N/A	N/A
IOC	N/A	AUG 2014	N/A	N/A
Total Cost (TY $M)	N/A	9034.3	N/A	3954.8
Total Quantity	N/A	27102	N/A	15652
Prog. Acq. Unit Cost (PAUC)	N/A	0.333	N/A	0.253

Cost Variance

Summary Then Year $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Dev Est)	1941.8	7092.5	--	9034.3
Previous Changes				
Economic	-22.5	+5.8	--	-16.7
Quantity	-29.3	-2913.1	--	-2942.4
Schedule	--	+208.6	--	+208.6
Engineering	+13.5	--	--	+13.5
Estimating	-170.8	-2638.3	--	-2809.1
Other	--	--	--	--
Support	--	+271.7	--	+271.7
Subtotal	-209.1	-5065.3	--	-5274.4
Current Changes				
Economic	-3.2	-14.0	--	-17.2
Quantity	--	--	--	--
Schedule	-154.0	+284.8	--	+130.8
Engineering	--	--	--	--
Estimating	-20.6	-8.7	--	-29.3
Other	--	--	--	--
Support	--	+110.6	--	+110.6
Subtotal	-177.8	+372.7	--	+194.9
Total Changes	-386.9	-4692.6	--	-5079.5
CE - Cost Variance	1554.9	2399.9	--	3954.8
CE - Cost & Funding	1554.9	2399.9	--	3954.8

Summary Base Year 2008 $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Dev Est)	1850.7	5907.9	--	7758.6
Previous Changes				
Economic	--	--	--	--
Quantity	-27.2	-2477.0	--	-2504.2
Schedule	--	+25.9	--	+25.9
Engineering	+12.1	--	--	+12.1
Estimating	-162.5	-2128.4	--	-2290.9
Other	--	--	--	--
Support	--	+239.8	--	+239.8
Subtotal	-177.6	-4339.7	--	-4517.3
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	-154.5	--	--	-154.5
Engineering	--	--	--	--
Estimating	-18.0	+5.8	--	-12.2
Other	--	--	--	--
Support	--	+45.9	--	+45.9
Subtotal	-172.5	+51.7	--	-120.8
Total Changes	-350.1	-4288.0	--	-4638.1
CE - Cost Variance	1500.6	1619.9	--	3120.5
CE - Cost & Funding	1500.6	1619.9	--	3120.5

Previous Estimate: December 2012

RDT&E	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	-3.2
Adjustment for current and prior escalation. (Estimating)	+2.3	+2.4
Funding reduction due to the FY 2014 Omnibus Appropriations Act (Army). (Estimating)	-20.3	-23.0
Net increase due to the deferral of the Small Airborne Network Radio beyond the Future Years Defense Program FY 2015 - FY 2019 (Army). (Schedule)	+13.8	+29.1
Reductions in FY 2012 and FY 2013 to reflect funding received due to a change in acquisition strategy to a Non-Developmental Item approach (Navy). (Schedule)	-168.3	-183.1
RDT&E Subtotal	-172.5	-177.8

Procurement	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	-14.0
Adjustment for current and prior escalation. (Estimating)	+0.4	+0.5
Decrease due to elimination of incorrect FY 2013 prior-to-need procurement dollars and quantities (Army). (Estimating)	-19.2	-17.9
Increase in program management costs due to decreased sharing of personnel resulting from the deferral of Small Airborne Networking Radio (SANR) beyond the Future Years Defense Program (FYDP) FY 2015 - FY 2019 (Army). (Estimating)	+24.6	+8.7
Stretch-out of procurement buy profile by seven years due to the deferral of SANR beyond the FYDP FY 2015 - FY 2019 (Army). (Schedule)	0.0	+284.8
Adjustment for current and prior escalation. (Support)	+0.3	+0.3
Increase in support due to addition of contractor data and fielding support costs identified by independent government cost estimates; additional new equipment training classes required to train all operators and maintainers rather than just the trainers; and increase in procurement-funded field maintenance civilian labor (Army). (Support)	+35.8	+75.5
Increase in initial spares due to inclusion of overhead costs (Army). (Support)	+9.8	+34.8
Procurement Subtotal	+51.7	+372.7

Contracts

General Contract Memo

There are no active contracts greater than $40M.

Deliveries and Expenditures

Delivered to Date	Plan to Date	Actual to Date	Total Quantity	Percent Delivered
Development	0	0	212	0.00%
Production	0	0	15440	0.00%
Total Program Quantity Delivered	0	0	15652	0.00%

Expended and Appropriated (TY $M)			
Total Acquisition Cost	3954.8	Years Appropriated	12
Expended to Date	1359.4	Percent Years Appropriated	37.50%
Percent Expended	34.37%	Appropriated to Date	1435.5
Total Funding Years	32	Percent Appropriated	36.30%

The above data is current as of 3/18/2014.

Expenditures consist of appropriated funds disbursed through March 18, 2014. Twenty-six Small Airborne Channels were previously reported as delivered under the closed out Lockheed Martin System Development and Demonstration contract, which has since been closed out as directed in the May 7, 2012 Acquisition Decision Memorandum. These previously reported quantities cannot be considered "fully-configured" and are not included in our current RDT&E quantities. Total Expended to Date stated in Dec 2012 SAR was an incorrect amount. Therefore, AMF JTRS conducted an analysis of expenditures based on available records for a more accurate AMF JTRS Total Expended to Date for this SAR submission.

Operating and Support Cost

AMF JTRS

Assumptions and Ground Rules

Cost Estimate Reference:
O&S Costs are based on the Program Office Estimate (POE) dated February 21, 2014.

Sustainment Strategy:
O&S costs are based on the procurement of 7,720 two-channel radios, each with a 20-year estimated service life.

No significant issues to report. The project is currently in the pre-Request for Proposal stage. The Program Office will conduct an in-depth assessment of risks to logistics and training as information on the product becomes available.
The Program Office will execute a step approach to contracting for a Performance Based Logistics (PBL) solution to be initiated after the Full-Rate Production (FRP) decision. Initial procurement of test/integration units is planned to come with a one-year warranty and Interim Contract Support at contract award. The Program Office plans to conduct a Business Case Analysis using actual cost, usage, and turn-around times before FRP. This approach will facilitate transition to full PBL implementation with greater understanding of requirements, more effective metrics, and greater cost fidelity. Depot Source of Repair Analysis will also be conducted prior to Milestone C. The training concept is being jointly developed by the Program Executive Office for Command, Control, and Communications - Tactical, Project Manager Tactical Radios, Product Manager AMF JTRS, the Army Training and Doctrine Command Training Directorate and Army Aviation and will include a System Training Plan that will accompany the validated requirements document.

Antecedent Information:
There is no antecedent to this program. AMF JTRS radios are software programmable, multi-band, multi-mode, mobile ad hoc networking radios, providing simultaneous voice, data, and video communications, and which may be employed in new and innovative ways as compared to any currently fielded legacy radio.

Unitized O&S Costs BY2008 $K		
Cost Element	**AMF JTRS per Channel**	**No Antecedent (Antecedent) N/A**
Unit-Level Manpower	0.000	--
Unit Operations	0.000	--
Maintenance	7.162	--
Sustaining Support	3.216	--
Continuing System Improvements	0.363	--
Indirect Support	0.000	--
Other	0.000	--
Total	10.741	--

Unitized Cost Comments:
O&S Unit Costs are based on the POE dated February 21, 2014. The Unit of Measure is per channel. The Annual Unit Cost is calculated as $3,316.8 Total O&S Base Year Cost /15,440 channels/20-years.

	Total O&S Cost $M			
	Current Development APB Objective/Threshold		Current Estimate	
	AMF JTRS		AMF JTRS	No Antecedent (Antecedent)
Base Year	22660.0	24926.0	3316.8	N/A
Then Year	36135.7	N/A	6065.4	N/A

Total O&S Costs Comments:

O&S Cost Variance		
Category	Base Year 2008 $M	Change Explanation
Prior SAR Total O&S Estimate -- Dec 2012	3,346.8	
Cost Estimating Methodology	-94.790	Refinement of repair, software maintenance and sustainment training models resulting in a net decrease.
Cost Data Update	0.000	
Labor Rate	+15.048	Increase in labor rates for software maintenance and sustainment training instructors.
Energy Rate	0.000	
Technical Input	0.000	
Programmatic/Planning Factors	+49.742	Increase in program office staff, sustainment training, and civilian field support due to reduction in sharing across AMF JTRS product lines.
Other	0.000	
Total Changes	-30.000	
Current Estimate	3,316.8	

The significant O&S cost decrease compared to the objective and threshold values is due to the large decrease in quantities as a result of the elimination of the Air Force and Navy radios. Additionally, the Non-Developmental Item approach decreases the annual unit support cost.

Disposal Costs:

Disposal costs are not included in the O&S costs. Disposal costs are estimated at $2.0M (BY$ 2008).