Selected Acquisition Report (SAR)

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

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

As of December 31, 2012

Defense Acquisition Management
Information Retrieval
(DAMIR)

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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 (SECDEF) Memo dated August 31, 2009. Navy and Air Force have ended their participation in the program and have removed all funding.

Responsible Office

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

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 (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 restructured 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 Integrating 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.

AMF JTRS will provide two types of radios: Small Airborne Networking Radio (SANR) and Small Airborne Link 16 Terminal (SALT). SANR addresses Army Aviation tactical communication shortfalls with Army ground networks including improvement of legacy system abilities to pass real-time information seamlessly while operating in highly mobile and dynamic combat environments. SANR will connect Army Aviation platforms to On-the-Move networks and support the commander's ability to understand, visualize, describe, direct, lead and assess. The radio will support sensor-to-shooter networks, sustainment and survivability applications, and access to network services in the full Range of Military Operations. SANR may also interoperate with select legacy networks. The fielding of airborne networking capabilities will follow the deployment of ground network capabilities. Army ground forces are currently fielding Soldier Radio Waveform (SRW) networks and intend to field a Mid-Tier Networking Waveform (MNW) capability. The SANR radio will provide SRW, Single Channel Ground and Airborne Radio System (SINCGARS) and the Wideband Networking Waveform (WNW) MNW 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

AMF JTRS program was restructured in accordance with Milestone Decision Authority (MDA) direction documented in 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. On August 11, 2012, the Army designated the Program Executive Office for Command, Control, and Communications Tactical (PEO C3T) as the cognizant organization for AMF JTRS upon dissolution of the Joint Program Executive Officer (JPEO) JTRS on October 1, 2012.

The May 2012 ADM directed the closeout of the AMF System Development and Demonstration (SDD) contract. On September 25, 2012, the prime contractor and the Government mutually agreed to close out the contract. Disposition of Government Furnished Equipment (GFE) / Contractor Acquired Property (CAP) is in progress. The Period of Performance on the SDD contract is expected to end in August 2013. The SDD contract has therefore exceeded 90% complete and will no longer be reported.

The restructured AMF JTRS program will procure two NDI radios to meet user needs. One radio, Small Airborne Link 16 Terminal (SALT), will possess Link 16 and Soldier Radio Waveform (SRW) capability. The second, Small Airborne Networking Radio (SANR), will provide networking and legacy waveform capability. SALT will provide one channel dedicated to a Link 16 capability and a second software-defined radio channel that can provide SRW or other non-Link 16 waveforms required by the platform. SANR will provide a two-channel software-defined radio that provides interoperability with the Army's Mid-tier Networking Waveform (MNW) capability that will be widely deployed to ground forces (e.g., Wideband Networking Waveform (WNW), Next-generation Mobile ad hoc network Waveform (NMW), or Adaptive Networking Wideband Waveform (ANW-2)). In addition, SANR will provide SRW, Single Channel Ground and Airborne Radio System (SINCGARS), and, as an objective, additional non-Link 16 waveforms required by the platforms.

AMF JTRS is currently in the pre-solicitation stage on both SALT and SANR procurements. The Program Office released a Request for Information (RFI) for both variants on July 19, 2012. Industry responses were received and analyzed and an industry day was conducted on September 11, 2012 to provide industry with a program update and familiarize them with the key platforms planning integration of the SANR capability. AMF JTRS is developing pre-award documentation in anticipation of a Request for Proposal (RFP) in Fourth Quarter, Fiscal Year 2013 (Q4 FY 2013). The Program Office estimates that the SALT and SANR contracts will be awarded in Q4 FY 2014.

In regards to documentation, an updated Acquisition Strategy (AS), representing the revised acquisition approach, has completed informal review with Office of Secretary of Defense (OSD). The revised AS will result in Research, Development, Test & Evaluation (RDT&E) and procurement funding and quantity adjustments. The Program Office will submit the AS for MDA approval in preparation for the Milestone C, currently scheduled for Q3 FY 2014. In addition, the current Acquisition Program Baseline (APB) is in schedule breach and represents the previous acquisition strategy. The Program Office will also submit a revised APB in preparation for the Milestone C. A revised Capability Production Document (CPD) is currently in staffing with Training & Doctrine Command (TRADOC) and Army Capabilities Integration Center (ARCIC).

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

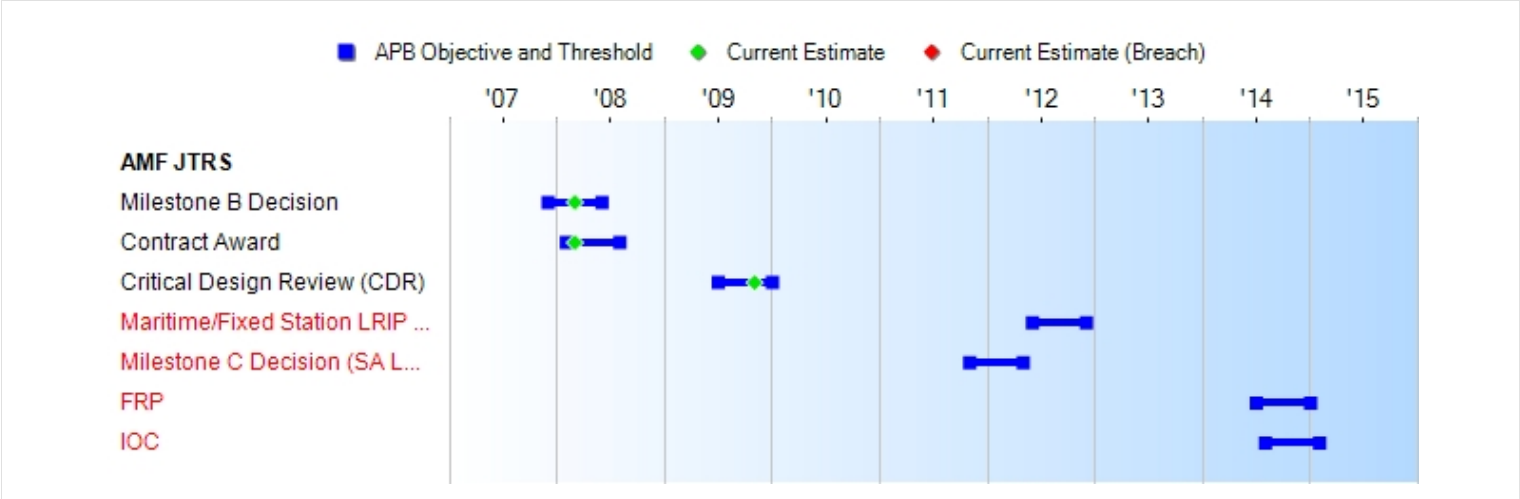
Explanation of Breach

The Maritime/Fixed Station Low Rate Initial Production (LRIP) Authorization schedule breach was previously reported in the December 2011 SAR and the Exception SAR from September 2012.

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

See previous SAR for further detail.

Schedule



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

[1] *APB Breach*

Acronyms And Abbreviations

FRP - Full Rate Production
IOC - Initial Operational Capability
LRIP - Low Rate Initial Production
SA - Small Airborne

Change Explanations

(Ch-1) The current Acquisition Program Baseline (APB) is now longer valid. Per Milestone Decision Authority (MDA) direction, the Program Office acquisition strategy has been restructured. A revised APB will be approved prior to Milestone C.

Memo

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

For the restructured NDI approach, the current estimate for a Milestone C for Small Airborne Link 16 Terminal (SALT) and Small Airborne Networking Radio (SANR) is 3Q FY 2016. For SALT, the milestone will also function as a Full-Rate Production (FRP) decision. It is anticipated that SANR will have multiple Program Status Reviews (PSR) related to contract award and approval of test assets. A Full Rate Production decision for SANR is estimated to occur in 2Q FY 2018. These dates are tentative and subject to Milestone Decision Authority approval.

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	Not 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	Not 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	Not 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	Not 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	Not Applicable.	(Ch-1)

	Channels	Channels	channels			
Scaleable Networking services	All Domains.	All Domains.	All Domains	TBD	Not Applicable.	(Ch-1)
Network extension/coverage.	Across organization-al boundar-ies.	Across organization-al boundar-ies.	Across organization-al boundar-ies.	TBD	Not 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	Not Applicable.	(Ch-1)
Operational Availability A(o)	0.99 (channel)	0.99 (channel)	0.96 (channel)	TBD	Not Applicable.	(Ch-1)

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

Acronyms And Abbreviations

DISR - DoD Information Technology Standards Registry
EPLRS - Enhanced Position Location Reporting System
IAW - In Accordance With
IER - Information Exchange Requirement
JTR - Joint Tactical Radio
KPP - Key Performance Parameter
MUOS - Mobile User Objective System
SATCOM - Satellite Communcations
SINCGARS - Single Channel Ground and Airborne Radio System
SRW - Soldier Radio Waveform
TBD - To Be Determined
UHF - Ultra High Fequency
WNW - Wideband Networking Waveform

Change Explanations

(Ch-1) The current Acquisition Program Baseline (APB) is now longer valid. Per Milestone Decision Authority (MDA) direction, the Program Office acquisition strategy has been restructured. A revised APB will be approved prior to Milestone C.

Memo

The current APB represents the previous Acquisition Strategy. The Program Office will submit a revised APB in preparation for the Milestone C. A revised Capability Production Document (CPD) is currently in staffing with Training & Doctrine Command (TRADOC) and Army Capabilities Integration Center (ARCIC). The Program Office anticipates that a subset of the approved Key Performance Parameters (KPPs) will apply to the approved CPD. The CPD is currently in formal routing and is expected to be approved in February 2014.

Track To Budget

General Memo

As part of the JTRS Joint Program Acquisition Strategy, each Military Department (MILDEP) budgets for a portion of the total program. During each Budget Cycle, each MILDEP's Budget Year Research, Development, Test and Evaluation (RDT&E) for JTRS is transferred to Navy Program Element (PE) 0604280N. Thus, for FY 2007 - 2013 all AMF JTRS RDT&E funding is located in Navy PE 0604280N. Starting in FY 2014, all AMF RDT&E funding will transition to Army PE 0605380A.

RDT&E

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

Procurement

APPN 2035	BA 02	PE 0310700A	(Army)
	ICN B90110	JTRS (AMF)	

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	1673.1	1941.8	1941.8	1732.7
Procurement	5907.9	5907.9	6498.7	1568.2	7092.5	7092.5	2027.2
Flyaway	5907.9	--	--	1328.4	7092.5	--	1718.1
Recurring	5907.9	--	--	1328.4	7092.5	--	1718.1
Non Recurring	0.0	--	--	0.0	0.0	--	0.0
Support	0.0	--	--	239.8	0.0	--	309.1
Other Support	0.0	--	--	127.2	0.0	--	160.5
Initial Spares	0.0	--	--	112.6	0.0	--	148.6
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	3241.3	9034.3	9034.3	3759.9

Procurement cost does not reflect platform installation and integration funding which will be budgeted and executed by the Services. Specific Service requirements by platform and year, including installation and integration of AMF JTRS on host platforms, are documented separately.

AMF JTRS PAUC and APUC measures are per channel.

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 as Navy and Air Force are no longer planning on procuring AMF JTRS radios. Total Army requirements are 690 Small Airborne Link 16 Terminal (SALT), or 1,380 channels, and 7,030 Small Airborne Networking Radio (SANR), or 14,060 channels, for a total of 7,720 radios or 15,440 channels.

Research, Development, Test and Evaluation (RDT&E) unit quantities of 20 SALT and 192 SANR channels reflect planned deliveries to Army for integration onto Platforms. These numbers do not include units required for testing. Total RDT&E radios, including test units, is 116 for SANR and 30 for Small Airborne Link 16 Terminal SALT.

AMF JTRS PAUC and APUC measures are per channel.

Cost and Funding

Funding Summary

Appropriation and Quantity Summary
FY2014 President's Budget / December 2012 SAR (TY$ M)

Appropriation	Prior	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	To Complete	Total
RDT&E	1550.9	57.5	33.2	64.6	21.4	5.1	0.0	0.0	1732.7
Procurement	0.0	74.0	0.0	8.8	165.0	153.7	160.8	1464.9	2027.2
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 2014 Total	1550.9	131.5	33.2	73.4	186.4	158.8	160.8	1464.9	3759.9
PB 2013 Total	1644.5	132.2	95.8	326.1	294.2	308.8	230.9	1197.0	4229.5
Delta	-93.6	-0.7	-62.6	-252.7	-107.8	-150.0	-70.1	267.9	-469.6

Program funding and production quantities listed in this SAR are consistent with the FY 2014 President's Budget (PB). The FY 2014 PB did not reflect the enacted DoD appropriation for FY 2013, nor sequestration; it reflected the President's requested amounts for FY 2013.

Quantity	Undistributed	Prior	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	To Complete	Total
Development	212	0	0	0	0	0	0	0	0	212
Production	0	0	220	0	48	1598	1188	1204	11182	15440
PB 2014 Total	212	0	220	0	48	1598	1188	1204	11182	15652
PB 2013 Total	92	0	220	356	1958	1670	1934	1152	4790	12172
Delta	120	0	0	-356	-1910	-72	-746	52	6392	3480

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	--	--	--	--	--	--	257.0
2013	--	--	--	--	--	--	57.5
Subtotal	**--**	**--**	**--**	**--**	**--**	**--**	**1454.3**

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	--	--	--	--	--	--	293.2
2011	--	--	--	--	--	--	285.8
2012	--	--	--	--	--	--	236.4
2013	--	--	--	--	--	--	51.9
Subtotal	**--**	**--**	**--**	**--**	**--**	**--**	**1402.4**

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

All RDT&E funding and associated channels are transferred to Navy in each execution year, consistent with the JTRS Joint Program Acquisition Strategy. Starting in FY 2014, all AMF JTRS RDT&E funding will transition from a Navy Program Element 0604280N to Army Program Element 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	--	--	--	--	--	--	33.2
2015	--	--	--	--	--	--	64.6
2016	--	--	--	--	--	--	21.4
2017	--	--	--	--	--	--	5.1
Subtotal	**212**	**--**	**--**	**--**	**--**	**--**	**124.3**

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	--	--	--	--	--	--	29.1
2015	--	--	--	--	--	--	55.5
2016	--	--	--	--	--	--	18.1
2017	--	--	--	--	--	--	4.2
Subtotal	**212**	**--**	**--**	**--**	**--**	**--**	**106.9**

Research, Development, Test & Evaluation (RDT&E) Funded Units reflect planned deliveries to the Army of 20 Small Airborne Link 16 Terminal (SALT) 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. Total RDT&E radios, including test units, is 116 for SANR and 30 for SALT.

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
2013	220	41.8	--	--	41.8	32.2	74.0
2014	--	--	--	--	--	--	--
2015	48	4.9	--	--	4.9	3.9	8.8
2016	1598	152.6	--	--	152.6	12.4	165.0
2017	1188	125.2	--	--	125.2	28.5	153.7
2018	1204	129.5	--	--	129.5	31.3	160.8
2019	1924	201.3	--	--	201.3	18.2	219.5
2020	2082	220.8	--	--	220.8	25.3	246.1
2021	1712	186.2	--	--	186.2	27.3	213.5
2022	1696	189.8	--	--	189.8	26.3	216.1
2023	1336	155.2	--	--	155.2	24.5	179.7
2024	1132	136.5	--	--	136.5	21.3	157.8
2025	928	117.1	--	--	117.1	19.5	136.6
2026	372	57.2	--	--	57.2	17.8	75.0
2027	--	--	--	--	--	20.6	20.6
Subtotal	**15440**	**1718.1**	**--**	**--**	**1718.1**	**309.1**	**2027.2**

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
2013	220	37.2	--	--	37.2	28.7	65.9
2014	--	--	--	--	--	--	--
2015	48	4.2	--	--	4.2	3.3	7.5
2016	1598	128.0	--	--	128.0	10.5	138.5
2017	1188	103.1	--	--	103.1	23.5	126.6
2018	1204	104.6	--	--	104.6	25.3	129.9
2019	1924	159.6	--	--	159.6	14.5	174.1
2020	2082	171.8	--	--	171.8	19.7	191.5
2021	1712	142.2	--	--	142.2	20.9	163.1
2022	1696	142.3	--	--	142.3	19.7	162.0
2023	1336	114.2	--	--	114.2	18.0	132.2
2024	1132	98.5	--	--	98.5	15.4	113.9
2025	928	82.9	--	--	82.9	13.9	96.8
2026	372	39.8	--	--	39.8	12.3	52.1
2027	--	--	--	--	--	14.1	14.1
Subtotal	**15440**	**1328.4**	**--**	**--**	**1328.4**	**239.8**	**1568.2**

FY 2013 funding of $74.0M is prior to need and based on the previous Program of Record. The program has subsequently been restructured in accordance with the Acquisition Decision Memoranda dated September 12, 2011, May 7, 2012, and July 11, 2012.

Procurement cost does not reflect platform installation and integration funding which will be budgeted and executed by the Services. Specific Service requirements by platform and year, including installation and integration of AMF JTRS on host platforms, are documented separately.

Future Years Defense Program funding and quantities are based on the FY 2014 President's Budget. FY 2019 and beyond quantities are adjusted to reflect total Army requirements. Quantities are channels with the assumption of two channels per radio. An updated Acquisition Strategy will be submitted for Milestone Decision Authority (MDA) approval which will result in both Research, Development, Test & Evaluation (RDT&E) and procurement funding and quantity adjustments.

Channel and radio quantities in accordance with planned funding are:
Total Channels -- 15,440
Total Radios -- 7,720

FY 2027 procurement funding is for costs associated with fielding of quantities procured in FY 2026.

Low Rate Initial Production

A Low Rate Initial Production (LRIP) quantity has not yet been approved by the Milestone Decision Authority (MDA).

Foreign Military Sales

Foreign Military Sales (FMS)
The AMF JTRS Program Office received roughly a $60M cut in FY 2011 that eliminated all funding for International Cooperation and FMS. There are currently no cases open with the Program Office and no plans for FMS exchanges with the program in the future. The program will revisit FMS and Coalition Interoperability issues at a later date should funding become available. In the interim, Joint Tactical Networking Center (JTNC) is working government to government to address coalition interoperability with allies and partner nations.

Coalition Interoperability
AMF JTRS has an objective requirement to include AMF Non-Development Item (NDI) interoperability with allied/coalition networks.

AMF JTRS is procuring Link 16 capability for the Apache Program. The Program Office and contractors will maintain International Link 16 standards to ensure coalition interoperability. AMF JTRS currently does not have any Memorandums of Agreement (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 Cost

None

Unit Cost

Unit Cost Report

Unit Cost	BY2008 $M Current UCR Baseline (OCT 2008 APB)	BY2008 $M Current Estimate (DEC 2012 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	7758.6	3241.3	
Quantity	27102	15652	
Unit Cost	0.286	0.207	-27.62
Average Procurement Unit Cost (APUC)			
Cost	5907.9	1568.2	
Quantity	26878	15440	
Unit Cost	0.220	0.102	-53.64

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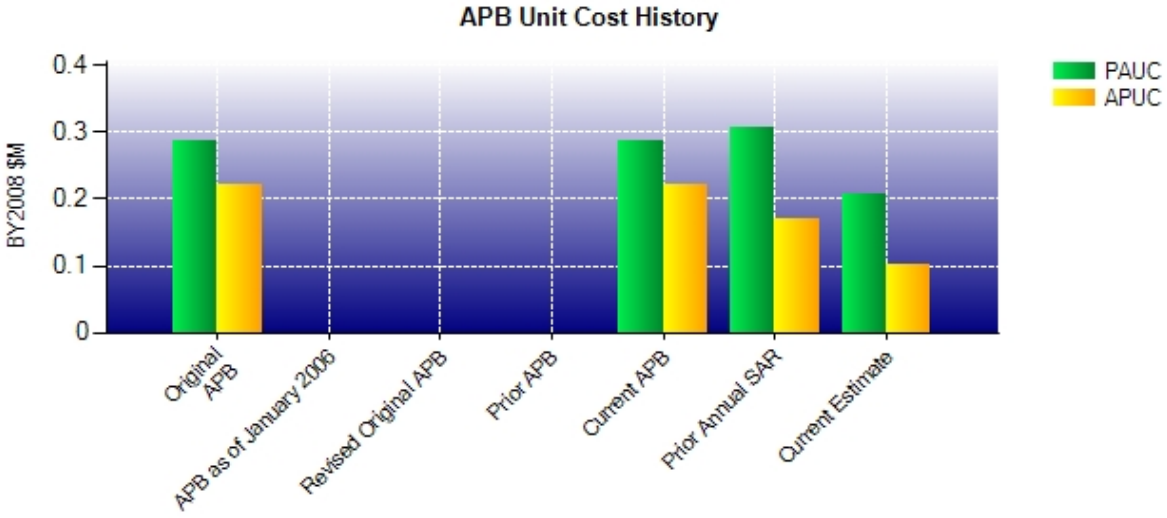
AMF JTRS PAUC and APUC calculations are per channel.

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 2011	0.306	0.169	0.347	0.207
Current Estimate	DEC 2012	0.207	0.102	0.240	0.131

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	-0.001	0.056	0.013	0.001	-0.179	0.000	0.017	-0.093	0.240

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	0.000	0.006	0.014	0.000	-0.171	0.000	0.018	-0.133	0.131

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	3759.9
Total Quantity	N/A	27102	N/A	15652
Prog. Acq. Unit Cost (PAUC)	N/A	0.333	N/A	0.240

Cost Variance

Summary Then Year $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Dev Est)	1941.8	7092.5	--	9034.3
Previous Changes				
Economic	-28.1	-34.7	--	-62.8
Quantity	-29.3	-3858.8	--	-3888.1
Schedule	--	+135.9	--	+135.9
Engineering	+13.5	--	--	+13.5
Estimating	-248.7	-1763.3	--	-2012.0
Other	--	--	--	--
Support	--	+933.6	--	+933.6
Subtotal	-292.6	-4587.3	--	-4879.9
Current Changes				
Economic	+5.6	+40.5	--	+46.1
Quantity	--	+945.7	--	+945.7
Schedule	--	+72.7	--	+72.7
Engineering	--	--	--	--
Estimating	+77.9	-875.0	--	-797.1
Other	--	--	--	--
Support	--	-661.9	--	-661.9
Subtotal	+83.5	-478.0	--	-394.5
Total Changes	-209.1	-5065.3	--	-5274.4
CE - Cost Variance	1732.7	2027.2	--	3759.9
CE - Cost & Funding	1732.7	2027.2	--	3759.9

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	-3156.7	--	-3183.9
Schedule	--	-5.0	--	-5.0
Engineering	+12.1	--	--	+12.1
Estimating	-227.7	-1474.9	--	-1702.6
Other	--	--	--	--
Support	--	+759.8	--	+759.8
Subtotal	-242.8	-3876.8	--	-4119.6
Current Changes				
Economic	--	--	--	--
Quantity	--	+679.7	--	+679.7
Schedule	--	+30.9	--	+30.9
Engineering	--	--	--	--
Estimating	+65.2	-653.5	--	-588.3
Other	--	--	--	--
Support	--	-520.0	--	-520.0
Subtotal	+65.2	-462.9	--	-397.7
Total Changes	-177.6	-4339.7	--	-4517.3
CE - Cost Variance	1673.1	1568.2	--	3241.3
CE - Cost & Funding	1673.1	1568.2	--	3241.3

Previous Estimate: June 2012

RDT&E	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+5.6
Decrease in funding in FY 2012 due to change to Non-Developmental Acquisition Approach. (Navy) (Estimating)	-17.6	-19.2
Transfer of Other Procurement, Army funds to Research, Development, Test, and Evaluation, Army in FY 2014 - FY 2017 due to slip in procurement schedule. (Army) (Estimating)	+87.7	+102.4
Adjustment for current and prior escalation. (Estimating)	-4.9	-5.3
RDT&E Subtotal	+65.2	+83.5

Procurement	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+40.5
Stretch-out of procurement buy profile from FY 2014 - FY 2025 due to slip in Milestone C . (Schedule)	0.0	+29.7
Total Quantity variance resulting from an increase of 3360 channels from 12080 to 15440. (Subtotal)	+311.0	+432.6
Quantity variance resulting from an increase of 3360 production channels from 12080 to 15440. (Quantity) (QR)	(+679.7)	(+945.7)
Allocation to Schedule resulting from Quantity change. (Schedule) (QR)	(+30.9)	(+43.0)
Allocation to Estimating resulting from Quantity change. (Estimating) (QR)	(-399.6)	(-556.1)
Reduced unit cost of Non-Developmental Item (NDI) radios compared to JTRS Small Airborne radios. (Estimating)	-100.4	-126.0
Decrease in Systems Engineering and Program Management required for NDI radios. (Estimating)	-153.2	-192.5
Adjustment for current and prior escalation. (Estimating)	-0.3	-0.4
Adjustment for current and prior escalation. (Support)	-0.2	-0.2
Decreases in Interim Contractor Support and Post Deployment Software Support needed for NDI radios, and in New Equipment Training due to revised strategy reducing use of contractor labor. (Support)	-480.2	-622.0
Decrease in Initial Spares due to decreased unit cost of NDI radios. (Support)	-39.6	-39.7
Procurement Subtotal	-462.9	-478.0

(QR) Quantity Related

Contracts

Appropriation: RDT&E

Contract Name	**AMF JTRS SDD**
Contractor	Lockheed Martin Corporation
Contractor Location	San Diego, CA 92121
Contract Number, Type	FA8726-08-C-0008, CPAF
Award Date	March 28, 2008
Definitization Date	September 13, 2010

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
775.5	N/A	N/A	891.4	N/A	N/A	1395.5	1444.9

Cost And Schedule Variance Explanations

Cost and Schedule variance reporting is not required on this CPAF contract.

Contract Comments

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to Option Contract Line Item Numbers (CLINs) being exercised. Note the current price does not include costs or any fee associated with the undefinitized Request for Equitable Adjustment (REA).

This contract has exceeded 90% complete and will no longer be reported. The period of performance is expected to end in August 2013.

The cost and schedule variances to date are unchanged from the previous SAR submittal due to the suspension of earned value reporting (effective September 1, 2011). This was initially due to contract restructuring efforts resulting from affordability concerns with the Program of Record. After agreement was not reached with Lockheed Martin on a restructured program, an Acquisition Decision Memorandum (ADM) was issued on May 7, 2012 directing the “smart” closeout of the AMF JTRS System Development and Demonstration (SDD) contract.

Deliveries and Expenditures

Deliveries 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 Quantities Delivered	0	0	15652	0.00%

Expenditures and Appropriations (TY $M)			
Total Acquisition Cost	3759.9	Years Appropriated	11
Expenditures To Date	1518.6	Percent Years Appropriated	44.00%
Percent Expended	40.39%	Appropriated to Date	1682.4
Total Funding Years	25	Percent Appropriated	44.75%

The above data is current as of 1/24/2013.

Expenditures consist of the Program Sunk Costs through FY 2012. Twenty-six (26) Small Airborne Channels were previously reported as delivered under the System Development and Demonstration (SDD) contract, which has since been closed out as directed in the May 7, 2012 Acquisition Decision Memorandum (ADM). These previously-reported quantities cannot be considered "fully-configured" and are not included in our current Research, Development, Testing, and Evaluation (RDT&E) quantities.

Operating and Support Cost

AMF JTRS

Assumptions and Ground Rules

Cost Estimate Reference:
Operating and Support (O&S) Costs are based on the Program Office Estimate of March 6, 2013.

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 current in the Pre-Request for Proposal (RFP) 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 Logistic (PBL) solution to be initiated beginning after the Full-Rate Production decision. Initial procurement of test/integration units planned to come with a one year warranty and Interim Contract Support (ICS) at contract award. The Program Office plans to conduct a Business Case Analysis (BCA) using actual cost, usage and turn-around times before Full Rate Production (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 MS C. The training concept being jointly developed by PEO C3T TR, AMF, TRADOC Training Directorate and Army Aviation to include System Training Plan (STRAP) 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 videa 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	0.0	0.0
Unit Operations	0.0	0.0
Maintenance	7.9	0.0
Sustaining Support	2.6	0.0
Continuing System Improvements	0.3	0.0
Indirect Support	0.0	0.0
Other	0.0	0.0
Total	10.8	--

Unitized Cost Comments:
Operating and Support (O&S) Unit Costs are based on the Program Office Estimate of March 6, 2013. The Unit of Measure is per channel. The Annual Unit Cost is calculated as $3,346.8M 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	3346.8	N/A
Then Year	36135.7	N/A	5312.7	N/A

Total O&S Costs Comments:

The variance in the annual unit O&S cost is primarily a result of the restructure of the program to a Non-Development Item (NDI) approach, decreasing the estimated cost of supporting each channel. A change in calculation methodology is a lessor contributor. The previous SAR reported total O&S costs based on an annual per radio cost derived from the Milestone B Independent Cost Estimate. However, at Milestone B, a significant portion of the radios were four-channel radios, so this methodology overstates the per-channel cost. The program office decided that per channel is a more appropriate unit of measure.

Disposal Costs

End-of-Life disposal costs are not included in the O&S costs. Disposal costs are estimated at $1.3M (BY 2008).