



## Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-385



## Joint Tactical Radio System Handheld, Manpack, and Small Form Fit Radios (JTRS HMS)

As of December 31, 2012

Defense Acquisition Management  
Information Retrieval  
(DAMIR)

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## Program Information

### Program Name

Joint Tactical Radio System Handheld, Manpack, and Small Form Fit Radios (JTRS HMS)

### DoD Component

Army

### Joint Participants

US Navy; US Marine Corps; US Air Force

Army is the lead Acquisition Executive, per memo dated July 11, 2012.

## Responsible Office

### Responsible Office

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**Date Assigned** July 2, 2012

## References

### SAR Baseline (Production Estimate)

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated October 20, 2011

### Approved APB

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated October 20, 2011

## Mission and Description

The JTRS HMS program is an Acquisition Category (ACAT) 1D program developing the materiel solution to provide Software Communications Architecture (SCA) compliant radios to Warfighters. The JTRS HMS program meets the radio requirements for Soldiers and small platforms (such as missiles and ground sensors). JTRS HMS Increment 1 is structured as a single program of record with two phases. Phase 1 developed Small Form Fit (SFF) SFF-A (1 and 2 Channel), SFF-D and AN/PRC-154 Rifleman Radio for use in a sensitive but unclassified environment. Phase 2 will develop the 2 Channel Manpack (MP) and SFF-B for use in a classified environment. JTRS HMS radios are designed to host SCA compliant software waveforms and applications. Phase 1 radios will host the Soldier Radio Waveform (SRW). Phase 2 will host the SRW, Ultra High Frequency (UHF) Satellite Communications (SATCOM) Military, Single Channel Ground to Air Radio System (SINCGARS), and Mobile User Objective System (MUOS) waveforms. JTRS HMS will provide new networking capability to the individual Soldiers, Marines, Sailors and Airmen and also continue to provide legacy radio interoperability. JTRS HMS will support the Net Centric Transport goal of traffic convergence on a single Internet Protocol (IP) internetwork by running JTRS networking services with the SRW. JTRS HMS provides the Warfighter with a software reprogrammable, networkable multi-mode system (of systems) capable of simultaneous voice, data and video communications. The program encompasses specific requirements to support the US Army, US Navy, US Marine Corps, US Air Force and the Special Operations Command (SOCOM) communication needs.

## Executive Summary

The JTRS HMS Program achieved a successful Milestone (MS) B decision on April 26, 2004, to begin the development of the JTRS HMS radios. Following full and open competition, a single Cost Plus Award Fee (CPAF) contract was awarded on July 16, 2004. The development contract is structured to address Increment 1 as a single program of record with two phases.

On June 17, 2011, the JTRS HMS program achieved a successful MS C, approving entry in the Production and Deployment phase and authorizing the Army to contract for an initial Low Rate Initial Production (LRIP) procurement of 6,250 Rifleman Radios (AN/PRC-154) and 100 Manpack radios (AN/PRC-155). The MS C Acquisition Decision Memorandum (ADM) was signed on this date, and directed the Services to fund to the Independent Cost Estimate (ICE) position. The Defense Acquisition Executive (DAE) signed an updated Acquisition Program Baseline (APB) on October 20, 2011. The APB aligns the program schedule, cost, and performance parameters to meet the Services' current requirements in accordance with the MS C decision.

The Full Rate Production (FRP) Decision for the Rifleman Radio (RR) was delayed due to changes in the program Acquisition Strategy (AS) to allow for full and open competition. The Program Manager (PM) is coordinating with the Office of the Secretary of Defense (OSD) on a competition strategy and is currently staffing the required documents for approval to release the Full and Open Competition (FOC) solicitation. The FRP Review for the AN/PRC-154 RR was estimated to take place in May 2012 and will now be in January 2015.

FRP Decision for the Manpack (MP) Radio was delayed due to changes in the program AS to allow for full and open competition. The PM is coordinating with the OSD on a competition strategy and is currently staffing the required documents for approval to release the FOC solicitation. The FRP for the AN/PRC-155 MP was estimated to take place in December 2012 and will now be in February 2015. The schedule date for the AN/PRC-155 MP Initial Operational Capability (IOC) dates changed due to initial production delays. The IOC for the AN/PRC-155 MP was estimated to take place in March 2013 and will now be in August 2013.

JTRS HMS participated in an Army Stakeholder meeting on April 18, 2012, and OSD Overarching Integrated Product Team (OIPT) on April 26, 2012, in preparation for a combined RR FRP Defense Acquisition Board (DAB) and a MP LRIP2 In-Process Review (IPR) DAB. Prior to the DAB, leadership recommended a separate DAB event for each radio. The RR DAB was held on May 23, 2012; the Milestone Decision Authority (MDA) approved an additional LRIP buy of 13,077 radios. The MP IPR DAB was held on July 26, 2012; the MDA recommended deferral of the purchase of additional MP LRIP units pending completion of further testing. The follow-on meeting with the MDA held October 10, 2012, resulted in an ADM dated October 11, 2012, which authorized additional LRIP of up to 3,726 MP radios.

In order to support Capability Set (CS) 14 during the implementation of the new FOC AS, the program office plans to purchase additional MP LRIP radios under the current contract no later than June 2013. This procurement will not exceed 10% of the Approved Acquisition Objective (AAO). A paper DAB is planned for May 2013 to obtain DAE approval for this purchase.

The JTRS HMS RR ADM, approving procurement of additional LRIP radios, was signed on July 11, 2012. The Program Management Office (PMO) and Integrated Product Teams (IPT) continue to work action items assigned from this and the MS C ADM. Progress continues to be made on critical acquisition documents. The RR Capability Production Document (CPD) was approved January 21, 2009, and revision 1 was certified by the Joint Requirements Oversight Council (JROC) on April 14, 2011. The MP CPD was approved by the JROC on May 10, 2012. The RR and MP Test and Evaluation Master Plans (TEMPs) changes are being coordinated between the test community and the PMO.

The Increment 1, Phase 1 RR achieved IOC in July 2012 with the fielding to the 2nd Brigade/1<sup>st</sup> Armored Division and 75th Ranger Regiment.

The Increment 1, Phase 2 MP development continues with incremental, increased capabilities to allow for fielding of initial capabilities sooner. The program completed the MP Multi-Service Operational Test and Evaluation (MOTE) in May 2012 in conjunction with the bi-annual Network Integration Exercise (NIE) 12.2 as well as additional Single Channel Ground and Airborne Radio System (SINCGARS) performance testing during the month of June 2012. This test, as well as prior tests, continues to improve the MP performance, using the test concept of Test-Fix-Test. MP Government Developmental Test (GDT) 3 was completed on October 3, 2012 which addressed many of the shortfalls identified in the MOTE. OSD established FRP entrance criteria in the October 11, 2012 ADM which require successful completion of developmental and operational test events and meeting key performance requirements using operationally configured vehicles.

A Joint Program Executive Office (JPEO) JTRS Reorganization ADM was signed by the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)) on July 11, 2012, directing program management and execution responsibility of JTRS HMS to transition to the Department of the Army. Program Executive Office for Command, Control and Communications-Tactical (PEO C3T) assumed program management and execution responsibility of JTRS HMS in October 2012.

As of March 31, 2013, the Government has received 9,347 LRIP RRs and 563 MPs.

The program has overcome the major software challenges and is producing systems that are demonstrating stable operations in testing and operational environments. The remaining software challenges involve porting of additional waveforms and are well understood. Therefore, there are no significant software-related issues with the program at this time.

### Threshold Breaches

APB Breaches		
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<b>Schedule</b>		<input checked="" type="checkbox"/>
<b>Performance</b>		<input type="checkbox"/>
<b>Cost</b>	RDT&E	<input type="checkbox"/>
	Procurement	<input type="checkbox"/>
	MILCON	<input type="checkbox"/>
	Acq O&M	<input type="checkbox"/>
<b>O&amp;S Cost</b>		<input type="checkbox"/>
<b>Unit Cost</b>	PAUC	<input type="checkbox"/>
	APUC	<input type="checkbox"/>

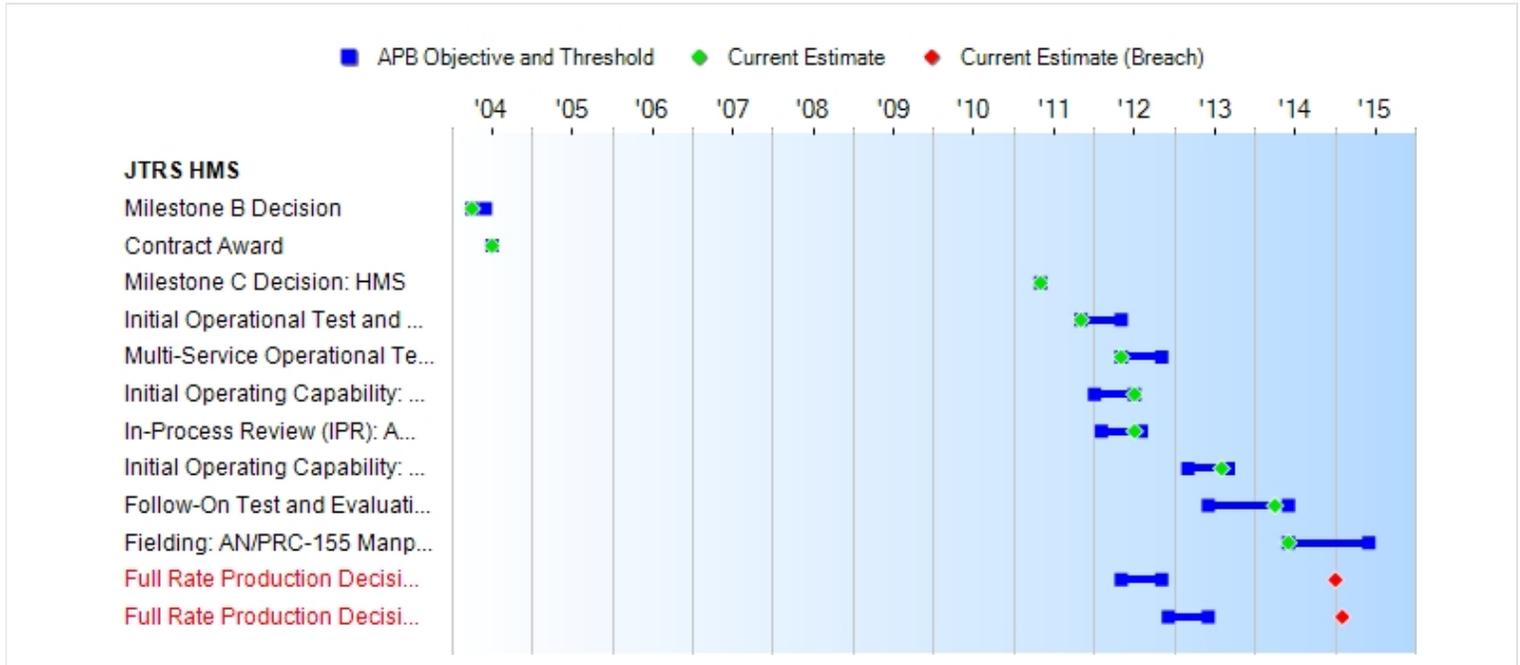
#### Explanation of Breach

JTRS HMS has incurred schedule breaches in two areas due to changes in the Acquisition Strategy (AS) to allow for Full and Open Competition. The Program Manager is coordinating with the Office of the Secretary of Defense (OSD) on a competition strategy and is currently staffing the required documents for approval to release the Full and Open Competition Solicitation. A Program Deviation Report (PDR) has been submitted and a new Acquisition Program Baseline (APB) reflecting the changes in schedule is being staffed.

Nunn-McCurdy Breaches		
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<b>Current UCR Baseline</b>		
	PAUC	None
	APUC	None
<b>Original UCR Baseline</b>		
	PAUC	None
	APUC	None

### Schedule



Milestones	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Current Estimate	
Milestone B Decision	APR 2004	APR 2004	JUN 2004	APR 2004	
Contract Award	JUL 2004	JUL 2004	JUL 2004	JUL 2004	
Milestone C Decision: HMS	MAY 2011	MAY 2011	MAY 2011	MAY 2011	
Initial Operational Test and Evaluation: AN/PRC-154 Rifleman Radio	NOV 2011	NOV 2011	MAY 2012	NOV 2011	
Multi-Service Operational Test and Evaluation: AN/PRC-155 Manpack	MAY 2012	MAY 2012	NOV 2012	MAY 2012	
Initial Operating Capability: AN/PRC-154 Rifleman Radio	JAN 2012	JAN 2012	JUL 2012	JUL 2012	
In-Process Review (IPR): AN/PRC-155 Manpack	FEB 2012	FEB 2012	AUG 2012	JUL 2012	
Initial Operating Capability: AN/PRC-155 Manpack	MAR 2013	MAR 2013	SEP 2013	AUG 2013	(Ch-1)
Follow-On Test and Evaluation: AN/PRC- 155 Manpack with MUOS	JUN 2013	JUN 2013	JUN 2014	APR 2014	
Fielding: AN/PRC-155 Manpack with MUOS	JUN 2014	JUN 2014	JUN 2015	JUN 2014	
Full Rate Production Decision Review: AN/PRC-154 Rifleman Radio	MAY 2012	MAY 2012	NOV 2012	<b>JAN 2015</b> <sup>1</sup>	(Ch-2)
Full Rate Production Decision Review: AN/PRC-155 Manpack	DEC 2012	DEC 2012	JUN 2013	<b>FEB 2015</b> <sup>1</sup>	(Ch-2)

<sup>1</sup>APB Breach

### Acronyms And Abbreviations

MUOS - Mobile User Objective System

### Change Explanations

(Ch-1) The AN/PRC-155 MP Radio Initial Operational Capability (IOC) current estimate changed from TBD to August 2013 due to initial production delays.

(Ch-2) The Full Rate Production Decision Review: AN/PRC-154 Rifleman Radio and Full Rate Production Decision Review: AN/PRC-155 Manpack current estimates were modified from TBD to January 2015 and February 2015 respectively in consonance with direction in the Defense Acquisition Executive (DAE) Acquisition Decision Memorandum (ADM) dated July 11, 2012.

### Memo

This ADM dated July 11, 2012 directed the program to conduct a full-and-open competition that is open to all vendors/industry partners. This is a change to the original acquisition strategy, and the program now requires additional time to conduct the full and open competition and achieve a full rate production decision. A Program Deviation Report (PDR) has been submitted for these schedule breaches and a new Acquisition Program Baseline (APB) reflecting these new dates is currently in staffing.

## Performance

Characteristics	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Demonstrated Performance	Current Estimate
Intra-Squad Communication: AN/PRC-154 Rifleman Radio	Voice	Voice	Voice	Voice	Voice
Soldier Location: AN/PRC-154 Rifleman Radio	Automatic PLI	Automatic PLI	Automatic PLI	Automatic PLI	Automatic PLI
Net Ready (NR) Capability: AN/PRC- 154 Rifleman Radio	The capability, system, and/or service must fully support execution of all operational activities and information exchanges identified in DoD Enterprise Architecture and solution architectures based on integrated DoDAF content, and must satisfy the technical requirements for transition to Net- Centric military operations to include 1 Solution architecture products compliant with DoD	The capability, system, and/or service must fully support execution of all operational activities and information exchanges identified in DoD Enterprise Architecture and solution architectures based on integrated DoDAF content, and must satisfy the technical requirements for transition to Net- Centric military operations to include 1 Solution architecture products compliant with DoD	The capability, system, and/or service must fully support execution of joint critical operational activities and information exchanges identified in the DoD Enterprise Architecture and solution architectures based on integrated DoDAF content, and must satisfy the technical requirements for transition to Net- Centric military operations to include: 1) Solution architecture products compliant with DoD	The capability, system, and/or service must fully support execution of joint critical operational activities and information exchanges identified in the DoD Enterprise Architecture and solution architectures based on integrated DoDAF content, and must satisfy the technical requirements for transition to Net- Centric military operations to include: 1) Solution architecture products compliant with DoD	The capability, system, and/or service must fully support execution of joint critical operational activities and information exchanges identified in the DoD Enterprise Architecture and solution architectures based on integrated DoDAF content, and must satisfy the technical requirements for transition to Net- Centric military operations to include: 1) Solution architecture products compliant with DoD

Enterprise Architecture based on integrated DoDAF content, including specified operationally effective information exchanges 2) Compliant with Net - Centric Data Strategy and Net-Centric Services Strategy, and the principles and rules identified in the DoD IEA, excepting tactical and non-IP communications 3) Compliant with GIG Technical Guidance to include IT Standards identified in the TV-1 and implementation guidance of GESPs, necessary to meet all operational requirements specified in the DoD Enterprise Architecture and solution architecture	Enterprise Architecture based on integrated DoDAF content, including specified operationally effective information exchanges 2) Compliant with Net - Centric Data Strategy and Net-Centric Services Strategy, and the principles and rules identified in the DoD IEA, excepting tactical and non-IP communications 3) Compliant with GIG Technical Guidance to include IT Standards identified in the TV-1 and implementation guidance of GESPs, necessary to meet all operational requirements specified in the DoD Enterprise Architecture and solution architecture	Enterprise Architecture based on integrated DoDAF content, including specified operationally effective information exchanges 2) Compliant with Net - Centric Data Strategy and Net-Centric Services Strategy, and the principles and rules identified in the DoD IEA, excepting tactical and non-IP communications 3) Compliant with GIG Technical Guidance to include IT Standards identified in the TV-1 and implementation guidance of GESPs necessary to meet all operational requirements specified in the DoD Enterprise Architecture and solution architecture	Enterprise Architecture based on integrated DoDAF content, including specified operationally effective information exchanges 2) Compliant with Net - Centric Data Strategy and Net-Centric Services Strategy, and the principles and rules identified in the DoD IEA, excepting tactical and non-IP communications 3) Compliant with GIG Technical Guidance to include IT Standards identified in the TV-1 and implementation guidance of GESPs necessary to meet all operational requirements specified in the DoD Enterprise Architecture and solution architecture	Enterprise Architecture based on integrated DoDAF content, including specified operationally effective information exchanges 2) Compliant with Net - Centric Data Strategy and Net-Centric Services Strategy, and the principles and rules identified in the DOD Information Enterprise Architecture (DoD IEA), excepting tactical and non-IP communications 3) Compliant with GIG Technical Guidance to include IT Standards identified in the TV-1 and implementation guidance of GESPs necessary to meet all operational requirements specified in the DoD Enterprise	Enterprise Architecture based on integrated DoDAF content, including specified operationally effective information exchanges 2) Compliant with Net - Centric Data Strategy and Net-Centric Services Strategy, and the principles and rules identified in the DOD Information Enterprise Architecture (DoD IEA), excepting tactical and non-IP communications 3) Compliant with GIG Technical Guidance to include IT Standards identified in the TV-1 and implementation guidance of GESPs necessary to meet all operational requirements specified in the DoD Enterprise
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	views 4) IA requirements including availability, integrity, authentication, confidentiality, and non-repudiation, and issuance of an ATO by the DAA, and 5) Supportability requirements to include SAASM, Spectrum and JTRS requirements	views 4) IA requirements including availability, integrity, authentication, confidentiality, and non-repudiation, and issuance of an ATO by the DAA, and 5) Supportability requirements to include SAASM, Spectrum and JTRS requirements	views 4) IA requirements including availability, integrity, authentication, confidentiality, and non-repudiation, and issuance of an IATO or ATO by the DAA, and 5) Supportability requirements to include SAASM, Spectrum and JTRS requirements	Architecture and solution architecture views 4) IA requirements including availability, integrity, authentication, confidentiality, and non-repudiation, and issuance of an IATO or ATO by the DAA, and 5) Supportability requirements to include SAASM, Spectrum and JTRS requirements	Architecture and solution architecture views 4) IA requirements including availability, integrity, authentication, confidentiality, and non-repudiation, and issuance of an IATO or ATO by the DAA, and 5) Supportability requirements to include SAASM, Spectrum and JTRS requirements
Sustainment (Operational Availability (Ao)): AN/PRC-154 Rifleman Radio	0.99 (Channel)	0.99 (Channel)	0.96 (Channel)	0.999 (Channel)	0.999 (Channel)
Voice and Data Communication: AN/PRC-155 Manpack	Must provide networked voice and data exchange to support timely tactical actions while dispersed across the battlefield.	Must provide networked voice and data exchange to support timely tactical actions while dispersed across the battlefield.	Must provide networked voice and data exchange to support timely tactical actions while dispersed across the battlefield.	MP demonstrate networked voice and data exchange (i.e., mission command information) supporting timely tactical actions while dispersed across the battlefield using gateways.	Must provide networked voice and data exchange to support timely tactical actions while dispersed across the battlefield.
Net Ready (NR) Capability: AN/PRC-	The capability,	The capability,	The capability,	TBD	The capability,

<p>155 Manpack</p>	<p>system, and/or service must fully support execution of all operational activities and information exchanges identified in DoD Enterprise Architecture and solution architectures based on integrated DoDAF content, and must satisfy the technical requirements for transition to Net-Centric military operations to include 1 Solution architecture products compliant with DoD Enterprise Architecture based on integrated DoDAF content, including specified operationally effective information exchanges 2) Compliant with Net - Centric Data Strategy and</p>	<p>system, and/or service must fully support execution of all operational activities and information exchanges identified in DoD Enterprise Architecture and solution architectures based on integrated DoDAF content, and must satisfy the technical requirements for transition to Net-Centric military operations to include 1 Solution architecture products compliant with DoD Enterprise Architecture based on integrated DoDAF content, including specified operationally effective information exchanges 2) Compliant with Net - Centric Data Strategy and</p>	<p>system, and/or service must fully support execution of joint critical operational activities and information exchanges identified in DoD Enterprise Architecture and solution architectures based on integrated DoDAF content, and must satisfy the technical requirements for transition to Net-Centric military operations to include 1 Solution architecture products compliant with DoD Enterprise Architecture based on integrated DoDAF content, including specified operationally effective information exchanges 2) Compliant with Net - Centric Data Strategy and</p>		<p>system, and/or service must fully support execution of joint critical operational activities and information exchanges identified in DoD Enterprise Architecture and solution architectures based on integrated DoDAF content, and must satisfy the technical requirements for transition to Net-Centric military operations to include 1 Solution architecture products compliant with DoD Enterprise Architecture based on integrated DoDAF content, including specified operationally effective information exchanges 2) Compliant with Net - Centric Data Strategy and</p>
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	<p>Net-Centric Services Strategy, and the principles and rules identified in the DoD IEA, excepting tactical and non-IP communications 3) Compliant with GIG Technical Guidance to include IT Standards identified in the TV-1 and implementation guidance of GESPs, necessary to meet all operational requirements specified in the DoD Enterprise Architecture and solution architecture views 4) IA requirements including availability, integrity, authentication, confidentiality, and non-repudiation, and issuance of an ATO by the DAA, and 5) Supportabil-</p>	<p>Net-Centric Services Strategy, and the principles and rules identified in the DoD IEA, excepting tactical and non-IP communications 3) Compliant with GIG Technical Guidance to include IT Standards identified in the TV-1 and implementation guidance of GESPs, necessary to meet all operational requirements specified in the DoD Enterprise Architecture and solution architecture views 4) IA requirements including availability, integrity, authentication, confidentiality, and non-repudiation, and issuance of an ATO by the DAA, and 5) Supportabil-</p>	<p>Net-Centric Services Strategy, and the principles and rules identified in the DoD IEA, excepting tactical and non-IP communications 3) Compliant with GIG Technical Guidance to include IT Standards identified in the TV-1 and implementation guidance of GESPs, necessary to meet all operational requirements specified in the DoD Enterprise Architecture and solution architecture views 4) IA requirements including availability, integrity, authentication, confidentiality, and non-repudiation, and issuance of an ATO by the DAA, and 5) Supportabil-</p>		<p>Net-Centric Services Strategy, and the principles and rules identified in the DoD IEA, excepting tactical and non-IP communications 3) Compliant with GIG Technical Guidance to include IT Standards identified in the TV-1 and implementation guidance of GESPs, necessary to meet all operational requirements specified in the DoD Enterprise Architecture and solution architecture views 4) IA requirements including availability, integrity, authentication, confidentiality, and non-repudiation, and issuance of an ATO by the DAA, and 5) Supportabil-</p>
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	ity requirements to include SAASM, Spectrum and JTRS requirements	ity requirements to include SAASM, Spectrum and JTRS requirements	ity requirements to include SAASM, Spectrum and JTRS requirements		ity requirements to include SAASM, Spectrum and JTRS requirements
Sustainment (Operational Availability (Ao)): AN/PRC-155 Manpack	0.99 (Channel)	0.99 (Channel)	0.96 (Channel)	0.93 (Channel)	0.97 (Channel)
Multi-Channel Operations: AN/PRC-155 Manpack	To enable Warfighters to conduct combat missions across the battlefield, any channel of the MP must have ability to operate any of the waveforms listed as Objective in Table EE-2 of the CPD. The MP must also allow simultaneous operations using waveform combinations listed as Objective identified in Table EE-3.2 of the CPD. In addition the MP must have the ability to route and retransmit threshold	To enable Warfighters to conduct combat missions across the battlefield, any channel of the MP must have ability to operate any of the waveforms listed as Objective in Table EE-2 of the CPD. The MP must also allow simultaneous operations using waveform combinations listed as Objective identified in Table EE-3.2 of the CPD. In addition the MP must have the ability to route and retransmit threshold	To enable Warfighters to conduct combat missions across the battlefield, any channel of the MP must have ability to operate any of the waveforms listed as Thresholds in Table EE-2 of the CPD. The MP must also allow simultaneous operations using waveform combinations identified in Table EE-3 of the CPD. In addition the MP must have the ability to route and retransmit threshold waveforms listed in Table EE-4	The radio enables Warfighters to conduct combat missions across the battlefield using the Soldier Radio Waveform, basic modes of SINCGARS and basic modes of UHF SATCOM. The MP has demonstrated simultaneous operations using combinations of these waveforms.	To enable Warfighters to conduct combat missions across the battlefield, any channel of the MP must have ability to operate any of the waveforms listed as Thresholds in Table EE-2 of the CPD. The MP must also allow simultaneous operations using waveform combinations identified in Table EE-3 of the CPD. In addition the MP must have the ability to route and retransmit threshold waveforms listed in Table EE-4

	waveforms listed as Objective in Table EE-4 of the CPD.	waveforms listed as Objective in Table EE-4 of the CPD.	of the CPD.		of the CPD.

**Requirements Source:** Rifleman Radio Capability Production Document (CPD) dated March 7, 2011 and Manpack CPD dated May 10, 2012

### Acronyms And Abbreviations

AN/PRC - Army-Navy Portable Radio Component  
ATO - Approval to Operate  
CPD - Capability Production Document  
DAA - Designated Approval Authority  
DOD - Department of Defense  
DODAF - Department of Defense Architecture Framework  
GESP - Global Information Grid Enterprise Service Profile  
GIG - Global Information Grid  
IA - Information Assurance  
IATO - Interim Approval to Operate  
IAW - in accordance with  
IEA - Information Environment Architecture  
IERs - Information Exchange Requirements  
IP - Internet Protocol  
IT - Information Technology  
JTA - Joint Technical Architecture  
JTRS - Joint Tactical Radio System  
MP - Manpack  
SAASM - Selective Availability Anti-Spoofing Module  
SATCOM - Satellite Communications  
SINGARS - Single Channel Ground to Air Radio System  
TBD - To Be Determined  
TV - Technical View  
UHF - Ultra High Frequency  
WF - Waveform

### Change Explanations

None

**Track To Budget**

<b>RDT&amp;E</b>				
APPN 1319	BA 05	PE 0604280N	(Navy)	
	Project 3075	Joint Tactical Radio System (JTRS) / HMS JTRS		
APPN 2040	BA 05	PE 0604280A	(Army)	
	Project 162	Joint Tactical Radio / Network Enterprise Domain (NED)	(Shared)	
	Project DZ5	Joint Tactical Radio		
APPN 2040	BA 05	PE 0604805A	(Army)	
	Project 615	JTRS - Ground Domain Integration	(Shared)	(Sunk)
	Project 61A	JTRS Cluster 5 Development		(Sunk)
APPN 3600	BA 05	PE 0604280F	(Air Force)	
	Project 655068	Joint Tactical Radio System (JTRS)	(Shared)	(Sunk)

Prior to FY 2014, Project Unit 3075 JTRS HMS was funded under Program Element (PE) 0604280N aligned under the Navy JTRS Programs. In FY 2014 - FY 2018, PE 0604280N no longer includes funding associated with the JTRS Programs. In accordance with the Acquisition Decision Memorandum (ADM) dated July 11, 2012, the JTRS Program of Records (PORs) transitioned to a Military Department-managed program. JTRS HMS is now associated with Program Executive Office Command, Control and Communications-Tactical (PEO C3T) under Project Manager Tactical Radios (PM TR) PE 0604280A.

<b>Procurement</b>				
APPN 1109	BA 04	PE 0206313M	(Navy)	
	ICN 4633	Radio Systems	(Shared)	
APPN 1810	BA 02	PE 0204163N	(Navy)	
	ICN 3057	Communication Items Under \$5M	(Shared)	

APPN 2035	BA 02	PE 0310700A	(Army)
	ICN B90210	JTRS Cluster 5 (Handheld)	
APPN 2035	BA 02	PE 0303140A	(Army)
	ICN B90215	JTRS (Manpack)	
APPN 2035	BA 03		(Army)
	ICN R80501	Ground Soldier System	(Shared)
APPN 3080	BA 03	PE 0207423F	(Air Force)
	ICN 8371	Tactical C-E Equipment	(Shared)

## Cost and Funding

### Cost Summary

#### Total Acquisition Cost and Quantity

Appropriation	BY2011 \$M			BY2011 \$M	TY \$M		
	SAR Baseline Prod Est	Current APB Production Objective/Threshold	Current Estimate	Current Estimate	SAR Baseline Prod Est	Current APB Production Objective	Current Estimate
RDT&E	1254.7	1254.7	1380.2	1185.7	1238.5	1238.5	1164.0
Procurement	6987.9	6987.9	7686.7	7251.6	7962.5	7962.5	9027.1
Flyaway	5281.6	--	--	5623.7	6007.9	--	7008.3
Recurring	5257.9	--	--	5604.2	5983.1	--	6987.5
Non Recurring	23.7	--	--	19.5	24.8	--	20.8
Support	1706.3	--	--	1627.9	1954.6	--	2018.8
Other Support	1512.9	--	--	1413.3	1734.6	--	1752.3
Initial Spares	193.4	--	--	214.6	220.0	--	266.5
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	8242.6	8242.6	N/A	8437.3	9201.0	9201.0	10191.1

Confidence Level for Current APB Cost 50% - The Independent Cost Estimate (ICE) to support JTRS HMS Milestone C decision, like all life-cycle cost estimates previously performed by the Cost Assessment Program Evaluation (CAPE) office, is built upon a product-oriented work breakdown structure, based on historical actual cost information to the maximum extent possible, and, most importantly, based on conservative assumptions that are consistent with actual demonstrated contractor and government performance for a series of acquisition programs in which the Department has been successful. It is difficult to calculate mathematically the precise confidence levels associated with life-cycle cost estimates prepared for Major Defense Acquisition Programs (MDAPs). Based on the rigor in methods used in building estimates, the strong adherence to the collection and use of historical cost information, and the review of applied assumptions, we project that it is about equally likely that the estimate will prove too low or too high for execution of the program described.

<b>Quantity</b>	<b>SAR Baseline Prod Est</b>	<b>Current APB Production</b>	<b>Current Estimate</b>
RDT&E	582	582	833
Procurement	270369	270369	270369
Total	270951	270951	271202

Unit of measure is an HMS radio, which includes multiple variants (Rifleman Radio, Manpack, or various Small Form Fits).

## 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	1015.6	116.0	31.8	0.6	0.0	0.0	0.0	0.0	1164.0
Procurement	488.4	485.8	382.9	355.4	355.1	355.1	382.7	6221.7	9027.1
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	1504.0	601.8	414.7	356.0	355.1	355.1	382.7	6221.7	10191.1
PB 2013 Total	1537.6	687.6	610.6	573.0	686.8	711.6	786.9	3710.6	9304.7
Delta	-33.6	-85.8	-195.9	-217.0	-331.7	-356.5	-404.2	2511.1	886.4

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	833	0	0	0	0	0	0	0	0	833
Production	0	23134	10995	10523	10065	10064	10064	10881	184643	270369
PB 2014 Total	833	23134	10995	10523	10065	10064	10064	10881	184643	271202
PB 2013 Total	833	20495	17128	18004	19130	18009	18072	25229	134302	271202
Delta	0	2639	-6133	-7481	-9065	-7945	-8008	-14348	50341	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
2007	--	--	--	--	--	--	132.9
2008	--	--	--	--	--	--	150.6
2009	--	--	--	--	--	--	127.1
2010	--	--	--	--	--	--	178.3
2011	--	--	--	--	--	--	66.1
2012	--	--	--	--	--	--	117.2
2013	--	--	--	--	--	--	116.0
<b>Subtotal</b>	<b>252</b>	--	--	--	--	--	<b>888.2</b>

## Annual Funding BY\$

## 1319 | RDT&amp;E | Research, Development, Test, and Evaluation, Navy

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2011 \$M	Non End Item Recurring Flyaway BY 2011 \$M	Non Recurring Flyaway BY 2011 \$M	Total Flyaway BY 2011 \$M	Total Support BY 2011 \$M	Total Program BY 2011 \$M
2007	--	--	--	--	--	--	139.7
2008	--	--	--	--	--	--	155.5
2009	--	--	--	--	--	--	129.6
2010	--	--	--	--	--	--	179.1
2011	--	--	--	--	--	--	64.7
2012	--	--	--	--	--	--	112.5
2013	--	--	--	--	--	--	109.2
<b>Subtotal</b>	<b>252</b>	--	--	--	--	--	<b>890.3</b>

## Annual Funding TY\$

## 2040 | RDT&amp;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
2004	--	--	--	--	--	--	21.9
2005	--	--	--	--	--	--	96.1
2006	--	--	--	--	--	--	124.6
2007	--	--	--	--	--	--	--
2008	--	--	--	--	--	--	--
2009	--	--	--	--	--	--	--
2010	--	--	--	--	--	--	--
2011	--	--	--	--	--	--	0.8
2012	--	--	--	--	--	--	--
2013	--	--	--	--	--	--	--
2014	--	--	--	--	--	--	31.8
2015	--	--	--	--	--	--	0.6
<b>Subtotal</b>	<b>562</b>	--	--	--	--	--	<b>275.8</b>

## Annual Funding BY\$

## 2040 | RDT&amp;E | Research, Development, Test, and Evaluation, Army

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2011 \$M	Non End Item Recurring Flyaway BY 2011 \$M	Non Recurring Flyaway BY 2011 \$M	Total Flyaway BY 2011 \$M	Total Support BY 2011 \$M	Total Program BY 2011 \$M
2004	--	--	--	--	--	--	24.9
2005	--	--	--	--	--	--	106.2
2006	--	--	--	--	--	--	133.9
2007	--	--	--	--	--	--	--
2008	--	--	--	--	--	--	--
2009	--	--	--	--	--	--	--
2010	--	--	--	--	--	--	--
2011	--	--	--	--	--	--	0.8
2012	--	--	--	--	--	--	--
2013	--	--	--	--	--	--	--
2014	--	--	--	--	--	--	29.1
2015	--	--	--	--	--	--	0.5
<b>Subtotal</b>	<b>562</b>	--	--	--	--	--	<b>295.4</b>

**Annual Funding TY\$**  
**1109 | Procurement | Procurement, Marine Corps**

<b>Fiscal Year</b>	<b>Quantity</b>	<b>End Item Recurring Flyaway TY \$M</b>	<b>Non End Item Recurring Flyaway TY \$M</b>	<b>Non Recurring Flyaway TY \$M</b>	<b>Total Flyaway TY \$M</b>	<b>Total Support TY \$M</b>	<b>Total Program TY \$M</b>
2019	226	15.9	--	--	15.9	1.1	17.0
2020	272	18.7	--	--	18.7	2.4	21.1
2021	331	22.8	--	--	22.8	2.9	25.7
2022	314	21.7	--	--	21.7	3.1	24.8
2023	267	18.5	--	--	18.5	2.9	21.4
2024	211	14.7	--	--	14.7	2.3	17.0
2025	179	12.6	--	--	12.6	2.0	14.6
2026	159	11.3	--	--	11.3	1.7	13.0
2027	149	10.7	--	--	10.7	1.6	12.3
2028	285	20.7	--	--	20.7	2.3	23.0
<b>Subtotal</b>	<b>2393</b>	<b>167.6</b>	<b>--</b>	<b>--</b>	<b>167.6</b>	<b>22.3</b>	<b>189.9</b>

**Annual Funding BY\$****1109 | Procurement | Procurement, Marine Corps**

<b>Fiscal Year</b>	<b>Quantity</b>	<b>End Item Recurring Flyaway BY 2011 \$M</b>	<b>Non End Item Recurring Flyaway BY 2011 \$M</b>	<b>Non Recurring Flyaway BY 2011 \$M</b>	<b>Total Flyaway BY 2011 \$M</b>	<b>Total Support BY 2011 \$M</b>	<b>Total Program BY 2011 \$M</b>
2019	226	13.3	--	--	13.3	0.9	14.2
2020	272	15.3	--	--	15.3	2.0	17.3
2021	331	18.3	--	--	18.3	2.3	20.6
2022	314	17.1	--	--	17.1	2.4	19.5
2023	267	14.3	--	--	14.3	2.2	16.5
2024	211	11.2	--	--	11.2	1.7	12.9
2025	179	9.4	--	--	9.4	1.5	10.9
2026	159	8.3	--	--	8.3	1.2	9.5
2027	149	7.7	--	--	7.7	1.1	8.8
2028	285	14.6	--	--	14.6	1.6	16.2
<b>Subtotal</b>	<b>2393</b>	<b>129.5</b>	<b>--</b>	<b>--</b>	<b>129.5</b>	<b>16.9</b>	<b>146.4</b>

**Annual Funding TY\$**  
**1810 | Procurement | Other Procurement, Navy**

<b>Fiscal Year</b>	<b>Quantity</b>	<b>End Item Recurring Flyaway TY \$M</b>	<b>Non End Item Recurring Flyaway TY \$M</b>	<b>Non Recurring Flyaway TY \$M</b>	<b>Total Flyaway TY \$M</b>	<b>Total Support TY \$M</b>	<b>Total Program TY \$M</b>
2013	46	3.4	--	--	3.4	0.2	3.6
2014	--	--	--	--	--	--	--
2015	17	1.2	--	--	1.2	0.3	1.5
2016	16	1.1	--	--	1.1	0.1	1.2
2017	16	1.1	--	--	1.1	0.1	1.2
2018	14	1.0	--	--	1.0	0.1	1.1
2019	12	0.8	--	--	0.8	0.1	0.9
2020	13	0.9	--	--	0.9	0.1	1.0
2021	13	0.9	--	--	0.9	0.1	1.0
2022	13	0.9	--	--	0.9	0.1	1.0
2023	13	0.9	--	--	0.9	0.1	1.0
2024	13	0.9	--	--	0.9	0.1	1.0
2025	13	0.9	--	--	0.9	0.1	1.0
2026	13	0.9	--	--	0.9	0.1	1.0
2027	13	0.9	--	--	0.9	0.1	1.0
2028	13	0.9	--	--	0.9	0.1	1.0
2029	12	0.9	--	--	0.9	0.1	1.0
<b>Subtotal</b>	<b>250</b>	<b>17.6</b>	<b>--</b>	<b>--</b>	<b>17.6</b>	<b>1.9</b>	<b>19.5</b>

**Annual Funding BY\$**  
**1810 | Procurement | Other Procurement, Navy**

<b>Fiscal Year</b>	<b>Quantity</b>	<b>End Item Recurring Flyaway BY 2011 \$M</b>	<b>Non End Item Recurring Flyaway BY 2011 \$M</b>	<b>Non Recurring Flyaway BY 2011 \$M</b>	<b>Total Flyaway BY 2011 \$M</b>	<b>Total Support BY 2011 \$M</b>	<b>Total Program BY 2011 \$M</b>
2013	46	3.2	--	--	3.2	0.2	3.4
2014	--	--	--	--	--	--	--
2015	17	1.1	--	--	1.1	0.3	1.4
2016	16	1.0	--	--	1.0	0.1	1.1
2017	16	1.0	--	--	1.0	--	1.0
2018	14	0.9	--	--	0.9	--	0.9
2019	12	0.7	--	--	0.7	0.1	0.8
2020	13	0.7	--	--	0.7	0.1	0.8
2021	13	0.7	--	--	0.7	0.1	0.8
2022	13	0.7	--	--	0.7	0.1	0.8
2023	13	0.7	--	--	0.7	0.1	0.8
2024	13	0.7	--	--	0.7	0.1	0.8
2025	13	0.7	--	--	0.7	--	0.7
2026	13	0.7	--	--	0.7	--	0.7
2027	13	0.6	--	--	0.6	0.1	0.7
2028	13	0.6	--	--	0.6	0.1	0.7
2029	12	0.6	--	--	0.6	0.1	0.7
<b>Subtotal</b>	<b>250</b>	<b>14.6</b>	<b>--</b>	<b>--</b>	<b>14.6</b>	<b>1.5</b>	<b>16.1</b>

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

<b>Fiscal Year</b>	<b>Quantity</b>	<b>End Item Recurring Flyaway TY \$M</b>	<b>Non End Item Recurring Flyaway TY \$M</b>	<b>Non Recurring Flyaway TY \$M</b>	<b>Total Flyaway TY \$M</b>	<b>Total Support TY \$M</b>	<b>Total Program TY \$M</b>
2011	5297	33.3	--	6.9	40.2	0.1	40.3
2012	17837	372.1	--	6.0	378.1	70.0	448.1
2013	10949	331.2	--	2.7	333.9	148.3	482.2
2014	10523	224.6	--	2.1	226.7	156.2	382.9
2015	10048	256.1	--	--	256.1	97.8	353.9
2016	10048	256.0	--	--	256.0	97.9	353.9
2017	10048	256.8	--	3.1	259.9	94.0	353.9
2018	10867	323.1	--	--	323.1	58.5	381.6
2019	16132	402.1	--	--	402.1	98.5	500.6
2020	16550	405.6	--	--	405.6	101.8	507.4
2021	16684	407.6	--	--	407.6	107.9	515.5
2022	16646	409.8	--	--	409.8	114.6	524.4
2023	16608	412.8	--	--	412.8	115.8	528.6
2024	16456	415.8	--	--	415.8	117.9	533.7
2025	16000	417.4	--	--	417.4	111.1	528.5
2026	16000	421.7	--	--	421.7	114.2	535.9
2027	16000	426.6	--	--	426.6	115.7	542.3
2028	14541	300.9	--	--	300.9	108.5	409.4
2029	15693	222.2	--	--	222.2	101.7	323.9
<b>Subtotal</b>	<b>262927</b>	<b>6295.7</b>	<b>--</b>	<b>20.8</b>	<b>6316.5</b>	<b>1930.5</b>	<b>8247.0</b>

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

<b>Fiscal Year</b>	<b>Quantity</b>	<b>End Item Recurring Flyaway BY 2011 \$M</b>	<b>Non End Item Recurring Flyaway BY 2011 \$M</b>	<b>Non Recurring Flyaway BY 2011 \$M</b>	<b>Total Flyaway BY 2011 \$M</b>	<b>Total Support BY 2011 \$M</b>	<b>Total Program BY 2011 \$M</b>
2011	5297	32.5	--	6.7	39.2	0.1	39.3
2012	17837	355.7	--	5.7	361.4	67.0	428.4
2013	10949	308.0	--	2.5	310.5	137.9	448.4
2014	10523	204.2	--	1.9	206.1	142.1	348.2
2015	10048	228.5	--	--	228.5	87.3	315.8
2016	10048	224.2	--	--	224.2	85.7	309.9
2017	10048	220.7	--	2.7	223.4	80.7	304.1
2018	10867	272.5	--	--	272.5	49.3	321.8
2019	16132	332.8	--	--	332.8	81.5	414.3
2020	16550	329.4	--	--	329.4	82.7	412.1
2021	16684	324.9	--	--	324.9	86.0	410.9
2022	16646	320.5	--	--	320.5	89.7	410.2
2023	16608	316.9	--	--	316.9	88.8	405.7
2024	16456	313.2	--	--	313.2	88.8	402.0
2025	16000	308.6	--	--	308.6	82.1	390.7
2026	16000	305.9	--	--	305.9	82.9	388.8
2027	16000	303.7	--	--	303.7	82.4	386.1
2028	14541	210.2	--	--	210.2	75.8	286.0
2029	15693	152.3	--	--	152.3	69.8	222.1
<b>Subtotal</b>	<b>262927</b>	<b>5064.7</b>	<b>--</b>	<b>19.5</b>	<b>5084.2</b>	<b>1560.6</b>	<b>6644.8</b>

## Annual Funding TY\$

## 3080 | Procurement | Other Procurement, 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
2019	258	19.4	--	--	19.4	1.3	20.7
2020	551	58.0	--	--	58.0	3.5	61.5
2021	783	80.0	--	--	80.0	4.8	84.8
2022	396	36.5	--	--	36.5	3.8	40.3
2023	319	28.6	--	--	28.6	6.1	34.7
2024	534	59.9	--	--	59.9	9.4	69.3
2025	929	102.3	--	--	102.3	8.8	111.1
2026	577	67.7	--	--	67.7	6.1	73.8
2027	200	23.7	--	--	23.7	5.9	29.6
2028	200	24.1	--	--	24.1	9.0	33.1
2029	52	6.4	--	--	6.4	5.4	11.8
<b>Subtotal</b>	<b>4799</b>	<b>506.6</b>	<b>--</b>	<b>--</b>	<b>506.6</b>	<b>64.1</b>	<b>570.7</b>

**Annual Funding BY\$****3080 | Procurement | Other Procurement, Air Force**

<b>Fiscal Year</b>	<b>Quantity</b>	<b>End Item Recurring Flyaway BY 2011 \$M</b>	<b>Non End Item Recurring Flyaway BY 2011 \$M</b>	<b>Non Recurring Flyaway BY 2011 \$M</b>	<b>Total Flyaway BY 2011 \$M</b>	<b>Total Support BY 2011 \$M</b>	<b>Total Program BY 2011 \$M</b>
2019	258	16.5	--	--	16.5	1.1	17.6
2020	551	48.3	--	--	48.3	3.0	51.3
2021	783	65.4	--	--	65.4	4.0	69.4
2022	396	29.3	--	--	29.3	3.0	32.3
2023	319	22.5	--	--	22.5	4.8	27.3
2024	534	46.3	--	--	46.3	7.3	53.6
2025	929	77.6	--	--	77.6	6.7	84.3
2026	577	50.4	--	--	50.4	4.5	54.9
2027	200	17.3	--	--	17.3	4.3	21.6
2028	200	17.3	--	--	17.3	6.4	23.7
2029	52	4.5	--	--	4.5	3.8	8.3
<b>Subtotal</b>	<b>4799</b>	<b>395.4</b>	<b>--</b>	<b>--</b>	<b>395.4</b>	<b>48.9</b>	<b>444.3</b>

## Low Rate Initial Production

	Initial LRIP Decision	Current Total LRIP
<b>Approval Date</b>	6/17/2011	10/11/2012
<b>Approved Quantity</b>	6350	23153
<b>Reference</b>	Milestone C ADM	ADM
<b>Start Year</b>	2011	2011
<b>End Year</b>	2012	2012

The Milestone C Acquisition Decision Memorandum (ADM) was signed on June 17, 2011, approving entry in the Production and Deployment phase and authorizing the Army to contract for an initial Low Rate Initial Production (LRIP) procurement of 6,250 Rifleman Radios (RRs) (AN/PRC-154) and 100 Manpack (MP) radios (AN/PRC-155). The ADM directed the Services to fund to the Independent Cost Estimate (ICE) position. A follow-on ADM signed July 11, 2012 approved the procurement of an additional LRIP of 13,077 RR's. An October 11, 2012 ADM authorized an additional LRIP procurement of up to 3,726 MP's.

## **Foreign Military Sales**

None

## **Nuclear Cost**

None

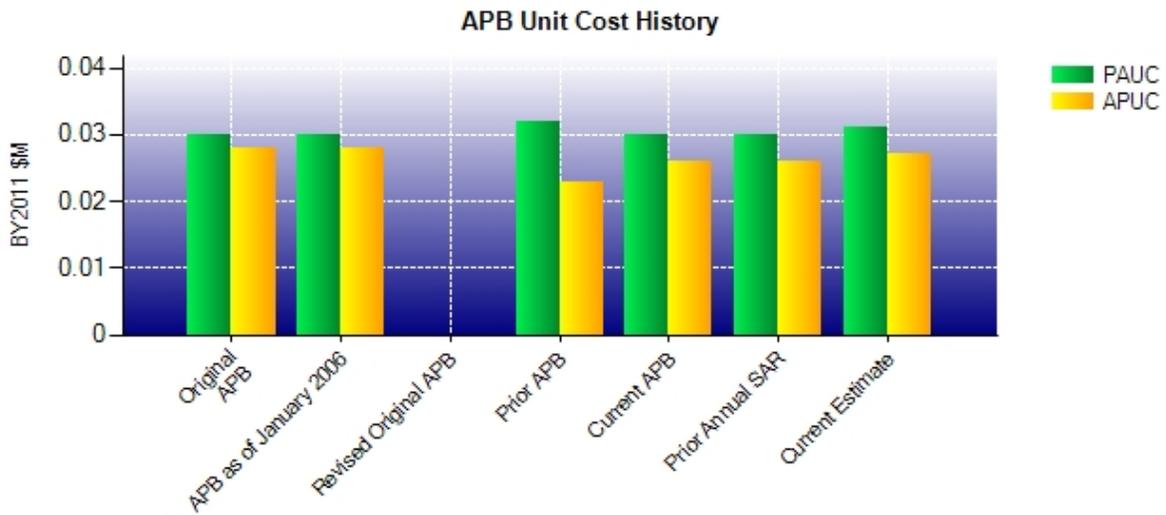
**Unit Cost****Unit Cost Report**

	BY2011 \$M	BY2011 \$M	
Unit Cost	Current UCR Baseline (OCT 2011 APB)	Current Estimate (DEC 2012 SAR)	BY % Change
<b>Program Acquisition Unit Cost (PAUC)</b>			
Cost	8242.6	8437.3	
Quantity	270951	271202	
Unit Cost	0.030	0.031	+3.33
<b>Average Procurement Unit Cost (APUC)</b>			
Cost	6987.9	7251.6	
Quantity	270369	270369	
Unit Cost	0.026	0.027	+3.85

	BY2011 \$M	BY2011 \$M	
Unit Cost	Original UCR Baseline (MAY 2004 APB)	Current Estimate (DEC 2012 SAR)	BY % Change
<b>Program Acquisition Unit Cost (PAUC)</b>			
Cost	9889.2	8437.3	
Quantity	329574	271202	
Unit Cost	0.030	0.031	+3.33
<b>Average Procurement Unit Cost (APUC)</b>			
Cost	9352.6	7251.6	
Quantity	328514	270369	
Unit Cost	0.028	0.027	-3.57

### Unit Cost History



	Date	BY2011 \$M		TY \$M	
		PAUC	APUC	PAUC	APUC
<b>Original APB</b>	MAY 2004	0.030	0.028	0.033	0.031
<b>APB as of January 2006</b>	MAY 2004	0.030	0.028	0.033	0.031
<b>Revised Original APB</b>	N/A	N/A	N/A	N/A	N/A
<b>Prior APB</b>	JAN 2008	0.032	0.023	0.036	0.027
<b>Current APB</b>	OCT 2011	0.030	0.026	0.034	0.029
<b>Prior Annual SAR</b>	DEC 2011	0.030	0.026	0.034	0.030
<b>Current Estimate</b>	DEC 2012	0.031	0.027	0.038	0.033

### SAR Unit Cost History

#### Initial SAR Baseline to Current SAR Baseline (TY \$M)

Initial PAUC Dev Est	Changes								PAUC Prod Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.033	0.002	0.012	0.003	0.000	-0.018	0.000	0.002	0.001	0.034

#### Current SAR Baseline to Current Estimate (TY \$M)

PAUC Prod Est	Changes								PAUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.034	0.001	0.000	0.002	0.000	0.001	0.000	0.000	0.004	0.038

## Initial SAR Baseline to Current SAR Baseline (TY \$M)

Initial APUC Dev Est	Changes								APUC Prod Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.031	0.002	0.013	0.003	0.000	-0.022	0.000	0.002	-0.002	0.029

## Current SAR Baseline to Current Estimate (TY \$M)

APUC Prod Est	Changes								APUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.029	0.001	0.000	0.002	0.000	0.001	0.000	0.000	0.004	0.033

## 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	APR 2004	APR 2004	APR 2004
Milestone C	N/A	MAR 2008	MAY 2011	MAY 2011
IOC	N/A	FEB 2007	JAN 2012	JUL 2012
Total Cost (TY \$M)	N/A	10717.0	9201.0	10191.1
Total Quantity	N/A	328674	270951	271202
Prog. Acq. Unit Cost (PAUC)	N/A	0.033	0.034	0.038

**Cost Variance**

<b>Summary Then Year \$M</b>				
	<b>RDT&amp;E</b>	<b>Proc</b>	<b>MILCON</b>	<b>Total</b>
SAR Baseline (Prod Est)	1238.5	7962.5	--	9201.0
Previous Changes				
Economic	-1.9	+138.9	--	+137.0
Quantity	--	--	--	--
Schedule	--	-7.7	--	-7.7
Engineering	--	--	--	--
Estimating	-61.2	-99.9	--	-161.1
Other	--	--	--	--
Support	--	+135.3	--	+135.3
Subtotal	-63.1	+166.6	--	+103.5
Current Changes				
Economic	+3.5	+113.5	--	+117.0
Quantity	--	--	--	--
Schedule	--	+445.2	--	+445.2
Engineering	--	--	--	--
Estimating	-14.9	+477.6	--	+462.7
Other	--	--	--	--
Support	--	-138.3	--	-138.3
Subtotal	-11.4	+898.0	--	+886.6
Adjustments	--	--	--	--
Total Changes	-74.5	+1064.6	--	+990.1
CE - Cost Variance	1164.0	9027.1	--	10191.1
CE - Cost & Funding	1164.0	9027.1	--	10191.1

Summary Base Year 2011 \$M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Prod Est)	1254.7	6987.9	--	8242.6
Previous Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	-55.4	-89.0	--	-144.4
Other	--	--	--	--
Support	--	+122.0	--	+122.0
Subtotal	-55.4	+33.0	--	-22.4
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	-13.6	+431.1	--	+417.5
Other	--	--	--	--
Support	--	-200.4	--	-200.4
Subtotal	-13.6	+230.7	--	+217.1
Adjustments	--	--	--	--
Total Changes	-69.0	+263.7	--	+194.7
CE - Cost Variance	1185.7	7251.6	--	8437.3
CE - Cost & Funding	1185.7	7251.6	--	8437.3

Previous Estimate: September 2012

<b>RDT&amp;E</b>	<b>\$M</b>	
<b>Current Change Explanations</b>	<b>Base Year</b>	<b>Then Year</b>
Revised escalation indices. (Economic)	N/A	+3.5
Adjustment for current and prior escalation. (Estimating)	-2.7	-2.8
Decrease reflects realignment of RDTE funds from the Navy to the Army. (Estimating)	-2.8	-3.0
Decrease reflects adjustment for out year RDTE budget reductions as well as a realignment of RDTE funds from the Navy and Air Force to the Army. (Estimating)	-5.0	-5.8
Decrease reflects realignment of RDTE funds from the Air Force to the Army. (Estimating)	-3.1	-3.3
<b>RDT&amp;E Subtotal</b>	<b>-13.6</b>	<b>-11.4</b>

<b>Procurement</b>	<b>\$M</b>	
<b>Current Change Explanations</b>	<b>Base Year</b>	<b>Then Year</b>
Revised escalation indices. (Economic)	N/A	+113.5
Adjustment to procurement buy profile based on funding updates. (Marine Corps) (Schedule) (QR)	0.0	+3.5
Adjustment to procurement buy profile based on funding updates. (Navy) (Schedule) (QR)	0.0	+0.3
Delay in the procurement buy profile extending the end date from FY 2023 to FY 2029. (Army) (Schedule) (QR)	0.0	+426.5
Adjustment to procurement buy profile based on funding updates. (Air Force) (Schedule) (QR)	0.0	+14.9
Adjustment for current and prior escalation. (Estimating)	-3.8	-3.9
Increase reflects update of Recurring Manufacturing costs with LRIP actuals. (Marine Corps) (Estimating)	+36.1	+49.1
Increase reflects update of Recurring Manufacturing costs with LRIP actuals. (Navy) (Estimating)	+3.5	+4.5
Increase reflects update of Recurring Manufacturing costs with LRIP actuals. (Army) (Estimating)	+331.4	+307.8
Increase reflects update of Recurring Manufacturing costs with LRIP actuals. (Air Force) (Estimating)	+63.9	+120.1
Adjustment for current and prior escalation. (Support)	-1.0	-1.2
Increase reflects update of Other Support costs with current programmatic and fielding plans. (Marine Corps) (Support)	+8.4	+11.5
Increase reflects update of Initial Spares costs with LRIP actuals. (Marine Corps) (Support)	+1.4	+2.1
Increase reflects update of Other Support costs with current programmatic and fielding plans. (Navy) (Support)	+0.8	+1.1
Decrease reflects update of Initial Spares costs with LRIP actuals. (Navy) (Support)	-0.1	-0.1
Decrease reflects update of Other Support costs with current programmatic and fielding plans. (Army) (Support)	-213.8	-178.6
Increase reflects update of Initial Spares costs with LRIP actuals. (Army) (Support)	+20.8	+36.8

Decrease reflects update of Other Support costs with current programmatic and fielding plans. (Air Force) (Support)	-19.6	-15.3
Increase reflects update of Initial Spares costs with LRIP actuals. (Air Force) (Support)	+2.7	+5.4
Procurement Subtotal	+230.7	+898.0

(QR) Quantity Related

## Contracts

### Appropriation: RDT&E

Contract Name	<b>Development</b>
Contractor	General Dynamics C4 Systems, Inc.
Contractor Location	Scottsdale, AZ 85257
Contract Number, Type	W15P7T-04-C-E405, CPAF
Award Date	July 16, 2004
Definitization Date	July 16, 2004

Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
295.6	N/A	0	631.3	N/A	833	890.9	901.0

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date (2/22/2013)	-6.9	-4.9
Previous Cumulative Variances	-5.0	-0.9
Net Change	-1.9	-4.0

### Cost And Schedule Variance Explanations

The unfavorable net change in the cost variance is due to management decision to implement an Over Target Baseline (OTB).

The unfavorable net change in the schedule variance is due to management decision to implement an OTB.

### Contract Comments

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to in scope contract changes.

In the December 2011 SAR, the contract was listed as 90% complete; since then, the program has undergone an Over Target Baseline, which has increased the Estimate at Complete, and resulted in the contract currently being less than 90% complete.

In 2006, the JTRS HMS program was restructured, resulting in cost and schedule above the original baseline. Since then, the baseline was further increased by other in scope contract changes including the Mobile User Objective System (MUOS), the modification of the Small Form Factor (SFF)-C to the current configuration AN/PRC-154 Rifleman Radio, and the realignment of tasks associated with changes to software drops. These changes to the baseline have caused the increase from the Initial Contract Price to the Current Contract Price.

**Appropriation: Procurement**

Contract Name	<b>Procurement</b>
Contractor	General Dynamics C4 Systems, Inc.
Contractor Location	Scottsdale, AZ 85257
Contract Number, Type	W15P7T-04-C-E405/1, FFP
Award Date	June 17, 2011
Definitization Date	June 28, 2011

Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
56.5	N/A	6350	428.6	N/A	25205	428.6	428.6

**Cost And Schedule Variance Explanations**

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

**Contract Comments**

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to additional Low Rate Initial Production (LRIP) Contract options exercised for Rifleman Radio and Manpack Radio LRIP2.

## Deliveries and Expenditures

Deliveries To Date	Plan To Date	Actual To Date	Total Quantity	Percent Delivered
Development	833	833	833	100.00%
Production	9905	9910	270369	3.67%
Total Program Quantities Delivered	10738	10743	271202	3.96%

Expenditures and Appropriations (TY \$M)			
Total Acquisition Cost	10191.1	Years Appropriated	10
Expenditures To Date	1519.9	Percent Years Appropriated	38.46%
Percent Expended	14.91%	Appropriated to Date	2105.8
Total Funding Years	26	Percent Appropriated	20.66%

As of March 31, 2013, the Government has received 9,347 Low Rate Initial Production (LRIP) Rifleman Radios (RR) and 563 LRIP Manpack (MP) radios. Planned figure consists of 9,327 RR and 578 MP radios. RR was 20 radios ahead of delivery schedule; MP was 15 radios behind delivery schedule. This was mainly due to low HDI-6 circuit board yields impacting MP deliveries.

## Operating and Support Cost

### JTRS HMS

#### Assumptions and Ground Rules

##### Cost Estimate Reference:

1. Cost estimate and quantities reflect the approved Office of the Secretary of Defense (OSD) Cost Assessment and Program Evaluation Office (CAPE) Independent Cost Estimate (ICE) signed June 2011.
2. Costs estimated in accordance with Department of the Army Cost Analysis Manual, May 2001.
3. OSD Inflation Guidance dated January 2013 was applied.
4. Approved JTRS HMS Cost Analysis Requirements Document (CARD) updated March 2011 is used as the basis of the estimate.

##### Sustainment Strategy:

For HMS products, Interim Contractor Support (ICS) will provide the sustainment support during Low Rate Initial Production (LRIP). During Full Rate Production (FRP) ICS will transition to organic support. FRP contracts will contain all sustainment requirements necessary to meet the Operational Availability Key Performance Parameter (KPP) of 96%. System life is estimated at 20 years. and the total number of radios are 270,369.

##### Antecedent Information:

There is no antecedent program; JTRS HMS has a diverse portfolio of radio configurations, ranging in both cost and function, and there is no single DoD program with a comparable set of requirements.

Unitized O&S Costs BY2011 \$K			
Cost Element	JTRS HMS Average Annual Cost per Radio	No Antecedent (Antecedent) N/A	
Unit-Level Manpower	0.000		0.000
Unit Operations	0.000		0.000
Maintenance	2.006		0.000
Sustaining Support	0.134		0.000
Continuing System Improvements	0.245		0.000
Indirect Support	0.000		0.000
Other	0.000		0.000
Total	2.385		--

##### Unitized Cost Comments:

The total Operating and Support (O&S) cost is the Average Annual Cost x Total Number of Radios (270,369) x 20 year system life.

	Total O&S Cost \$M			
	Current Production APB Objective/Threshold		Current Estimate	
	JTRS HMS		JTRS HMS	No Antecedent (Antecedent)
<b>Base Year</b>	14710.4	16181.4	12896.3	N/A
<b>Then Year</b>	20019.2	N/A	17236.1	N/A

Total O&S Costs Comments:

The O&S cost variance from the prior SAR is largely due to breaking out the Disposal costs from the O&S total cost estimate to its respective section.

**Disposal Costs**

The O&S estimate does not include Disposal costs in the amount of \$1.814 (BY11\$K).