

**UNCLASSIFIED**

PE NUMBER: 0207423F

PE TITLE: Advanced Communications Systems

<b>Exhibit R-2, RDT&amp;E Budget Item Justification</b>	DATE <b>February 2008</b>
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<b>BUDGET ACTIVITY</b> <b>07 Operational System Development</b>	<b>PE NUMBER AND TITLE</b> <b>0207423F Advanced Communications Systems</b>
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Cost (\$ in Millions)	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	38.215	33.372	29.782	57.877	65.220	66.556	67.982	Continuing	TBD
4934 Tactical Air Control Party (TACP)	8.768	13.437	13.253	10.870	11.044	11.332	11.636	Continuing	TBD
5084 C4ISR NODE (AJCN)	0.950	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
5189 C2ISR JTRS Integration	28.497	19.935	16.529	47.007	54.176	55.224	56.346	Continuing	TBD

**(U) A. Mission Description and Budget Item Justification**

Note: BPAC 5084 includes .950 for AJCN(BA04) in FY07.

Tactical Air Control Party (TACP)s deploy with Army maneuver units and provide a Command and Control (C2) link for Close Air Support (CAS), airlift and AF surveillance/reconnaissance missions. TACPs are equipped with various targeting and communications equipment needed to interface with ground maneuver forces, aircraft conducting CAS operations, aerospace C2 aircraft/agencies, and Intelligence, Surveillance and Reconnaissance (ISR) platforms/agencies. The TACP-Modernization (TACP-M) program provides TACP and Air Support Operations Centers (ASOCs) personnel with the capability to precisely locate and target enemy ground forces by integrating various Laser Targeting Devices (LTD) and ultra high frequency satellite communications (UHF SATCOM) for beyond-line-of-sight (BLOS) Air Force Air Request Net operations. The purpose of the TACP-M program is intended to reduce reliance on voice transmission and replace analog equipment with the latest digital, data link and streaming video (i.e. Remote Operations Video Enhanced Receiver (ROVER)) technology. This capability increase supports joint and multinational interoperability, improves battlefield Situational Awareness (SA), increases targeting accuracy, reduces kill chain decision time, improves data flows/information exchange, and reduces potential fratricide. The TACP-M program directly supports the GWOT and significantly increases the mission effectiveness of the TACPs and ASOCs during Operations Enduring and Iraqi Freedom. The TACP-M program continues to be instrumental in providing ground communications for TACPs during federal emergency relief operations and Homeland Defense initiatives.

TACP-M is divided into two segments: Dismounted and mounted. The dismounted TACP provides a modernized/modular capability via a streamlined acquisition using non-developmental, commercial off-the-shelf (COTS) Manpack Radios (MPR) or Handheld Radios (HHR), LTD such as Laser Range Finder (LRF), Military Ruggedized Tablet (MRT) combined with TACP Close Air Support System (CASS) software. The mounted TACP Vehicular Communications System (VCS) is an upgrade of the existing TACP VCS with new advanced radios (COTS and JTRS) and ancillary components, which provides reliable communications for close air support operations. VCS will integrate Internet Protocol-capable, Software Communications Architecture (SCA)-compliant radios for voice & data UHF SATCOM and LOS UHF / VHF communications. TACP-M will continue to develop systems integration software (dismounted and vehicular) for multiple air/ground platforms (i.e. FCS, F-35, MRAP, ASOC Gateway) and will provide interoperability with SADL, Link-16 and other transformational communications capabilities.

The Adaptive Joint Command, Control, Communications and Computing, Intelligence, Surveillance and Reconnaissance Node (AJCN), Advanced Concept Technology Demonstration (ACTD) is developing software programmable Radio Frequency payloads designed to support Information Superiority. AJCN is an open, Commercial-Off-The-Shelf (COTS) based system that can be remotely programmed on the fly to perform a variety of functions simultaneously: air-to-air communications interoperability, Electronic Warfare, Signals Intelligence, and Information Operations. AJCN addresses numerous Mission Needs Statements,

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Operational Requirements Documents, and the Combatant Commanders Integrated Priority Lists related to communications, intelligence and information operations.

C2ISR Joint Tactical Radio System (JTRS) Integration funds integration and systems engineering of JTRS radios and upgraded communication systems into Air Force platforms and networking architectures related to the JTRS suite of radios. The JTRS JPEO developed or approved JTRS products will provide a common family of software programmable radios for reliable multi-channel voice, data, imagery, and video communications. JPEO JTRS may also provide gateways, routers or other components to achieve an IP-based networking capability. These JTRS systems will provide unprecedented communication capabilities that will allow multiple platforms to seamlessly exchange voice and data in an IP-based, heterogeneous environment, including service-only, joint, coalition, and allied operations. JTRS along with existing waveforms, radios, and the subsequent JTRS airborne network are required to meet mission and joint interoperability requirements. Legacy and other available upgraded communication products will be utilized until JTRS products are available. Information assurance systems engineering will ensure the data exchange capabilities will meet operational, theater, and national requirements. Systems engineering efforts will support standardized critical network parameters to permit the easy transmission and receipt of time-sensitive data that will give the warfighter transformational communications capabilities. The funding provides integration efforts of JTRS capabilities on various C2ISR platforms including, but not limited to Global Hawk, Predator, Rivet Joint, and JSTARS and associated required systems to ensure maximized networked voice and data over IP throughout the JTRS airborne network.

This program is in budget activity 7, Operational System Development, since it examines appropriate emerging technologies for the continuing spiral development of Commercial-Off-The-Shelf (COTS) equipment, provides software development, and determines and resolves integration issues pertaining to COTS.

Note: AJCN BA 04 FY07 funds were inadvertently loaded into this BA in ABIDES.

(U) **B. Program Change Summary (\$ in Millions)**

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Previous President's Budget	41.928	33.584	27.497
(U) Current PBR/President's Budget	38.215	33.372	29.782
(U) Total Adjustments	-3.713	-0.212	
(U) Congressional Program Reductions	0.000		
Congressional Rescissions	0.000	-0.212	
Congressional Increases	0.000		
Reprogrammings	-3.469		
SBIR/STTR Transfer	-0.244		
(U) <u>Significant Program Changes:</u>			

## Exhibit R-2a, RDT&amp;E Project Justification

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BUDGET ACTIVITY				PE NUMBER AND TITLE			PROJECT NUMBER AND TITLE		
<b>07 Operational System Development</b>				<b>0207423F Advanced Communications Systems</b>			<b>4934 Tactical Air Control Party (TACP)</b>		
Cost (\$ in Millions)	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
4934 Tactical Air Control Party (TACP)	8.768	13.437	13.253	10.870	11.044	11.332	11.636	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0		

(U) **A. Mission Description and Budget Item Justification**

TACPs deploy with Army maneuver units and provide a Command and Control (C2) link for Close Air Support (CAS), airlift and AF surveillance/reconnaissance missions. TACPs are equipped with various targeting and communications equipment needed to interface with ground maneuver forces, aircraft conducting CAS operations, aerospace C2 aircraft/agencies, and Intelligence, Surveillance and Reconnaissance (ISR) platforms/agencies. The TACP-Modernization (TACP-M) program provides TACP and Air Support Operations Centers (ASOCs) personnel with the capability to precisely locate and target enemy ground forces by integrating various Laser Targeting Devices (LTD) and ultra high frequency satellite communications (UHF SATCOM) for beyond-line-of-sight (BLOS) Air Force Air Request Net operations. The purpose of the TACP-M program is to reduce reliance on voice transmission and replace analog equipment with the latest digital, data link and streaming video (i.e. Remote Operations Video Enhanced Receiver (ROVER)) technology. This capability supports joint and multinational interoperability, improves battlefield Situational Awareness (SA), increases targeting accuracy, reduces kill chain decision time, improves data flows/information exchange, and reduces potential fratricide. The TACP-M program supports the GWOT and significantly increased the mission effectiveness of the TACPs and ASOCs during Operations Enduring and Iraqi Freedom. The TACP-M program continues to be instrumental in providing ground communications for TACPs during federal emergency relief operations and Homeland Defense initiatives.

TACP-M is divided into two segments: Dismounted and mounted. The dismounted TACP provides a modernized/modular capability via a streamlined acquisition using non-developmental, commercial off-the-shelf (COTS) Manpack Radios (MPR) or Handheld Radios (HHR), LTD such as Laser Range Finder (LRF), Military Ruggedized Tablet (MRT) combined with TACP Close Air Support System (CASS) software. The mounted TACP Vehicular Communications System (VCS) is an upgrade of the existing TACP VCS with new advanced radios (COTS and JTRS) and ancillary components, which provides reliable communications for CAS operations. VCS will be Internet Protocol (IP)-capable, Software Communications Architecture (SCA)-compliant radios for voice & data UHF SATCOM and LOS UHF / VHF communications. TACP-M funds will continue to develop systems integration software (dismounted and mounted) for multiple air/ground platforms (i.e. FCS, F-35, MRAP, ASOC Gateway) and will provide interoperability with SADL, Link-16 and other transformational communications capabilities.

This program is in budget activity 7, Operational System Development, since it examines appropriate emerging technologies for the continuing spiral development of COTS equipment, provides software development, and determines and resolves integration issues pertaining to COTS.

(U) **B. Accomplishments/Planned Program (\$ in Millions)**

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Continue TACP Vehicular Communication System (VCS) integration of hardware (GFE & COTS) development	0.506	1.048	5.427
(U) Software development and systems integration	5.553	6.485	4.550
(U) Operational and interoperability test planning	1.088	1.974	1.380
(U) Contractor support and systems engineering	1.621	3.930	1.896
(U) Total Cost	8.768	13.437	13.253

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Project 4934

Exhibit R-2a (PE 0207423F)

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BUDGET ACTIVITY <b>07 Operational System Development</b>	PE NUMBER AND TITLE <b>0207423F Advanced Communications Systems</b>	PROJECT NUMBER AND TITLE <b>4934 Tactical Air Control Party (TACP)</b>
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(U) **C. Other Program Funding Summary (\$ in Millions)**

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	
(U) Advanced Communications System Other Procurement, AF PE 0207423F	91.717	99.509	139.305	99.550	94.391	73.979	75.441	Continuing	TBD

(U) **D. Acquisition Strategy**

The TACP-M is executing a spiral development for the dismounted segment (TACP CASS). Systems engineering, design, integration, and fielding support is being provided under a cost plus fixed fee contract. TACP-M will also award a fixed price contract for the Vehicular Communication System (VCS) in FY08 under full and open competition. These contracts will deliver an integrated system (mounted/dismounted) with an emphasis on Reduced Total Ownership Cost (RTOC) over the life cycle of the program.

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**Exhibit R-3, RDT&E Project Cost Analysis**

DATE

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BUDGET ACTIVITY				PE NUMBER AND TITLE					PROJECT NUMBER AND TITLE			
<b>07 Operational System Development</b>				<b>0207423F Advanced Communications Systems</b>					<b>4934 Tactical Air Control Party (TACP)</b>			
(U) Cost Categories (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract Method &amp; Type</u>	<u>Performing Activity &amp; Location</u>	<u>Total Prior to FY 2007 Cost</u>	<u>FY 2007 Cost</u>	<u>FY 2007 Award Date</u>	<u>FY 2008 Cost</u>	<u>FY 2008 Award Date</u>	<u>FY 2009 Cost</u>	<u>FY 2009 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
(U) <u>Product Development</u>												
ESC Sys Int Software Dev't	CPFF	Rockwell Collins, Cedar Rapids IA		0.006	Apr-07	4.392	Oct-07	4.268	Oct-08	Continuing	TBD	TBD
VCS (MRC-144 Upgrade)	FFP	TBD		0.500	Oct-06	6.000	Oct-07	4.000	Oct-08	Continuing	TBD	TBD
Subtotal Product Development			0.000	0.506		10.392		8.268		Continuing	TBD	TBD
Remarks:	Vehicular Communication System (VCS) GFE & COTS hardware integration											
(U) <u>Support</u>												
System Engineering/Software Development	C/FFP	Various		5.553	Oct-06	0.000	Oct-07	0.000	Oct-08	Continuing	TBD	TBD
Subtotal Support			0.000	5.553		0.000		0.000		Continuing	TBD	TBD
Remarks:												
(U) <u>Test &amp; Evaluation</u>												
Test Agency Support	MIPR	Various		1.088	Nov-06	1.526	Nov-07	3.534	Nov-08	Continuing	TBD	TBD
Subtotal Test & Evaluation			0.000	1.088		1.526		3.534		Continuing	TBD	TBD
Remarks:												
(U) <u>Management</u>												
Support	Various	Various		1.621	Dec-06	1.519	Jan-07	1.451	Mar-08	Continuing	TBD	TBD
Subtotal Management			0.000	1.621		1.519		1.451		Continuing	TBD	TBD
Remarks:												
(U) Total Cost			0.000	8.768		13.437		13.253		Continuing	TBD	TBD

Exhibit R-4, RDT&E Schedule Profile

DATE

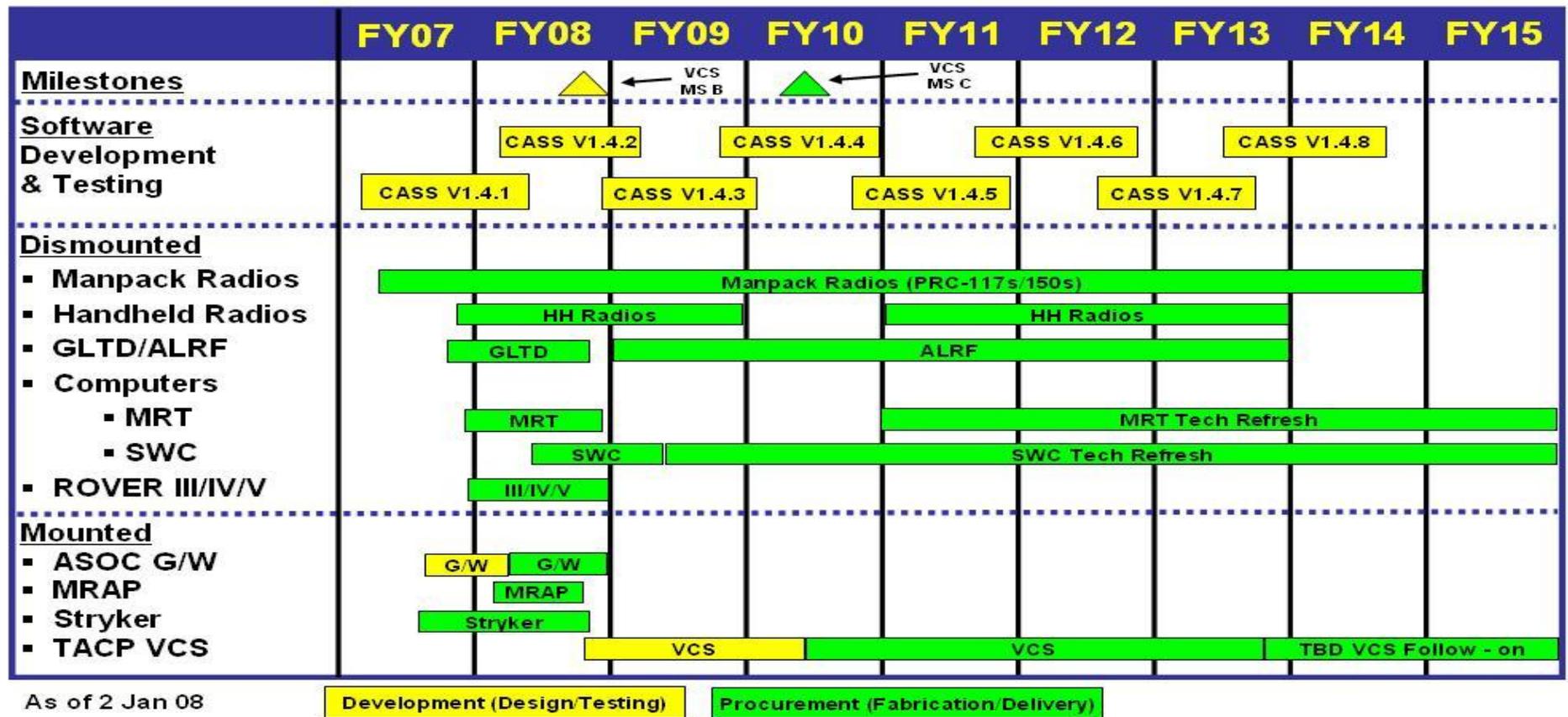
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BUDGET ACTIVITY  
07 Operational System Development

PE NUMBER AND TITLE  
0207423F Advanced Communications Systems

PROJECT NUMBER AND TITLE  
4934 Tactical Air Control Party (TACP)

# TACP-M Program Schedule



As of 2 Jan 08

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**Exhibit R-4a, RDT&E Schedule Detail**

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**February 2008**

BUDGET ACTIVITY

**07 Operational System Development**

PE NUMBER AND TITLE

**0207423F Advanced Communications Systems**

PROJECT NUMBER AND TITLE

**4934 Tactical Air Control Party (TACP)**

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) <b><u>Schedule Profile</u></b>			
(U) Milestone (MS) B		3Q	
(U) VCS Contract Award		3Q	
(U) VCS Development		3-4Q	1-4Q
(U) Software Development - TACP-CASS v1.4.1	1-4Q	1-2Q	
(U) Software Development - Future TACP-CASS v1.4.2		1-4Q	1-2Q
(U) Software Development - Future TACP-CASS v1.4.3		4Q	1-4Q

**Exhibit R-2a, RDT&E Project Justification**

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BUDGET ACTIVITY <b>07 Operational System Development</b>					PE NUMBER AND TITLE <b>0207423F Advanced Communications Systems</b>		PROJECT NUMBER AND TITLE <b>5084 C4ISR NODE (AJCN)</b>		
Cost (\$ in Millions)	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
5084 C4ISR NODE (AJCN)	0.950	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Quantity of RDT&E Articles	0	0	0	0	0	0	0		

**(U) A. Mission Description and Budget Item Justification**

The Adaptive Joint Command, Control, Communications and Computing, Intelligence, Surveillance and Reconnaissance Node (AJCN), Advanced Concept Technology Demonstration (ACTD) is developing software programmable Radio Frequency payloads designed to support Information Superiority. AJCN is an open, Commercial-Off-The-Shelf (COTS) based system that can be remotely programmed on the fly to perform a variety of functions simultaneously: air-to-air communications interoperability, Electronic Warfare, Signals Intelligence, and Information Operations. AJCN addresses numerous Mission Needs Statements, Operational Requirements Documents, and the Combatant Commanders Integrated Priority Lists related to communications, intelligence and information operations.

This program is in Budget Activity 07, Operational Systems Development, since it examines appropriate emerging technologies for the continuing spiral development of COTS equipment, provides software development, and determines and resolves integration issues pertaining to COTS. Note: AJCN BA04 funds were inadvertently loaded into this BA in ABIDES.

**(U) B. Accomplishments/Planned Program (\$ in Millions)**

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Field Evaluation	0.773		
(U) Security Accreditation	0.135		
(U) Aircraft Integration	0.042		
(U) Total Cost	0.950	0.000	0.000

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

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	
(U)									

**(U) D. Acquisition Strategy**

All major contracts within this Program Element and programs were awarded after full and open competition.

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**Exhibit R-3, RDT&E Project Cost Analysis**

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BUDGET ACTIVITY				PE NUMBER AND TITLE					PROJECT NUMBER AND TITLE			
<b>07 Operational System Development</b>				<b>0207423F Advanced Communications Systems</b>					<b>5084 C4ISR NODE (AJCN)</b>			
(U) Cost Categories (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract Method &amp; Type</u>	<u>Performing Activity &amp; Location</u>	<u>Total Prior to FY 2007 Cost</u>	<u>FY 2007 Cost</u>	<u>FY 2007 Award Date</u>	<u>FY 2008 Cost</u>	<u>FY 2008 Award Date</u>	<u>FY 2009 Cost</u>	<u>FY 2009 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
(U) <u>Product Development</u>												
Subtotal Product Development			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
(U) <u>Support</u>												
Subtotal Support			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
(U) <u>Test &amp; Evaluation</u>												
Joint Military Utility Assessments	MIPR	Army Tactical Command & Control Sys, Ft Monmouth, NJ		0.950	Nov-06						0.950	
Subtotal Test & Evaluation			0.000	0.950		0.000		0.000		0.000	0.950	0.000
Remarks:												
(U) <u>Management</u>												
Subtotal Management			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
(U) Total Cost			0.000	0.950		0.000		0.000		0.000	0.950	0.000

Exhibit R-4, RDT&E Schedule Profile

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BUDGET ACTIVITY  
07 Operational System Development

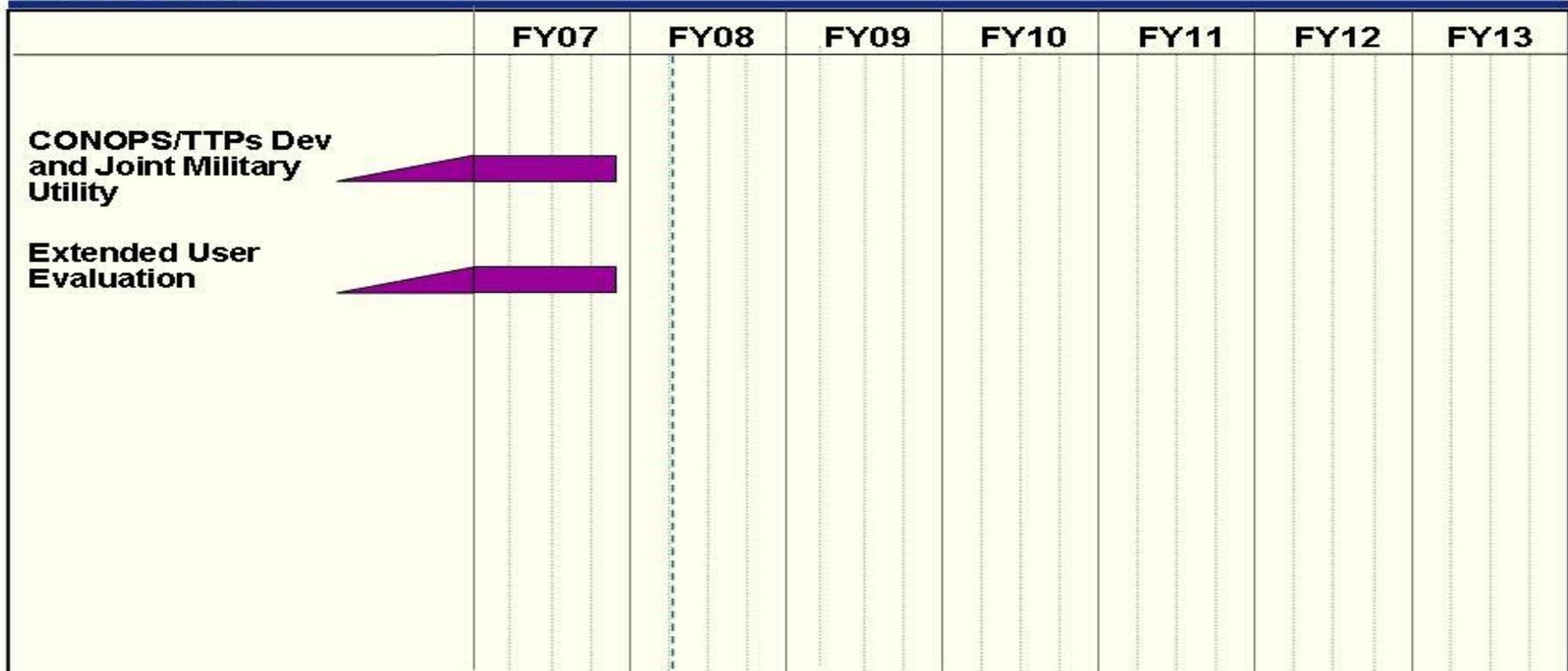
PE NUMBER AND TITLE  
0207423F Advanced Communications Systems

PROJECT NUMBER AND TITLE  
5084 C4ISR NODE (AJCN)



U.S. AIR FORCE

**AJCN  
Schedule**



- JTRS Procurement
- System Eng, Int & Plns
- Platform Plan & Int
- Legacy Procurement
- Test & Interops Plans
- Sustainment

△ Key events

As of 10 Jan 08

Exhibit R-4a, RDT&E Schedule Detail

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5084 C4ISR NODE (AJCN)

(U) Schedule Profile

FY 2007

FY 2008

FY 2009

(U) CONOPS/TTPs Development and Joint Military Utility Assessments

1-4Q

(U) Extended User Evaluation

1-4Q

(U) Follow-On Development, Production, & Fielding

1-4Q

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<b>BUDGET ACTIVITY</b> <b>07 Operational System Development</b>				<b>PE NUMBER AND TITLE</b> <b>0207423F Advanced Communications Systems</b>			<b>PROJECT NUMBER AND TITLE</b> <b>5189 C2ISR JTRS Integration</b>			
Cost (\$ in Millions)		FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
5189	C2ISR JTRS Integration	28.497	19.935	16.529	47.007	54.176	55.224	56.346	Continuing	TBD
	Quantity of RDT&E Articles	0	0	0	0	0	0	0		

**(U) A. Mission Description and Budget Item Justification**

This program funds integration and systems engineering of Joint Tactical Radio System (JTRS) products into Air Force platforms and systems engineering of networking architectures specific to the JTRS suite of radios. JTRS developed systems will provide a common family of software programmable radios for reliable multi-channel voice, data, imagery, and video communications, as well as necessary gateways, routers or other associated components to achieve an IP-based networking capability. JTRS radios will be modular, scalable, and network ready. Legacy and other available upgraded communication products will be utilized until JTRS products, developed by the JTRS JPEO or other qualified vendors, are available. The funding provides capabilities on various C2ISR platforms including, but not limited to Global Hawk, Predator, Rivet Joint, and Joint Stars. The capability provided by JTRS requires systems engineering efforts to standardize critical network parameters to permit the easy transmission and receipt of time-sensitive data that will give the tactical warrior transformational communications capabilities. JTRS, in conjunction with upgraded existing communication systems, will provide unprecedented capabilities allowing platforms to seamlessly exchange voice and data in an IP-based, heterogeneous environment, including service-only, joint, coalition, and allied operations. The JTRS airborne network is necessary to support these capabilities and meet mission and joint interoperability requirements.

FY09 systems engineering will ensure voice and data exchange capabilities are realized by the operational commander. Aircraft communication architectures, connectivity, bandwidth compatibility and engineering are required for optimal airborne networking opportunities throughout the JTRS network. AF JTRS PMO will develop and support strategies to ensure waveform integration and interoperability among platforms and systems to ensure unprecedented networked voice and data exchange. Test Plans will be developed in support of the joint operational environment.

C2ISR JTRS program is in Budget Activity 7, Operational System Development, since it supports integration of JTRS products and legacy radios into operational systems.

**(U) B. Accomplishments/Planned Program (\$ in Millions)**

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) System Engineering, Planning, and Integration	15.076	13.285	8.482
(U) Platform Planning and Integration	13.421	6.650	5.367
(U) Develop Operational and Interoperability Test Plans	0.000	0.000	2.680
(U) Total Cost	28.497	19.935	16.529

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BUDGET ACTIVITY <b>07 Operational System Development</b>	PE NUMBER AND TITLE <b>0207423F Advanced Communications Systems</b>	PROJECT NUMBER AND TITLE <b>5189 C2ISR JTRS Integration</b>
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**(U) C. Other Program Funding Summary (\$ in Millions)**

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	
(U) Advanced Communication System-Aircraft Procurement, AF PE 0207423F	0.000	21.144	66.863	157.790	198.407	189.287	196.010	Continuing	TBD
(U) Advanced Communication System-Other Procurement, AF PE 0207423F	39.264	44.276	87.548	135.282	190.931	254.406	253.892	Continuing	TBD

**(U) D. Acquisition Strategy**

Air Force JTRS integration will perform system engineering integration, network development, and fielding support to deliver an interoperable, fully synchronized, deployable JTRS system under various contract awards. This effort will assist various AF platform efforts to acquire and integrate the next generation communications system, to include all key documentation (CONOPS, TTPs, ICDs, TRDs, etc.)

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**Exhibit R-3, RDT&E Project Cost Analysis**

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BUDGET ACTIVITY				PE NUMBER AND TITLE					PROJECT NUMBER AND TITLE			
<b>07 Operational System Development</b>				<b>0207423F Advanced Communications Systems</b>					<b>5189 C2ISR JTRS Integration</b>			
(U) Cost Categories (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	Contract Method & Type	Performing Activity & Location	Total Prior to FY 2007 Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost to Complete	Total Cost	Target Value of Contract
(U) <u>Product Development</u>												
Systems Engineering, Planning, and Integration	C/FFP	Northrop Grumman, Melbourne, FL	2.300	6.027	Feb-07	1.600	Feb-08	1.900	Feb-09	Continuing	TBD	TBD
Systems Engineering, Planning, and Integration	MIPR	Aeronautical Systems Center, Wright-Patterson on AFB, OH	0.850	0.400	Aug-07	2.800	Feb-08	1.570	Feb-09	Continuing	TBD	TBD
Systems Engineering, Planning, and Integration	C/FFP	General Atomics, San Diego, CA	3.700	5.500	Mar-07	3.100	Feb-08	2.150	Feb-09	Continuing	TBD	TBD
Systems Engineering, Planning, and Integration	C/FFP	L3COM IS, Greenville, TX	1.200	1.690	Apr-07	1.500	Feb-08	1.000	Feb-09	Continuing	TBD	TBD
Systems Engineering, Planning, and Integration	MIPR	Various	0.295								0.295	0.295
Systems Engineering, Planning, and Integration	Various	Various		5.109	Feb-07	3.405	Feb-08	2.000	Feb-09	Continuing	TBD	TBD
Subtotal Product Development			8.345	18.726		12.405		8.620		Continuing	TBD	TBD
Remarks:												
(U) <u>Planning and Integration</u>												
	MIPR	ASC/AA (Various), Wright-Patterson AFB, OH	5.790	9.771	Apr-07	7.530	Mar-08	5.229	Mar-09	Continuing	TBD	TBD
Subtotal Planning and Integration			5.790	9.771		7.530		5.229		Continuing	TBD	TBD
Remarks:												
(U) <u>Development operational and interoperability test plans</u>												
	MIPR/TBD	Test Agency Support	2.812	0.000		0.000		2.680	Mar-09	Continuing	TBD	TBD
Subtotal Development operational and interoperability test plans			2.812	0.000		0.000		2.680		Continuing	TBD	TBD
Remarks:												
(U) Total Cost			16.947	28.497		19.935		16.529		Continuing	TBD	TBD

R-1 Line Item No. 139

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Project 5189

Exhibit R-3 (PE 0207423F)

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UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile

DATE  
February 2008

BUDGET ACTIVITY  
07 Operational System Development

PE NUMBER AND TITLE  
0207423F Advanced Communications Systems

PROJECT NUMBER AND TITLE  
5189 C2ISR JTRS Integration



# Air Force JTRS Procurement and Integration Schedule

**U.S. AIR FORCE** Note: includes legacy and other radio procurement until JTRS are avail

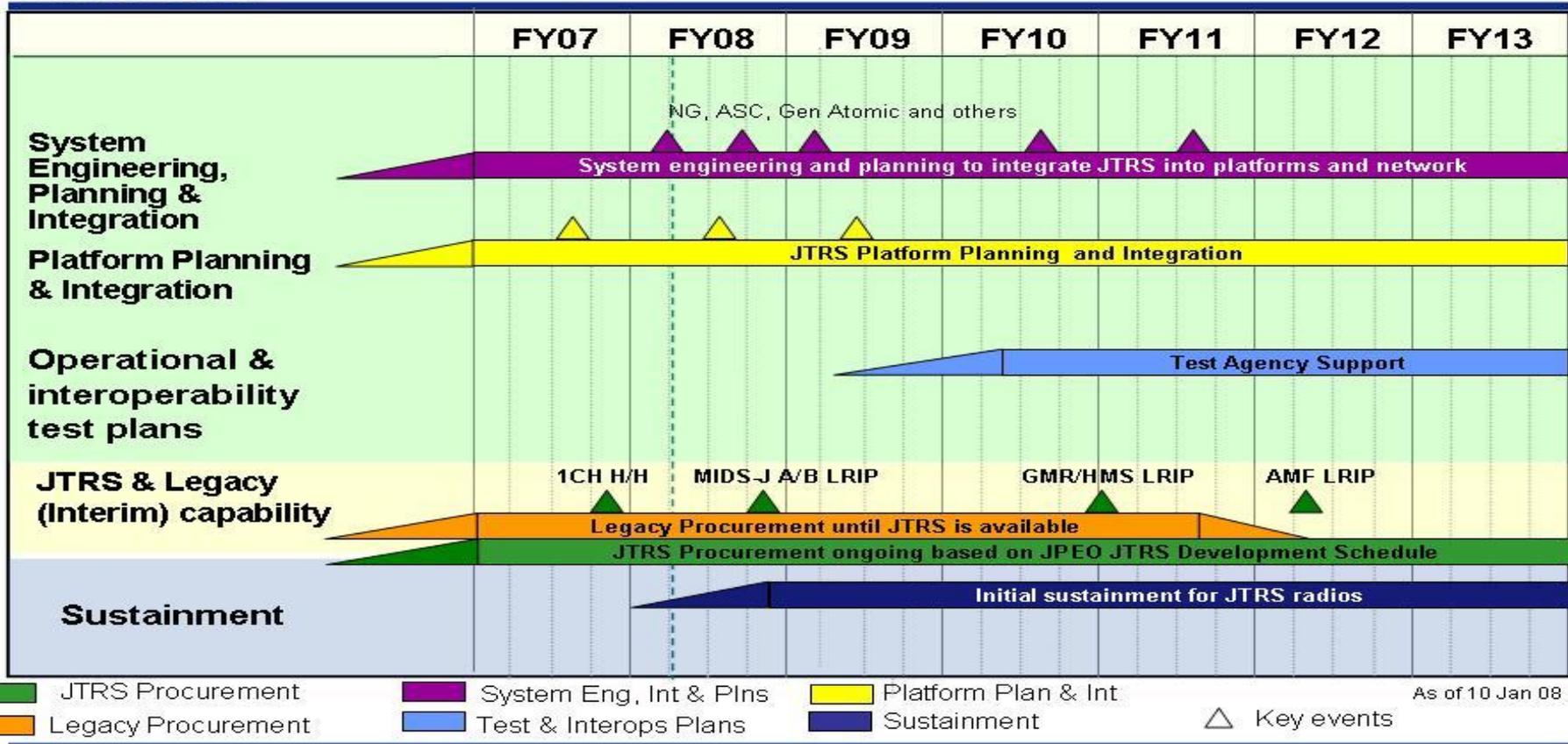


Exhibit R-4a, RDT&E Schedule Detail

DATE

February 2008

BUDGET ACTIVITY <b>07 Operational System Development</b>	PE NUMBER AND TITLE <b>0207423F Advanced Communications Systems</b>	PROJECT NUMBER AND TITLE <b>5189 C2ISR JTRS Integration</b>
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(U) <u>Schedule Profile</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Systems Engineering	1-4Q	1-4Q	1-4Q
(U) Aircraft Communication Architecture Migration	1-4Q	1-4Q	1-4Q
(U) Reverse Engineering to meet Operational Requirements	1-4Q	1-4Q	1-4Q
(U) Planning and Integration	1-4Q	1-4Q	1-4Q
(U) Bandwidth and Connectivity Integration	1-4Q	1-4Q	1-4Q
(U) Waveform Integration for JTRS Airborne Network	1-4Q	1-4Q	1-4Q
(U) Operational & Interoperability Test Planning			2-4Q
(U) Develop Interoperability & Test Plans in Joint Environment			2-4Q