

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)							February 2006		
BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>			PE NUMBER AND TITLE <b>0604280A - Joint Tactical Radio System</b>					PROJECT <b>162</b>	
COST (In Thousands)	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
162 JOINT TACTICAL RADIO SYSTEM	151274	139546	832259	285870	271043	198127	98178	0	2167800
<p><b>A. Mission Description and Budget Item Justification:</b> The mission of the Joint Tactical Radio System (JTRS) is to provide the Department of Defense (DoD) with software programmable, reconfigurable digital radio systems to meet Joint Vision (JV) 2010/2020 requirements for interoperability, flexibility, adaptability, and information exchange. JTRS will acquire a family of affordable, scaleable, high-capacity, interoperable Line of Sight (LoS) and Beyond LoS radios to support simultaneous networked voice/data/video transmissions with low probability of intercept. The program will provide operational forces with an upgraded, interoperable communications capability for improved battle space management and increased Warfighter effectiveness. Interoperability with allied and coalition partners is pursued through international cooperative efforts, including signed agreements with Japan, UK and Sweden.</p> <p>In Feb 2005, by direction of the Defense Acquisition Executive, all JTRS Product Lines were realigned and are now managed by the Joint Program Executive Office (JPEO) - JTRS.</p> <p>Beginning in FY07, all JTRS RDT&amp;E Program Elements (PE)'s are realigned under the Army JTRS PE (0604280A) for the current Budget Year (BY) only. From the BY+1 through the end of the FYDP, all JTRS RDT&amp;E projects are funded in three equal shares by each Military Department (MILDEP). This transition results in the total JTRS development funding being managed out of three MILDEP PE's (0604280A, 0604280N, and 0604280F) across the FYDP, and consolidated into one Army PE (0604280A) for the current BY.</p> <p>(WAVEFORMS) The Joint Waveform Program Office (JWPO) is responsible for the development and delivery of software-defined, legacy radio waveforms and networking waveforms that support Net-Centric operational warfare at sea, air and on the ground. Networking waveforms extend the Global Information Grid (GIG) to the last tactical mile and to the Warfighter. The JPEO/JWPO team is responsible for (1) the overall management and oversight of the JTRS Waveform program, (2) development, validation, and evolution of a common JTRS Software Communications Architecture (SCA), (3) development and evolution of waveform software applications, (4) development of software cryptographic algorithms and equipment applications, (5) testing and certification of JTRS hardware/software products and (6) JTRS networking and network management software components. Service acquisition agencies are responsible for acquiring and fielding host radio hardware and integrating JTRS into Service platforms.</p> <p>(GROUND MOBILE RADIO) JTRS Cluster 1 is a product line managed under JTRS Ground Systems Domain and is being renamed to Ground Mobile Radio. The JTRS GMR program will enable the Services to acquire and field a family of affordable, scaleable, high capacity, interoperable radio sets based on the JTRS SCA. The JTRS is a key enabler of transformation and will provide critical communications capabilities across the spectrum of operations in a Joint environment for Ground Vehicular applications. The JTRS GMR will provide networking capability using networking Waveforms to connect the unmanned sensors to the decision makers "On-The-Move" (OTM) which will significantly reduce the decision cycle. The JTRS GMR is the key enabler for connectivity OTM to the GIG, an essential multiplier to network centric warfare.</p> <p>(HANDHELD/MANPACK/SMALL FORM FIT) JTRS Cluster 5 is now a product line managed under the JTRS Ground Systems Domain and is being renamed to Handheld/Manpack/Small Form Fit (HMS) Radios. JTRS is the DoD family of common software-defined programmable radios that will form the foundation of information radio frequency transmission for Joint Vision 2020. HMS provides a software re-programmable, networkable, multi-band, multi-mode system capable of simultaneous voice/data/video communication. HMS Increment 1 consists of the following form factors: 2 Channel Handheld, 2 Channel Manpack (including vehicular mounted), and a family of Small Form</p>									

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Fit (SFF) embedded applications (SFF-A, B, C, D, H, I and J).				
(AIRBORNE, MARITIME/FIXED STATION (AMF) JTRS) AMF JTRS is intended to support communications readiness and mission success, in the 2MHz to 2GHz operating frequency range, by providing military commanders with the ability to command, control and communicate with their Forces via secure voice/video/data media forms. AMF JTRS will provide the Warfighter with a modernized communications capability for more effective battlefield management and interoperability. AMF JTRS is a key enabler for the transformation of airborne communications toward network-centric operations.				
AMF JTRS is designed to perform as a reliable and dynamic family of advanced communications systems. As a result, AMF JTRS will be a hardware-configurable and software-programmable radio system that provides increased interoperability, flexibility and adaptability to support varied mission requirements. The system is multi-functional, multi-band, multi-mode, network capable and capable of providing communications through a range of low probability of intercept, low probability of detection and anti-jam waveforms. AMF JTRS will operate with legacy equipment and waveforms currently used by civilian and military airborne, surface, subsurface, and fixed station platforms. AMF JTRS is intended to replace existing legacy radio systems, which are currently facing long-term sustainment issues and diminishing sources of material support. AMF JTRS capabilities will be developed in an incremental approach, with each increment building on the technological achievements of its predecessor, while providing expanded capabilities.				
(MIDS JTRS) The MIDS-LVT is a jam-resistant, secure, digital (voice and data) information distribution system enabling rapid integrated communications, navigation and identification for tactical and command and control operations. The objective of the MIDS JTRS program is to transform the current MIDS-LVT into a four-channel, SCA compliant JTRS, while maintaining current Link-16 and tactical air navigation system (TACAN) functionality. MIDS gathers data from multiple sources, which provides the platform with a digital view of the battlefield. MIDS JTRS is designed to be interchangeable for U.S. Navy and U.S. Air Force platforms that use MIDS-LVT. Improvements such as Link-16 enhanced throughput, Link-16 frequency re-mapping, and programmable crypto will also be realized in the MIDS JTRS design. In addition to the Link-16 and TACAN functionality, the MIDS JTRS core terminal includes three 2 MHz-2 GHz programmable channels that allow the Warfighter to use multiple waveforms currently in development with the JTRS JWPO. Total core terminal program requirements include: Terminal development, F/A-18 Level 0 integration, software hosting, Common Link Integration Processing Increment 1 embedding and production transition. The Tactical Targeting Network Technology JTRS Platform Capability Package (TTNT JPCP) involves integration of an advanced low latency, high bandwidth, Internet protocol-capable waveform that meets Time Sensitive Targeting Networking Technology requirements. TTNT JPCP program requirements include hardware/software changes, terminal development, qualification and production transition. The TTNT JPCP is the integration of the TTNT waveform as the specific implementation of the Joint Airborne Networking - Tactical Edge (JAN-TE) waveform.				
<b><u>Accomplishments/Planned Program</u></b>		<b><u>FY 2005</u></b>	<b><u>FY 2006</u></b>	<b><u>FY 2007</u></b>
***WAVEFORMS***		0	0	0
Continue the development and acquisition of networking waveforms that support Net-Centric operational warfare at sea, air and on the ground, to include JTRS Program support and other waveform related activities. Networking waveforms extend the GIG to the last tactical mile to the warfighter. Waveforms include: Wideband Networking Waveform (WNW), Soldier Radio Waveform (SRW), and Joint Airborne Networking - Tactical Edge (JAN-TE).		39389	79023	135943
Continue the development and acquisition of software-defined legacy radio waveforms to include JTRS Program support and other waveform related activities. Waveforms include EPLRS, HF, UHF, SATCOM and Link 16.		72892	30810	25269
Continue development of crypto algorithm software, cryptographic equipment applications and other security related activities.		6400	4120	0

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Manage and transition Joint Task Force WARNET.	11000	0	0
Begin development and acquisition of a network manager and common network services.	0	0	29590
Joint Waveform Program Office (JWPO) technical support, including waveform development, system engineering, spectrum allocation and approval for use, systems security engineering and problem resolution and support of Software Communications Architecture (SCA) activities. Provide technical guidance to Service Program Management Offices (PMOs). Provide oversight for all DoD radio acquisitions to ensure JTRS interoperability.	11520	9500	10220
Continue JWPO program support, including administration, program management, international cooperative efforts, legal, contracting, budget execution and cost estimating activities.	5040	9193	8893
Continue Waveform integration, test and evaluation to include hardware and software waveform certification process (SCA compliance testing) to meet program requirements.	5033	6900	6030
Begin Software Trouble Report (STR) corrections to software-defined legacy radio and networking waveforms.	0	0	2600
***GROUND MOBILE RADIO***	0	0	0
JTRS Product Development (JTRS GMR Vehicular and Airborne Hardware Design and Development of Prototypes and technical engineering support)	0	0	202239
JTRS Test and Evaluation (JTRS EPG Testbed and Test Planning/Test Support/Electronic and Information Warfare Test and Evaluation/Labor)	0	0	4485
JTRS Management Services (JTRS Program Management Office Support)	0	0	11227
JTRS Support Costs (Systems Engineering and Technical Support)	0	0	1940
***HANDHELD/MANPACK/SMALL FORM FIT***	0	0	0
JTRS HMS Product Development of HMS radios.	0	0	94220
JTRS HMS Test and Evaluation	0	0	2294
JTRS HMS Management Services (JTRS Program Management Office Support)	0	0	12092
JTRS HMS Support Costs (Technical Support)	0	0	2342
***AMF JTRS***	0	0	0
AMF JTRS Requirements Planning and Risk Reduction Efforts	0	0	33064
AMF JTRS Development and Demonstration	0	0	91000
AMF JTRS System Engineering, Integration, and Testing	0	0	23592
Business Operations, Planning, Management and Support	0	0	6889
***MIDS JTRS***	0	0	0
MIDS JTRS Phase 2B Core Terminal: Conduct Test Readiness Review in Jan 07; hold Milestone C decision meeting in Mar 07 to receive Low Rate Initial Production authorization; complete contractor First Article Qualification Testing and conduct Government FAQT; and begin Production Verification Terminal deliveries in 4th quarter.	0	0	86147

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MIDS JTRS Tactical Targeting Network Technology JTRS Platform Capability Package: Award development contract and conduct Preliminary Design Review.	0	0	27693
Continue F/A-18 Level 0 integration. Procure additional F/A-18 Test and Evaluation Test Assets for Developmental and Operational test. Begin F/A-18 integrated logistics support planning.	0	0	14490
Total	151274	139546	832259

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<b><u>B. Program Change Summary</u></b>			FY 2005	FY 2006	FY 2007						
Previous President's Budget (FY 2006)			117259	156665	110951						
Current BES/President's Budget (FY 2007)			151274	139546	832259						
Total Adjustments			34015	-17119	721308						
Congressional Program Reductions				-15100							
Congressional Rescissions			-93								
Congressional Increases											
Reprogrammings			34108								
SBIR/STTR Transfer											
Adjustments to Budget Years				-2019	721308						
FY05: Additional \$34M RDT&E funds provided for Joint Waveforms ORD 2.3 and 3.2 requirements. These funds will be used to assist in meeting customer requirements and required security architecture.											
FY 06: Congressional reduction (-\$15.1M) for JTRS program delay and restructure. Remaining -\$2M reduction due to higher Army priorities.											
FY 07: Serivce transfers provided additional funding for the continued development of JTRS software-defined legacy radio waveforms and network waveforms to include: (a) Completion of (FQT) VHF BOWMAN and SINCGARS INC/EOM; (b) Continued development of EPLRS, HF, UHF, SATCOM and Link 16; (c) Continued development of Networking Waveforms to include: WNW, SRW, and JAN-TE (d) Begin development of the Network Manager and Common Networking Services. This adjustment also supports the continued development of JTRS Ground Mobile Radio, Handheld/Manpack/Small Form Fit Radios, Airborne and Maritime/Fixed Station Radios, and the Multifunctional Information Distribution System JTRS Radios. This adjustment also reflects the funding transferred from PEs 0604805A, 0604280N, and 0604280F.											
<b><u>C. Other Program Funding Summary</u></b>			FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
RDTE, Navy, 0604280N/3073 (Waveforms)			0	0	0	73529	71172	50535	14925	CONT	CONT
RDTE, Air Force, 0604280F/5068 (Waveforms)			0	0	0	73624	71632	51284	15232	CONT	CONT
RDTE, 0604805A C3 Systems - Eng Dev; project 615, JTRS Ground Domain Integ (CL 1)			97232	172337	0	0	0	0	0	CONT	CONT
RDTE, 0604805A C3 Systems - Eng Dev; project 61A, JTRS, Handheld/Manpack/Small Form Factor (CL 5)			96042	128791	0	0	0	0	0	CONT	CONT
RDTE, Navy, 0604280N/3073 (GMR)			0	0	0	78308	67273	39139	15896	CONT	CONT
RDTE, Air Force, 0604280F/5068 (GMR)			0	0	0	78409	67708	39719	16223	CONT	CONT
Future Combat System (FCS), RDTE 60465A/F56/F61**			1622	2261	2415	2321	1862	1840	1891	CONT	CONT
RDTE, Navy, 0604280N/3073 (HMS)			0	0	0	35215	35685	23845	7349	CONT	CONT

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RDTE, Air Force, 0604280F/5068 (HMS)	0	0	0	35261	35916	24198	7500	CONT	CONT
Future Combat System (FCS), RDTE 60465A/F61	13000	4000	0	0	0	0	0	CONT	CONT
RDTE, Navy, 0604280N/3073 (AMF)	54342	87152	0	71175	91394	84346	59603	CONT	CONT
RDTE, Air Force, 0604280F/5068 (AMF)	36109	81036	0	71267	91985	85596	60827	CONT	CONT
RDTE, Navy, 0604280N / 3020 (MIDS)	21794	78946	1153	0	0	0	0	CONT	CONT
RDTE, Navy, 0604280N / 3073 (MIDS)	0	0	0	26077	4956	0	0	CONT	CONT
RDTE, Air Force, 0604280F / 5068 (MIDS)	0	0	0	26111	4988	0	0	CONT	CONT
<p>Comment: PE 0604805A (JTRS Clusters 1 and 5 System Development and Demonstration) was realigned to this PE (0604280A) via service transfer. Funding for the completion of development for GMR/HMS is contained in RDTE, Army, 0604280A/162; RDTE, Navy, 0604280N/3073; and RDTE, Air Force, 0604280F/5068. FCS funding reflects relevant JTRS GMR funding only and does not reflect entire FCS program funds. FCS JTRS GMR relevant funding is contained within Project F56 in FY 2004 and Project F61 in FY 2005.</p> <p>For FY07, funding in PEs 0604280N and 0604280F (Airborne, Maritime/Fixed Station JTRS) was realigned to this PE (0604280A) via service transfer. Funding for the completion of development for AMF JTRS is contained in RDTE, Army, 0604280A/162; RDTE, Navy, 0604280N/3073; and RDTE, Air Force, 0604280F/5068.</p> <p>For FY07, PE 0604280N (Multifunctional Information Distribution System (MIDS) JTRS) was realigned to this PE (0604280A) via service transfer. Funding for the completion of development for MIDS is contained in RDTE, Army, 0604280A/162; RDTE, Navy, 0604280N/3073; and RDTE, Air Force, 0604280F/5068.</p> <p><b>D. Acquisition Strategy</b> In Feb 2005, all JTRS programs were realigned under the JPEO JTRS. In Nov 2005, the DAE and Senior JTRS Leadership selected a re-plan option which restructures JTRS to emphasize cost and schedule performance while executing a moderate technical risk plan. The new strategy is pending formal approval, which is anticipated in the 2nd quarter of FY06.</p> <p>(WAVEFORMS) The JTRS JWPO is responsible for common core activities including developing and evolving the software-defined legacy and networking waveforms that operate on multiple hardware sets and in all operational environments that support network-centric operational warfare. Waveform developments will be procured through full and open contract competitions, except when special circumstances support sole source acquisition. The JWPO is developing Waveforms and Cryptographic Equipment applications (CEAs) for use within the JTRS community. The module developer will develop CEAs. The FY07 budget supports continued development of waveforms, supporting software, and testing support, as well as the NSA evaluation of the aforementioned software crypto libraries.</p> <p>(GROUND MOBILE RADIO) This project supports the JTRS GMR SDD efforts. After a Milestone (MS) B Decision in 3QFY02, the GMR development effort was awarded to develop multi-channel ground and airborne configurations (airborne is now re-aligned under AMF). The JTRS GMR supports an evolutionary acquisition strategy and was based on an aggressive acquisition schedule. In June 2002, a Cost Plus Award Fee (CPAF) contract was competitively awarded to develop and/or acquire numerous SCA compliant waveforms, define common form-fit-function configurations for vehicular versions of the JTRS hardware, and successfully port waveforms to JTRS hardware. Under GMR, a</p>									

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<p>software reprogrammable radio providing the warfighter with a multi-band and multi-mode capability, networkable radio system is being developed. In FY05, the program underwent preliminary testing of hardware capabilities along with the program restructuring and on-going development of the operating system. The FY07 budget supports continued development and support for the GMR sets to include the operating environment, design of ground vehicular A-kits (installation kits) for platforms required for testing for System Integration Test (SIT)/Limited User Test (LUT) and Multi-Service Operational Test and Evaluation (MOT&amp;E) testing for GMR.</p> <p>(HANDHELD/MANPACK/SMALL FORM FIT) This project supports the JTRS HMS SDD efforts. A MS B was achieved in Apr 2004 to begin the development of the HMS Radios. Following full and open competition, a single CPAF contract was awarded in July 2004. The Increment 1 evolutionary acquisition strategy is based on incremental development, reduced requirements, and better reuse/teaming with other product lines and NSA. The contract will be structured to address Increment 1, consisting of Phases 1 and 2. Increment 1, Phase 1 will develop 1 and 2 Channel Type 2 Small Form Fits (SFFs) A, C, H and J running SRW waveform v1.0/2.1 for use in a sensitive but unclassified environment. The initial development of SFF J is an interim product to be delivered to support Future Combat Systems (FCS) need dates. The FY07 budget supports continued development of breadboards, prototypes, and Engineering Development Models (EDMs).</p> <p>(AMF JTRS) A joint AF / Navy team manages the development of a common core radio design that will be the basis for satisfying the AMF requirements. AMF will complete Pre-SDD contracts in FY06, which were awarded to two, competing vendors in late FY04. These efforts included System and Software Development reviews and culminated in completion of Preliminary Design Reviews. The AMF program is planning a MS B decision in early FY07 resulting in a single, contract award for SDD, using a full and open competition acquisition strategy and a CP Incentive Fee (CPIF) contract. This effort is expected to leverage technical solutions derived from efforts resulting from the Pre-SDD contracts. The FY07 budget supports the completion of the Pre-SDD phase and initiation of the SDD phase of AMF. A Critical Design Review is planned for late FY07.</p> <p>(MIDS JTRS) MIDS JTRS development will be initiated as a major modification to the MIDS-LVT using an Engineering Change Proposal to the existing production contracts. Development efforts include the Phase 2B core terminal and the Phase 2C/2D Tactical Targeting Network Technology JTRS Platform Capability Package (TTNT JPCP). The U.S. prime contractors from the MIDS-LVT program (Data Link Solutions and ViaSat, Inc.) will cooperatively design and develop the core terminal and TTNT JPCP. Each prime contractor will build and qualify Production Verification Terminals. The U.S. will implement a continuous competition strategy between DLS and ViaSat that will be maintained throughout the MIDS JTRS production phase. This strategy was successfully used on MIDS-LVT.</p>		

ARMY RDT&E COST ANALYSIS (R3)										February 2006		
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I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
***WAVEFORMS***			0	0		0		0		0	0	0
Architecture Development and Validation, Evolve and Provide CM Mgmt of SCA	Various	Various	65874	960	2Q	909	2Q	1035	2Q	Continue	0	Continue
Waveform Development; Crypto S/W; Waveform Sustainment Engineering	Various	Various	259237	107884	3-4Q	113951	1-2Q	192367	1-2Q	Continue	0	Continue
Certification (SCA Compliance Testing)	Various	Various	45594	14870	1-4Q	6900	1-2Q	6030	1-2Q	Continue	0	Continue
Technology Advancement/Problem Resolution	Various	Various	8260	0		0		0		0	8260	0
JTF WARNET	Various	Various	46000	11000	2-3Q	0		0		0	0	0
***GROUND MOBILE RADIO***			0	0		0		0		0	0	0
JTRS GMR SDD Development	C/CPAF	BOEING, Anaheim, CA	0	0		0		200819	1-2Q	Continue	0	Continue
JTRS GMR Development - System Engr Spt	Various	Miscellaneous	0	0		0		1420	1-2Q	Continue	0	Continue
***HMS***			0	0		0		0		0	0	0
JTRS HMS Design, Development and Manufacture of Engineering Development Models (EDMs)	C/CPAF	General Dynamics Decision Systems, Scottsdale, AZ	0	0		0		89270	1Q	Continue	0	Continue
JTRS HMS Development System Engineering Support	Various	Various	0	0		0		4950	1-2Q	Continue	0	Continue
***AMF JTRS***			0	0		0		0		0	0	0
AMF JTRS SDD	CPAF / IF	TBD	0	0		0		91000	1Q	Continue	0	Continue
Requirements Planning and Risk Reduction	Various	Various	0	0		0		33064	1Q	Continue	0	Continue
Systems Engineering, Integration, and Testing Support	Various	Various	0	0		0		22070	1Q	Continue	0	Continue
***MIDS JTRS***			0	0		0		0		0	0	0



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HW/SW Development (CLIN 3000)	CPIF	Data Link Solutions Cedar Rapids, IA	0	0		0		23604	1Q	Continue	0	Continue
MIDS JTRS HW/SW Development (CLIN 3000)	CPIF	ViaSat Inc. Carlsbad, CA	0	0		0		24293	1Q	Continue	0	Continue
MIDS JTRS Software Hosting	CPFF	Various	0	0		0		7000	4Q	Continue	0	Continue
MIDS JTRS Production Transistion	FFP	Various	0	0		0		21000	1Q	Continue	0	Continue
CLIP Increment 1 MIDS JTRS Embedding	CPFF	Various	0	0		0		4400	3Q	Continue	0	Continue
MIDS JTRS - TTNT JPCP	CPIF	Data Link Solutions Cedar Rapids, IA	0	0		0		13097	1Q	Continue	0	Continue
MIDS JTRS - TTNT JPCP	CPIF	ViaSat Inc. Carlsbad, CA	0	0		0		13096	1Q	Continue	0	Continue
Systems Engineering - TTNT JPCP	WX	SSC-SD	0	0		0		1500	1Q	Continue	0	Continue
Systems Engineering	Various	Various	0	0		0		4150	1Q	Continue	0	Continue
Systems Engineering	WX	SSC-SD	0	0		0		1500	1Q	Continue	0	Continue
Subtotal:			424965	134714		121760		755665		Continue	8260	Continue
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
***WAVEFORMS***			0	0		0		0		0	0	0
FFRDC - MITRE and Other contracted Technical Support	FFP	Various	47840	11520	1-2Q	9500	1-2Q	10220	1-2Q	Continue	0	Continue
***GROUND MOBILE RADIO***			0	0		0		0		0	0	0
JTRS Technical Support	Various	Miscellaneous	0	0		0		1940	1-2Q	Continue	0	Continue
***HMS***			0	0		0		0		0	0	0
JTRS Technical Support	Various	Various	0	0		0		2342	1-3Q	Continue	0	Continue
***AMF JTRS***			0	0		0		0		0	0	0
Program Support	Various	Various	0	0		0		6889		Continue	0	Continue
***MIDS JTRS***			0	0		0		0		0	0	0

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F/A-18 Level 0 Development Support	Various	Various	0	0		0		2476	1Q	Continue	0	Continue
F/A-18 Level 0 Integrated Logistics Support	Various	Various	0	0		0		3600	1Q	Continue	0	Continue
Subtotal:			47840	11520		9500		27467		Continue	0	Continue
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
***GROUND MOBILE RADIO***	N/A	N/A	0	0		0		0		0	0	0
JTRS EPG Testbed and Test Planning	MIPR	EPG, Fort Huachuca, AZ	0	0		0		1500	1Q	Continue	0	Continue
JTRS Modeling & Simulation	MIPR	USAIC, Ft. Huachuca, AZ	0	0		0		600	1-2Q	Continue	0	Continue
JTRS Test Inhouse Spt & Govt Activities	Various	Various	0	0		0		1835	1Q	Continue	0	Continue
JTRS EOA/SIT/LUT/MOTE Test Activity	Various	EPG, Fort Huachuca, AZ/Various	0	0		0		550	1-3Q	Continue	0	Continue
***HMS***			0	0		0		0		0	0	0
JTRS EPG test bed and planning	MIPR	EPG, Fort Huachuca, AZ	0	0		0		591	1Q	Continue	0	Continue
JTRS Modeling & Simulation	MIPR	USAIC, Ft. Huachuca, AZ	0	0		0		92	1Q	Continue	0	Continue
JTRS Test Inhouse Support & Government Activities	Various	Various	0	0		0		1611	1-3Q	Continue	0	Continue
Field Test/LUT and OT	Various	Various	0	0		0		0		Continue	0	Continue
***AMF JTRS***			0	0		0		0		0	0	0
Test Planning / Support - JTRS			0	0		0		1522		0	0	0
***MIDS JTRS***			0	0		0		0		0	0	0
F/A-18 Level 0 Developmental Test & Evaluation	N/A	N/A	0	0		0		289	1Q	Continue	0	Continue

ARMY RDT&E COST ANALYSIS (R3)									February 2006			
BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>			PE NUMBER AND TITLE <b>0604280A - Joint Tactical Radio System</b>							PROJECT <b>162</b>		
* F/A-18 Level 0 Test Assets (*Unique)	FFP	Data Link Solutions Cedar Rapids, IA	0	0		0		4063	1Q	Continue	0	Continue
* F/A-18 Level 0 Test Assets (*Unique)	FFP	ViaStat Inc. Carlsbad, CA	0	0		0		4062	1Q	Continue	0	Continue
Subtotal:			0	0		0		16715		Continue	0	Continue
Remarks: *System and operational testing performed by the Services; funded in Service appropriations.												
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
***WAVEFORMS***			0	0		0		0		0	0	0
Program Support	Various	Various	39807	5040	1-2Q	8286	1-2Q	8893	1-2Q	Continue	0	Continue
***GROUND MOBILE RADIO***			0	0		0		0		0	0	0
JTRS Business/Engineering Management	Various	Various	0	0		0		3601	1-4Q	Continue	0	Continue
Project Management Office Support	Various	Various	0	0		0		7001	1-4Q	Continue	0	Continue
JTRS MITRE Support	PWD	MITRE Corp., Mclean, VA	0	0		0		625	1Q	Continue	0	Continue
***HMS***			0	0		0		0		0	0	0
Project Management Office Support	Various	Various	0	0		0		9896	1-4Q	Continue	0	Continue
JTRS Business/Engineering Management	Various	Various	0	0		0		2196	1-4Q	Continue	0	Continue
***MIDS JTRS***			0	0		0		0		0	0	0
Travel	Various	Various	0	0		0		200	1-4Q	Continue	0	Continue
Subtotal:			39807	5040		8286		32412		Continue	0	Continue
<b>Project Total Cost:</b>			<b>512612</b>	<b>151274</b>		<b>139546</b>		<b>832259</b>		<b>Continue</b>	<b>8260</b>	<b>Continue</b>



Schedule Detail (R4a Exhibit)						February 2006	
BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>			PE NUMBER AND TITLE <b>0604280A - Joint Tactical Radio System</b>			PROJECT <b>162</b>	
<u>Schedule Detail</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
***WAVEFORMS***							
WNW							
WNW FQT			2Q	4Q			
WNW Test and STR Resolution			2-4Q	1-4Q	1-4Q	1-4Q	1-4Q
SRW							
SRW FQT			1Q		4Q		
SRW Test and STR Resolution		4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
JAN-TE							
JAN-TE FQT				4Q			
JAN-TE Test and STR Resolution		3-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
SINCGARS				1Q			
UHF SATCOM		3Q					
EPLRS			1Q				
Link 16			3Q				
HF				3Q			
Legacy Waveform Test and STR Resolution	1-4Q						
JFT WARNET Transition	1Q						
JWTT Full Operational Capability (FOC)	1-3Q	1-3Q					
***GMR***							
Pre-EDM Deliveries	2Q						
Contract DevTest /Design VerificationTest Fault fix		2-3Q					
System Readiness Review		4Q					
HW Delta Preliminary Design Review			2Q				
Radio Applications SW Critical Design Review (CDR)			3Q				
Hardware CDR			4Q				

EDM procure/build				1-4Q	1-2Q		
Radio Application SW Functional Qualification Test				3-4Q			
EDM Delivery Begin					2Q		
Product Qualification Test					1-2Q		
JTRS-Army GMR System Integration Test/Limited User Test (LUT)						1Q	
JTRS GMR Milestone C						3Q	
JTRS-Army GMR MOT&E							3Q
Product Improvements				1-4Q	1-4Q	1-4Q	2-4Q
***HMS***							
CDT - Inc 1, Ph 1			2-3Q				
GDT - Inc 1, Ph 1			4Q	1-4Q			
MS C - Inc 1, Ph 1					1Q		
CDT - Inc 1, Ph 2				4Q	1-2Q		
GDT - Inc 1, Ph 2					2-4Q		
MS C - Inc 1, Ph 2						1Q	
***AMF JTRS***							
Milestone B		2Q					
LRIP					1Q		
Milestone C					1Q		
FRP Decision Review							1Q
Contract Award			1Q				
Prototype Phase (Pre-SDD)	1-4Q	1-2Q					
Preliminary Design Review	4Q						
System Development			1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
System Critical Design Review			4Q				
DT/OT Certifications (includes OT Flight Test)				4Q	1-4Q	1-2Q	
MOT&E						3-4Q	
EDM's				4Q			
***MIDS JTRS***							
Migration Core Terminal							

Phase 2A Extension: Specification Development	3Q						
Phase 2B: Design, Development, Fabrication and Qualification							
System Development	1-4Q	1-4Q	1-4Q				
Preliminary Design Review (PDR)	4Q						
Critical Design Review (CDR)		2Q					
Quality Design and Build		2-4Q	1-2Q				
Test Readiness Review (TRR)			2Q				
Contractor Testing (FAQT)			2-4Q				
Government Testing			4Q				
Production Verification Terminal Delivery (PVT)			4Q	1Q			
Production Transition Terminal Delivery (PTT)				1-2Q			
Test and Evaluation							
F/A-18 Level 0 Integration							
Milestone C			2Q				
Technical Evaluation (TECHEVAL)			4Q	1-4Q			
Operational Evaluation (OPEVAL)				4Q	1Q		
Initial Operating Capability					2Q		
Full Rate Production Decision					2Q		
MIDS JTRS TTNT JPCP							
Phase 2C: Specification Development		1Q	1Q				
Phase 2D: Design, Development, Fabrication and Qualification							
System Development			1Q		1Q		
Preliminary Design Review (PDR)			3Q				
Critical Design Review (CDR)				1Q			
Quality Design and Build				1-4Q			
Test Readiness Review (TRR)				4Q			
Contractor Testing (FAQT)				4Q	1Q		
Government Testing					1-2Q		
Production Verification Terminal Delivery (PVT)					2Q		