

UNCLASSIFIED

PE NUMBER: 0207434F

PE TITLE: Link 16 Support and Sustainment

Exhibit R-2, RDT&E Budget Item Justification

DATE

February 2005

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0207434F Link 16 Support and Sustainment

Cost (\$ in Millions)	FY 2004 Actual	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
Total Program Element (PE) Cost	61.150	134.547	157.677	184.100	151.289	155.710	159.298	162.024	Continuing	TBD
5049 JINTACCS	5.107	8.734	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	TBD
5050 TDL System Integration	56.043	125.813	157.677	184.100	151.289	155.710	159.298	162.024	Continuing	TBD

In FY06, Project #655049 funding will merge with Project #655050 since Project #655049 efforts include the development and deployment of Tactical Data Links, which is accomplished in Project #655050.

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

TDLs are used in a combat environment to exchange information such as messages, data, radar tracks, target information, platform status, imagery, and command assignments. TDLs provide interoperability, local and global connectivity, and situational awareness to the user when operating under rapidly changing operational conditions. TDLs are used by all Service theater Command and Control (C2) elements, weapons platforms, and sensors. TDLs include but are not limited to: Link 16, Link 11, Situational Awareness Data Link (SADL), and Variable Message Format (VMF).

The Joint Interoperability of Tactical Command and Control Systems (JINTACCS) Program ensures platform/system interoperability through the development and management of the joint/combined architecture, tactical information exchange requirements (IERS), interface definitions and protocols, platform/system implementations, employment concepts, and operating procedures. This includes the coordination of all TDL and United States Message Text format (USMTF) message standards, USMTF configuration management, platform/system interoperability assessments, and interoperability certification testing. This program will participate in the development, testing, and implementation of international standards (to include NATO standardization agreements) to ensure joint, allied, and coalition interoperability.

Utilization of TDLs in a joint environment requires the integration of terminals [e.g., Joint Tactical Information Distribution System (JTIDS) or Multifunctional Information Distribution System (MIDS)] into host platforms, and designing interoperability of Link 16 networks across all deployed joint and allied platforms. The Tactical Data Networks (TDN) Squadron performs several cross-platform activities to ensure proper integration of Link 16 capabilities and interoperability of Link 16 networks. TDL efforts include incorporating changes and additions to the TDL message standard (MIL-STD-6016C) and incorporating Interoperable Systems Management and Requirements Transformation (iSMART), a process which enables network centric interoperability assessments to be made more quickly and effectively. In addition, the TDN Squadron has management responsibility for the Air Force's Air Defense Systems Integrator (ADSI) systems.

The air portion of the Common Tactical Picture (CTP), the Single Integrated Air Picture (SIAP), consists of common, continual and unambiguous tracks of airborne objects of interest in the surveillance area. SIAP is derived from real time and near real time data and consists of correlated air object tracks and associated information. SIAP systems integration efforts include, but are not limited to: defining the SIAP Platform Independent Model (PIM) functionality, the required SIAP architecture, and the integration methodology for AF C2 weapons systems.

This program is in budget activity 5 (Engineering Manufacturing and Development) because it supports development, integration solutions, fielding, operational support activities, and support of special projects.

Exhibit R-2, RDT&E Budget Item Justification

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BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0207434F Link 16 Support and Sustainment

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

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Previous President's Budget	70.481	141.012	218.743	228.009
(U) Current PBR/President's Budget	61.150	134.547	157.677	184.100
(U) Total Adjustments	-9.331	-6.465		
(U) Congressional Program Reductions		-10.800		
Congressional Rescissions		-2.065		
Congressional Increases		6.400		
Reprogrammings	-7.700			
SBIR/STTR Transfer	-1.631			

(U) **Significant Program Changes:**

Beginning in FY05, the Family of Interoperable Pictures (FIOP) level of effort funding was transferred to PE 0207443F, Project #655137. In addition, funds in PE 27434F for FY06-07 were re-aligned to support JTRS network-centric efforts in PE 0207423F.

In FY05, Congress increased the program by \$6.4M: \$3M to fund Enhanced TDL Data Displays, part of the Link 16 integration in the Alaskan Aerospace Surveillance Range Operations Modernization (AASROM)/Link-16 Alaska (LAK) Program. \$3.4M to fund the Link 16 Pocket J Program, a deployable Link 16 capability that temporarily fills gaps in Link 16 coverage within the CONUS or in austere, remote locations. Also in FY05, the FY05 Defense Appropriations Bill reduced the PE, eliminating the Data Links Test Facility (DTF) Program (\$10.8M).

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Exhibit R-2a, RDT&E Project Justification

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BUDGET ACTIVITY					PE NUMBER AND TITLE			PROJECT NUMBER AND TITLE		
05 System Development and Demonstration (SDD)					0207434F Link 16 Support and Sustainment			5049 JINTACCS		
Cost (\$ in Millions)	FY 2004 Actual	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
5049 JINTACCS	5.107	8.734	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0		

In FY06, Project #655049 funding will be consolidated into Project #655050 since these efforts include the development and deployment of Tactical Data Links.

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

The Joint Interoperability of Tactical Command and Control Systems (JINTACCS) Program is a Joint Staff-directed program that provides the sole Air Force (AF) activity responsible for ensuring the interoperability of AF Tactical Data Links (TDLs) [including, but not limited to Tactical Digital Information Links (TADILs) and Variable Message Formats (VMF)] and United States Message Text Format (USMTF) systems with the associated Joint and allied/coalition systems. The requirements for the program are delineated in DoDD 4630.5, DoDD 4630.8, CJCSI 6212.01B, and AFI 33-108. The program ensures platform/system interoperability through the development and management of the joint/combined architecture, tactical information exchange requirements (IERs), interface definitions and protocols, platform/system implementations, employment concepts, and operating procedures. This includes the coordination of all TDL and USMTF message standards configuration management, platform/system interoperability assessments and interoperability certification testing. Air Force platforms/systems participating in, and affected by, this program include, but are not limited to: Airborne Warning and Control System (AWACS); Modular Control Elements (MCE); Air Operations Centers (AOC); Joint Surveillance Target Attack Radar System (JSTARS); F-15 A/B/C/D/E; F-16 Block 30/40/50; F/A-22; A/OA-10; Joint Strike Fighter (JSF); Airborne Laser (ABL); B-1; B-2; B-52; F-117; RC-135; Regional/Sector Air Operations Centers (RAOC/SAOC), Command & Control Information Processing System (C2IPS); Space Based Infrared System (SBIRS); Air Support Operations Centers (ASOC); and Tactical Air Control Parties (TACPs), Theater Battle Management Core Systems (TBMCS), Contingency Automated Theater Automated Planning System (CTAPS), Combat Intelligence System (CIS), Air Defense System Integrator (ADSI), Distributed Common Ground System (DCGS), North American Aerospace Defense Command (NORAD)/United States Space Command (USSPACECOM) Warfighting Support System (N/UWSS), AWACS Digital Information Link, and Global Command and Control System (GCCS)-Air Force. The Air Force JINTACCS program supports the Assistant Secretary of Defense (ASD) directive on harmonization of US and NATO messages (e.g., Air Tasking Order and Air Control Order). This budget activity also includes TDL Roadmap configuration management and Interoperable System Management and Requirements Transformation (iSMART) implementation.

This program is in budget activity 5 (Engineering Manufacturing and Development) because it supports development, integration solutions, fielding, operational support activities, and support of special projects.

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

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Accomplishments/Planned Program	0.000			
(U) Interoperability Certification Testing. Specific platforms will be determined based on Link 16 message implementation, software upgrade, and system modification	0.633	0.645		
(U) US Message Text Formats Management and Updates	1.583	1.603		
- Support Joint, Allied/Coalition meetings and working groups				
- Support technology maturation for joint standards and DoD policy				

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Exhibit R-2a, RDT&E Project Justification

DATE

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BUDGET ACTIVITY				PE NUMBER AND TITLE				PROJECT NUMBER AND TITLE			
05 System Development and Demonstration (SDD)				0207434F Link 16 Support and Sustainment				5049 JINTACCS			
(U)	Tactical Data Link Management and Architecture Development.			2.891				5.176			
	- Support Tactical Data Link and VMF meetings and working groups										
	- Support implementation and interoperability engineering efforts with the F-16, B-52, B-1, B-2, F-117, and other weapon systems										
	- Support software systems engineering updates and interoperability with the F-15C, E-3, E-8, Control and Reporting Center/Control and Reporting Element (CRC/CRE), interoperable Systems Management and Requirements Transformation (iSMART), and other weapon systems										
(U)	Tactical Data Link Roadmap Requirements and Configuration Management.							1.310			
(U)	Total Cost			5.107				8.734 0.000 0.000			
(U)	C. Other Program Funding Summary (\$ in Millions)										
		<u>FY 2004</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>	<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>Estimate</u>	<u>Complete</u>	
(U)	AF RDT&E										
(U)	0207445F (Fighter TDL)	36.418	50.093	122.160	84.513	50.860	0.000	0.000	0.000		344.044
(U)	0207446F (Bomber TDL)	12.049	78.721	144.863	136.624	57.556	0.000	0.000	0.000		429.813
(U)	0207448F (C2ISR TDL)	25.003	25.150	14.838	4.479	1.952	1.948	1.953	1.939	Continuing	TBD
(U)	0401839F (Airlift TDL)	0.000	0.000	0.000	31.967	0.000	0.000	0.000	0.000		31.967
(U)	Other APPN										
(U)	Aircraft Procurement, AF (3010)										
(U)	0207434F (Link 16 Sup & Sus)	0.040	6.455	3.036	2.737	0.000	9.464	9.703	9.806	Continuing	TBD
(U)	0207423F (JTRS I&I)	0.000	0.000	17.192	43.445	52.032	53.650	49.645	53.695	Continuing	TBD
(U)	0207445F (Fighter TDL)	29.300	95.934	90.430	60.614	12.507	0.000	0.000	0.000		288.785
(U)	0207446F (Bomber TDL)	0.000	44.245	22.237	11.624	4.392	0.000	0.000	0.000		82.498
(U)	0401839F (Airlift TDL)	0.000	3.091	24.443	11.350	14.407	12.427	25.882	26.175	Continuing	TBD
(U)	O&M, AF (3400)										
(U)	0207434F (Link 16 Sup & Sus)	12.877	13.055	21.360	18.590	16.301	16.320	16.862	15.964	Continuing	TBD
(U)	0401839F (Airlift TDL)	0.000	1.812	2.776	5.883	12.073	16.843	17.105	17.397	Continuing	TBD
(U)	Other Procurement, AF (3080)										
(U)	0207434F (Link 16 Sup &	0.000	27.810	32.446	30.656	12.758	8.376	8.413	8.460	Continuing	TBD
Project 5049				R-1 Shopping List - Item No. 96-5 of 96-17				Exhibit R-2a (PE 0207434F)			

Project 5049

R-1 Shopping List - Item No. 96-5 of 96-17

Exhibit R-2a (PE 0207434F)

Exhibit R-2a, RDT&E Project Justification		DATE February 2005
BUDGET ACTIVITY 05 System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0207434F Link 16 Support and Sustainment	PROJECT NUMBER AND TITLE 5049 JINTACCS
<p>(U) <u>C. Other Program Funding Summary (\$ in Millions)</u> Sus)</p> <p>(U) <u>D. Acquisition Strategy</u> As the Air Force lead agent for a jointly directed program, JINTACCS provides level of effort technical support for increasing interoperability of AF programs through message text and data link standards implementation.</p>		

Project 5049

R-1 Shopping List - Item No. 96-6 of 96-17

Exhibit R-2a (PE 0207434F)

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Exhibit R-3, RDT&E Project Cost Analysis

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BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0207434F Link 16 Support and
Sustainment

PROJECT NUMBER AND TITLE

5049 JINTACCS

(U) Cost Categories (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total Prior to FY 2004 Cost</u>	<u>FY 2004 Cost</u>	<u>FY 2004 Award Date</u>	<u>FY 2005 Cost</u>	<u>FY 2005 Award Date</u>	<u>FY 2006 Cost</u>	<u>FY 2006 Award Date</u>	<u>FY 2007 Cost</u>	<u>FY 2007 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
(U) <u>Product Development</u>														
MITRE - Systems Engineering	SS/FFP	MITRE, Bedford MA	6.381	2.616	Dec-03	5.901	Dec-04					0.000	14.898	14.898
USMTF Standards Support	C/CPFF	B3H, Hampton VA	1.940	1.008	Dec-03	0.625	Dec-04					0.000	3.573	3.573
TDL Integration and Requirements	C/CPFF	Odyssey, Hampton VA	1.200	0.612	Dec-03	1.368	Dec-04					0.000	3.180	3.180
Subtotal Product Development			9.521	4.236		7.894		0.000		0.000		0.000	21.651	21.651
Remarks:														
(U) <u>Test & Evaluation</u>														
AF Participating Test Unit (PTU)	MIPR	ACC/SC, Langley AFB VA	0.483	0.502	Jan-04	0.480	Jan-05					0.000	1.465	1.465
Subtotal Test & Evaluation			0.483	0.502		0.480		0.000		0.000		0.000	1.465	1.465
Remarks:														
(U) <u>Management</u>														
Program Office and Contractor Support	C/FFP	Various	0.355	0.369	Jan-04	0.360	Dec-04						1.084	1.084
Subtotal Management			0.355	0.369		0.360		0.000		0.000		0.000	1.084	1.084
Remarks:														
(U) Total Cost			10.359	5.107		8.734		0.000		0.000		0.000	24.200	24.200

Exhibit R-4, RDT&E Schedule Profile

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BUDGET ACTIVITY

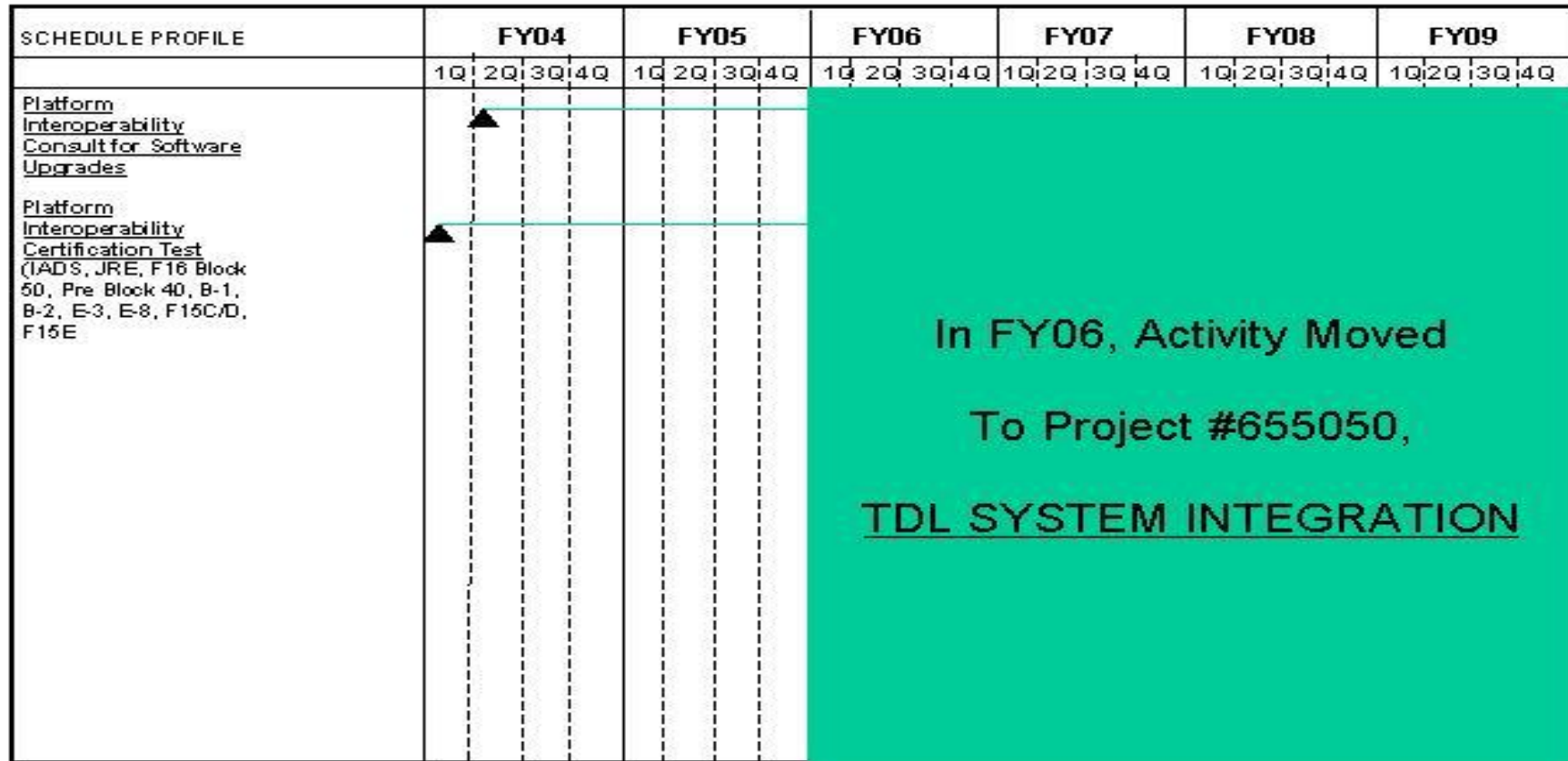



05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0207434F Link 16 Support and
Sustainment

PROJECT NUMBER AND TITLE

5049 JINTACCS

**Legend**Contract Award  Development  Testing  Delivery 

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Exhibit R-4a, RDT&E Schedule Detail

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05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0207434F Link 16 Support and
Sustainment

PROJECT NUMBER AND TITLE

5049 JINTACCS

(U) Schedule Profile

(U) Platform Interoperability Consultation for Software Upgrades

(U) Iceland Air Defense System Interoperability Tests

(U) Joint Range Extension Interoperability Tests

(U) F-16 Block 50 Interoperability Tests

(U) F-16 Pre-Block 40 Interoperability Tests

(U) B-1 Interoperability Tests

(U) B-2 Interoperability Tests

(U) E-3 AWACS Interoperability Tests

(U) E-8 JSTARS Interoperability Tests

(U) F-15C/D Interoperability Tests

(U) F-15E Interoperability Tests

FY 2004FY 2005FY 2006FY 2007

1-4Q

1-4Q

1-2Q

3Q

1-2Q

3Q

1-2Q

1-2Q

1-2Q

3-4Q

2-3Q

1-2Q

3-4Q

3-4Q

4Q

1Q

2-3Q

Exhibit R-2a, RDT&E Project Justification

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BUDGET ACTIVITY					PE NUMBER AND TITLE			PROJECT NUMBER AND TITLE		
05 System Development and Demonstration (SDD)					0207434F Link 16 Support and Sustainment			5050 TDL System Integration		
Cost (\$ in Millions)	FY 2004 Actual	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
5050 TDL System Integration	56.043	125.813	157.677	184.100	151.289	155.710	159.298	162.024	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0		

In FY06, funding for the Joint Interoperability of Tactical Command and Control Systems (JINTACCS) program (currently residing in Project #655049), will be merged with Project #655050 resulting in the elimination of Project #655049.

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

Tactical Data Links (TDLs) are used in a combat environment to exchange information such as messages, data, radar tracks, target information, platform status, imagery, and mission assignments. TDLs provide interoperable data exchange, local and global connectivity, and situational awareness to the tactical user when operating under rapidly changing operational conditions. TDLs are used by the Air Force, Army, Navy, and Marine Corps Theater Command and Control (C2) Elements, weapons and sensor platforms.

TDLs include but are not limited to: Link 16, Link 11, Situational Awareness Data Link (SADL) and Variable Message Format (VMF).

The number of Air Force platforms hosting TDLs is expanding from C2 aircraft (E-3, E-8, etc.) into the fighter, bomber, ISR, tanker, airlift and other tactical fleets (F-15, F-16, F/A-22, Rivet Joint, B-1, B-2, B-52, etc.). Utilization of TDLs in a joint environment requires the integration of terminals into host platforms and interoperability of TDL networks across all deployed joint and allied platforms. Network Centric Transformation activities performed by the Tactical Data Networks (TDN) Squadron (previously the TDL System Program Office) include, but are not limited to; enabling and supporting the transformation to network-centric operations, Common Link Integration Processor (CLIP) software development, Network Enhanced Weapons (previously Weapons Data Link), analysis and integration efforts encompassing hardware, software, operational Link 16 enhancements, and training and logistics development, certification of individual TDL implementations to joint and allied standards, establishment of service-wide network management procedures and operations, system wide enhancements and test.

In addition, this project funds the integration of the Joint Interface Control Officer (JICO) - Support System (JSS) and TDL Gateways such as the Objective Gateway, the Joint Air Defense System Integrator (J-ADSI), the family of Joint Range Extension (JRE) functionality [which includes the JRE Transparent Multi-Platform Gateway (TMPG) Equipment Package (JTEP)], Pocket J, Enhanced Tactical Data Link and Data Display [previously called Link 16 Alaska (LAK)], and Beyond Line of Sight (BLOS) capabilities such as the Roll-on BLOS Enhancement (ROBE).

JINTACCS is a Joint Staff-directed program providing Air Force activities responsible for ensuring the interoperability of AF TDLs [including, but not limited to Tactical Digital Information Links (TADILs) and Variable Message Formats (VMF)] and United States Message Text Format (USMTF) systems with the associated Joint and allied/coalition systems. This includes the coordination of all TDL and USMTF message standards configuration management, platform/system interoperability assessments and interoperability certification testing. The Air Force JINTACCS program supports the Assistant Secretary of Defense (ASD) directive on harmonization of US and NATO messages (e.g., Air Tasking Order and Air Control Order). This budget activity also includes TDL Roadmap configuration management, Interoperable System Management and Requirements Transformation (iSMART) implementation. This program will participate in the development, testing, and implementation of international standards (to include NATO standardization agreements) to ensure joint, allied, and coalition interoperability.

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BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0207434F Link 16 Support and Sustainment

PROJECT NUMBER AND TITLE

5050 TDL System Integration

The air portion of the Common Tactical Picture (CTP), the Single Integrated Air Picture (SIAP), consists of common, continual and unambiguous tracks of airborne objects of interest in the surveillance area. SIAP is derived from real time and near real time data and consists of correlated air object tracks and associated information. SIAP systems integration efforts include, but are not limited to: defining the SIAP Platform Independent Model (PIM) functionality, the required SIAP architecture, and the integration methodology for AF C2 weapons systems.

This activity is in Budget Activity 5 (Engineering, Manufacturing and Development) because it supports development, integration solutions, fielding, operational support activities, and support of special projects.

(U) **B. Accomplishments/Planned Program (\$ in Millions)**FY 2004FY 2005FY 2006FY 2007

(U) TDN MANAGEMENT AND INITIAL FIELDING:

9.572

19.831

23.388

24.089

- Joint Interface Control Officer Support System (JSS): Finalizes risk reduction activities, down-selects to single development contractor, and provides development and test support of Engineering Development Models (EDM's).

- TDL Integration, Fielding and Support: Provides initial fielding support for units/platforms fielding a datalink capability. This support consists of organic and contractor teams that provide Tactics, Techniques & Procedures (TTP) training, equipment and operations expertise needed to set-up initial TDL OPS, and field installations. Develops Tactical Data Link architectures for implementation at USAF and Joint locations worldwide resulting in a 20%-100% increase in TDL mission capability. Supports USAF and Joint TDL experiments.

(U) NETWORK CENTRIC TRANSFORMATION:

2.078

23.914

48.169

55.990

- Network Centric Transformation activities include, but are not limited to: enabling and supporting the transformation to network-centric operations, Common Link Integration Processor (CLIP) software development, Network Enhanced Weapons (previously Weapons Data Link), Network Centric Capability Assessment, and Network Centric Transformation.

- Maintain developmental equipment; test support; fielding/non-recurring training; network support; crypto support; spectrum support; gateway support; data link tool support; and support operational working groups

(U) GATEWAYS:

2.418

15.200

44.646

62.122

- Efforts associated with Link 16 network management and network capability improvements--includes, but not limited to: Link 16 and other TDL Gateways and Interfaces, Near Term Gateways such as JRE, JTEP, TMPG, ADSI and Objective Gateway development.

(U) ROLL-ON BEYOND-LINE-OF-SIGHT ENHANCEMENT (ROBE):

0.000

9.578

3.370

1.500

- Spiral 2 effort applied to the 40 ROBE-Spiral 1 equipped KC-135s (Group A and Group B kits). This effort will add capabilities such as, but not limited to: a Situational Awareness Data Link (SADL) gateway, Built in Test (BIT), Remote Control, and additional Satellite Communications (SATCOM)

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BUDGET ACTIVITY				PE NUMBER AND TITLE			PROJECT NUMBER AND TITLE				
05 System Development and Demonstration (SDD)				0207434F Link 16 Support and Sustainment			5050 TDL System Integration				
capability.											
(U)	TDN INTEROPERABILITY TEST AND CONFIGURATION MANAGEMENT: - JINTACCS Tactical Data Link Management, Architecture Development and Certification Testing. - Implementation and interoperability scheduling with the F-16, B-52, B-1, B-2, F-117, and other weapon systems - Software updates and interoperability testing with the F-15C, E-3, E-8, Control and Reporting Center/Control and Reporting Element (CRC/CRE), interoperable Systems Management and Requirements Transformation (iSMART), and other weapon systems. - Tactical Data Link Roadmap Requirements, Configuration Management, and Air Force Participating Test Unit activities (AFPTU).						8.269	16.024	19.723		
(U)	TACTICAL DATA LINK ACQUISITION MANAGEMENT: Includes the TDN Squadron on-line collaboration tool [Integrated Digital Environment (IDE)], coalition interoperability management, contractor support and MITRE support			5.783			9.735	11.280	11.176		
(U)	CONGRESSIONAL ADDS: - Enhanced TDL and Data Display (previously Link-16 Alaska) - Pocket J: A deployable Link 16 capability for temporary, austere, or remote locations.			12.300			6.400				
(U)	SINGLE INTEGRATED AIR PICTURE: - AF system engineering and infrastructure cost to execute SIAP initiatives.			23.892			32.886	10.800	9.500		
(U)	Total Cost			56.043			125.813	157.677	184.100		
(U)	C. Other Program Funding Summary (\$ in Millions)										
		<u>FY 2004</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>	<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>Estimate</u>	<u>Complete</u>	
(U)	AF RDT&E										
(U)	0207445F (Fighter TDL)	36.418	50.093	122.160	84.513	50.860	0.000	0.000	0.000	Continuing	TBD
(U)	0207446F (Bomber TDL)	12.049	78.721	144.863	136.624	57.556	0.000	0.000	0.000	Continuing	TBD
(U)	0207448F (C2ISR TDL)	25.003	25.150	14.838	4.479	1.952	1.948	1.953	1.939		77.262
(U)	0401839F (Airlift TDL)	0.000	0.000	0.000	31.967	0.000	0.000	0.000	0.000	Continuing	TBD
(U)	0207443F (SIAP Project-FIOP PE)	0.000	46.607	29.296	20.450	0.000	0.000	0.000	0.000	Continuing	TBD
(U)	Other APPN										
(U)	Aircraft Procurement, AF (3010)										
(U)	0207423F (JTRS I&I)	0.000	0.000	17.192	43.445	52.032	53.650	49.645	53.695	Continuing	TBD
Project 5050											
				R-1 Shopping List - Item No. 96-12 of 96-17				Exhibit R-2a (PE 0207434F)			

R-1 Shopping List - Item No. 96-12 of 96-17

Exhibit R-2a (PE 0207434F)

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Exhibit R-2a, RDT&E Project Justification

DATE

February 2005

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0207434F Link 16 Support and
Sustainment

PROJECT NUMBER AND TITLE

5050 TDL System Integration

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

(U) 0207434F (Link 16 Sup & Sus)	0.040	6.455	3.036	2.737	0.000	9.464	9.703	9.806	Continuing	TBD
(U) 0207445F (Fighter TDL)	29.300	95.934	90.430	60.614	12.507	0.000	0.000	0.000		288.785
(U) 0207446F (Bomber TDL)	0.000	44.245	22.237	11.624	4.392	0.000	0.000	0.000		82.498
(U) 0401839F (Airlift TDL)	0.000	3.091	24.443	11.350	14.407	12.427	25.882	26.175	Continuing	TBD
(U) O&M, AF (3400)										
(U) 0207434F (Link 16 Sup & Sus)	12.877	13.055	21.360	18.590	16.301	16.320	16.862	15.964	Continuing	TBD
(U) 0401839F (Airlift TDL)	0.000	1.812	2.776	5.883	12.073	16.843	17.105	17.397	Continuing	TBD
(U) Other Procurement, AF (3080)										
(U) 0207434F (Link 16 Sup & Sus)	0.000	27.810	32.446	30.656	12.758	8.376	8.413	8.460	Continuing	TBD

(U) **D. Acquisition Strategy**

The Air Force Tactical Data Networks Squadron provides common enterprise management for development, integration, and interoperability across all Air Force platforms. It ensures tactical data links are procured and maintained as a joint, end-to-end, command and control system using evolutionary acquisition approaches and a combination of sole source and open competition contracts.

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Exhibit R-3, RDT&E Project Cost Analysis

DATE

February 2005

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0207434F Link 16 Support and Sustainment

PROJECT NUMBER AND TITLE

5050 TDL System Integration

(U) <u>Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract</u> <u>Method &</u> <u>Type</u>	<u>Performing</u> <u>Activity &</u> <u>Location</u>	<u>Total</u> <u>Prior to FY</u> <u>2004</u> <u>Cost</u>	<u>FY 2004</u> <u>Cost</u>	<u>FY 2004</u> <u>Award</u> <u>Date</u>	<u>FY 2005</u> <u>Cost</u>	<u>FY 2005</u> <u>Award</u> <u>Date</u>	<u>FY 2006</u> <u>Cost</u>	<u>FY 2006</u> <u>Award</u> <u>Date</u>	<u>FY 2007</u> <u>Cost</u>	<u>FY 2007</u> <u>Award</u> <u>Date</u>	<u>Cost to</u> <u>Complete</u>	<u>Total Cost</u>	<u>Target</u> <u>Value of</u> <u>Contract</u>
(U) <u>Product Development</u>														
-TDN Managment and Initial Fielding (JSS, IFS)	Various	Various		9.572	Feb-04	19.831	Jun-05	23.388	Dec-05	23.589	Dec-06	Continuing	TBD	TBD
-Network Centric Transformation (CLIP, JAN-TE, NEW, NCCA, TSR, LET)	Various	Various	1.771	2.078	Dec-03	23.300	Mar-05	41.745	Dec-05	50.269	Dec-06	Continuing	TBD	TBD
-Gateways (OG, Global Hawk/MMP, JRE, JTEP, TPMG, ADSI, ROBE)	Various	Various		2.418	Dec-03	24.778	Dec-04	48.016	Dec-05	62.622	Dec-06	Continuing	TBD	TBD
-TDN Interoperability Test and Configuration Management (AFPTU, JINTACCS, iSMART)	Various	Various			Jan-04	8.269	Feb-05	16.024	Dec-05	19.723	Dec-06	Continuing	TBD	TBD
-TDL Acquisition Management (IDE NEXUS, Coalition Interoperability)	Various	Various		0.891	Nov-03	3.270	Nov-04	3.313	Nov-05	2.732	Nov-06	Continuing	TBD	TBD
-Single Integrated Air Picture (SIAP)	Various	Various	14.785	23.892	Mar-04	32.886	Jan-05	10.800	Dec-05	9.500	Dec-05	Continuing	TBD	TBD
-* Enhanced TDL & Data Display (LAK)	C/CPFF	Pro-Logic, Inc., Manassas, VA	6.898	8.000	Aug-04	3.000	Apr-05					0.000	17.898	17.898
-* Pocket J	SS/TBD	Pro-Logic, Inc., Fairmont, WV		4.300	Jul-04	3.400	Feb-05					0.000	7.700	7.700
Subtotal Product Development			23.454	51.151		118.734		143.286		168.435		Continuing	TBD	TBD
Remarks:	* Supports the Congressional Add - is a Small Business Set-Aside program award.													
(U) <u>Test & Evaluation</u>														
-46th Test Squadron	MIPR	46th Test Squadron, Eglin AFB FL	0.625	0.675	Dec-03	0.614	Dec-04	6.424	Dec-05	7.221	Dec-06	Continuing	TBD	TBD
Subtotal Test & Evaluation			0.625	0.675		0.614		6.424		7.221		Continuing	TBD	TBD
Remarks:														
(U) <u>Management</u>														
-Program Office and Contractor Support	C/FFP	Various	0.685	4.217	Dec-03	6.465	Dec-04	7.967	Dec-05	8.444	Dec-06	Continuing	TBD	TBD
Subtotal Management			0.685	4.217		6.465		7.967		8.444		Continuing	TBD	TBD
Remarks:														
(U) Total Cost			24.764	56.043		125.813		157.677		184.100		Continuing	TBD	TBD

Project 5050

R-1 Shopping List - Item No. 96-14 of 96-17

Exhibit R-3 (PE 0207434F)

Exhibit R-4, RDT&E Schedule Profile

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BUDGET ACTIVITY

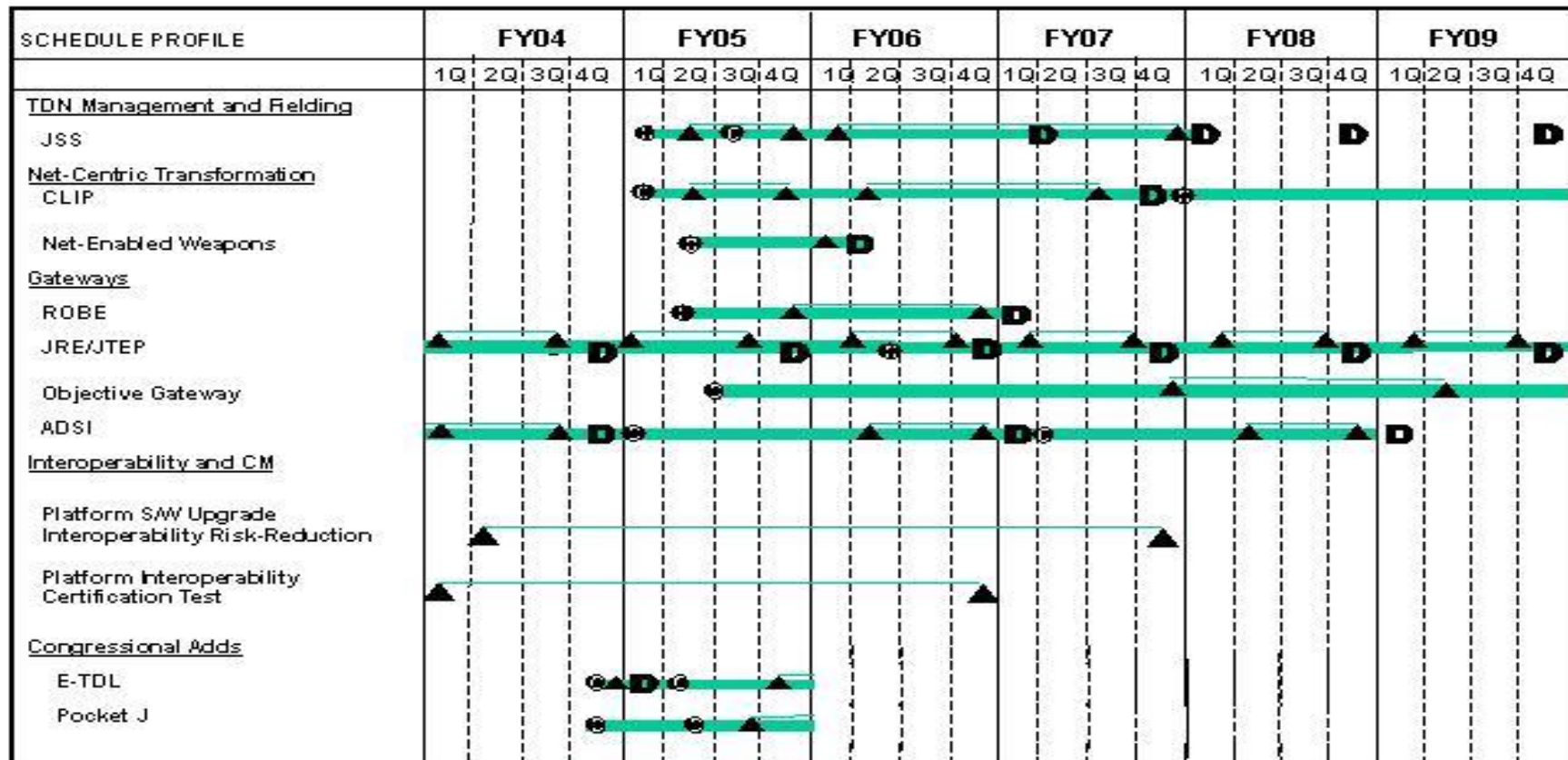
05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0207434F Link 16 Support and Sustainment

PROJECT NUMBER AND TITLE

5050 TDL System Integration

**Legend**

Contract Award Development Testing Delivery

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Exhibit R-4a, RDT&E Schedule Detail

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BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0207434F Link 16 Support and
Sustainment

PROJECT NUMBER AND TITLE

5050 TDL System Integration

(U) <u>Schedule Profile</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) ADSI Contract Award		1Q		
(U) ADSI Development	1-4Q	1-4Q	1-4Q	1-4Q
(U) ADSI Test & Certification	1-3Q		2-4Q	
(U) ADSI Product Delivery	4Q			1Q
(U) ROBE Contract Award		2Q		
(U) ROBE Development		2-4Q	1-4Q	
(U) ROBE Test & Certification		4Q	1-4Q	
(U) ROBE Product Delivery				1Q
(U) CLIP Contract Award		1Q		
(U) CLIP Development		1-4Q	1-4Q	1-4Q
(U) CLIP Test & Certification		2-4Q	2-4Q	1-3Q
(U) CLIP Product Delivery				4Q
(U) E-TDL Contract Award	4Q	2Q		
(U) E-TDL Development	4Q	1-4Q		
(U) E-TDL Test & Certification		4Q		
(U) E-TDL Product Delivery		1Q		
(U) JSS Contract Award	4Q	3Q		
(U) JSS Development	4Q	1-4Q	1-4Q	1-4Q
(U) JSS Test & Certification	2-4Q	1-4Q	1-4Q	1-4Q
(U) JSS Product Delivery				2Q
(U) JRE/JTEP Contract Award			2Q	
(U) JRE/JTEP Development	1-4Q	1-4Q	1-4Q	1-4Q
(U) JRE/JTEP Test & Certification	1-3Q	1-3Q	2-4Q	1-3Q
(U) JRE/JTEP Product Delivery	4Q	4Q	4Q	4Q
(U) POCKET J Contract Award	4Q	2Q		
(U) POCKET J Development	4Q	1-4Q		
(U) POCKET J Test & Certification		3-4Q		
(U) Objective Gateway Contract Award		2Q		
(U) Objective Gateway Development		2-4Q	1-4Q	1-4Q
(U) Objective Gateway Test & Certification			4Q	
(U) Net Enabled Weapons Contract Award		2Q		
(U) Net Enabled Weapons Development		2-4Q		

Project 5050

R-1 Shopping List - Item No. 96-16 of 96-17

Exhibit R-4a (PE 0207434F)

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Exhibit R-4a, RDT&E Schedule Detail						DATE
						February 2005
BUDGET ACTIVITY				PE NUMBER AND TITLE		PROJECT NUMBER AND TITLE
05 System Development and Demonstration (SDD)				0207434F Link 16 Support and Sustainment		5050 TDL System Integration
(U) Net Enabled Weapons Test & Certification						1Q
(U) Net Enabled Weapons Product Delivery						2Q

Project 5050

R-1 Shopping List - Item No. 96-17 of 96-17

Exhibit R-4a (PE 0207434F)