

## UNCLASSIFIED

PE NUMBER: 0401839F

PE TITLE: Airlift/Other Tactical Data Link

## Exhibit R-2, RDT&amp;E Budget Item Justification

DATE

February 2006

## BUDGET ACTIVITY

## 07 Operational System Development

## PE NUMBER AND TITLE

## 0401839F Airlift/Other Tactical Data Link

Cost (\$ in Millions)	FY 2005 Actual	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	0.000	0.000	32.099	0.000	0.000	0.000	0.000	0.000	32.099
5040 Airlift/Other Tactical Data Link	0.000	0.000	32.099	0.000	0.000	0.000	0.000	0.000	32.099

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

Tactical Data Links (TDL) 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).

This development effort adds TDL Line of Sight (LOS) and Beyond Line of Sight (BLOS) capability to the Air Mobility and Special Operations Forces (SOF) Fleet. LOS/BLOS Integration includes, but is not limited to, the following aircraft: KC-135, C-5, C-17, C-130, KC-10 and other Air Mobility, Refueling, and SOF Aircraft. TDLs provide a secure, jam-resistant, digital-data-transfer-network capability with a standardized waveform and data format allowing intra- and inter-flight communications. TDLs increase mission effectiveness, provide situational awareness, provide positive identification of aircraft in the network, correlate on- and off-board sensor data-, target-, and threat information. TDL efforts include, but are not limited to: changes and additions to the TDL message standard (MIL-STD-6016C) and Interface Change Proposals (ICPs); interoperability certification testing with the Joint Interoperability Test Center (JITC); future development, integration, and verification of TDL Operational Flight Program (OFP) upgrades; data gathering processes for future network-centric assessments for all Air Mobility Command (AMC) platforms; and Joint Tactical Radio System (JTRS) migration activities.

RDT&E activity is currently planned for FY07 to develop and integrate LOS/BLOS TDL capabilities in the Program Element / Project.

Airlift/Other Tactical Data Link program is in Budget Activity 7, Operational System Development, since it supports integration of tactical data links into operational systems.

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

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Previous President's Budget			
(U) Current PBR/President's Budget	0.000	0.000	32.099
(U) Total Adjustments	0.000	0.000	
(U) Congressional Program Reductions			
Congressional Rescissions			
Congressional Increases			
Reprogrammings			
SBIR/STTR Transfer			

(U) **Significant Program Changes:**

In FY07, funds are programmed to support the Air Mobility Command (AMC) requirement for A-kit development and airframe design integration analysis/changes for C-130 Link-16 integration and BLOS standard A-kit development.

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PROJECT NUMBER AND TITLE

5040 Airlift/Other Tactical Data Link

Cost (\$ in Millions)	FY 2005 Actual	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total
5040 Airlift/Other Tactical Data Link	0.000	0.000	32.099	0.000	0.000	0.000	0.000	0.000	32.099
Quantity of RDT&E Articles	0	0	0	0	0	0	0		

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

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

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Antenna/Cabling analysis and development	0.000	0.000	4.017
(U) Flight system/subsystem functional verification	0.000	0.000	8.830
(U) Test and compatibility analysis	0.000	0.000	5.420
(U) Design training system/simulators	0.000	0.000	13.832
(U) Total Cost	0.000	0.000	32.099

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

	<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>Complete</u>	
(U) RDT&E (3600)									
(U) 0207434F (Link 16 Sup & Sus)	120.633	161.345	172.625	142.449	152.320	154.994	156.665	Continuing	TBD
(U) 0207445F (Fighter TDL)	35.668	119.965	113.388	81.084	38.626	34.714	0.000		423.445
(U) 0207446F (Bomber TDL)	76.568	142.800	168.168	94.889	0.000	0.000	0.000		482.425
(U) 0207448F (C2ISR TDL)	24.420	14.627	4.338	1.801	1.731	1.697	1.633	Continuing	TBD
(U) Procurement (3010)									
(U) 0207423F (JTRS I&I)	0.000	0.000	0.000	19.472	26.521	66.948	42.346	Continuing	TBD
(U) 0207434F (Link 16 Sup & Sus)	2.046	2.996	2.783	0.000	9.598	9.846	9.962	Continuing	TBD
(U) 0207445F (Fighter TDL)	95.934	89.222	61.623	12.688	0.000	0.000	0.000		259.467
(U) 0207446F (Bomber TDL)	44.245	21.940	11.818	4.456	0.000	0.000	0.000		82.459
(U) 0401839F (Airlift TDL)	0.000	24.118	11.539	14.616	12.603	26.263	26.591	Continuing	TBD
(U) Procurement (3080)									
(U) 0207434F (Link 16 Sup & Sus)	26.231	42.462	30.740	12.777	8.435	8.508	8.612	Continuing	TBD
(U) O&M (3400)									
(U) 0207434F (Link 16 Sup & Sus)	9.549	21.112	10.156	12.279	16.177	16.629	16.975	Continuing	TBD
(U) 0401839F (Airlift TDL)	0.596	2.731	5.708	11.783	16.499	17.178	17.271	Continuing	TBD

(U) **D. Acquisition Strategy**

The Air Force Tactical Data Links System Program Office (SPO) provides for common development of integration and interoperability across all Air Force platforms and ensures that TDLs are procured and maintained as joint, end-to-end, command-and-control systems.

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## Exhibit R-3, RDT&amp;E Project Cost Analysis

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(U) <u>Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract</u> <u>Method &amp;</u> <u>Type</u>	<u>Performing</u> <u>Activity &amp;</u> <u>Location</u>	<u>Total</u> <u>Prior to FY</u> <u>2005</u> <u>Cost</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 Value</u> <u>of Contract</u>
(U) <u>Product Development</u> TDL integration for airlift, refueling and other AMC aircraft Subtotal Product Development Remarks:	Various	Various	0.000	0.000		0.000		21.219	Oct-06	0.000	21.219	TBD
(U) <u>Support</u> Subtotal Support Remarks:	TBD	TBD	0.000	0.000		0.000		1.525	Oct-06	0.000	1.525	TBD
(U) <u>Test &amp; Evaluation</u> Subtotal Test & Evaluation Remarks:	TBD	TBD	0.000	0.000		0.000		8.330	Oct-06	0.000	8.330	TBD
(U) <u>Management</u> Subtotal Management Remarks:	TBD	TBD	0.000	0.000		0.000		1.025	Oct-06	0.000	1.025	TBD
(U) Total Cost			0.000	0.000		0.000		32.099		0.000	32.099	TBD

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## Exhibit R-4, RDT&amp;E Schedule Profile

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# Tactical Data Links / Link 16

## Air Mobility Development Schedule

SCHEDULE PROFILE	FY05				FY06				FY07				FY08				FY09				FY10			
Air Mobility RDT&E	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
<b>Link 16 Integration</b>																								
C-130 AMP																								
C-130J																								
Baseline KC-135R & Roll-on Beyond Line of Sight Enhancement (ROBE) Equipped KC-135R																								

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## Exhibit R-4a, RDT&amp;E Schedule Detail

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(U) Schedule ProfileFY 2005FY 2006FY 2007

(U) TDL integration for C-130 AMP

1-4Q

(U) TDL integration for C-130 J

1-4Q

(U) TDL integration for KC-135 R with ROBE

1-4Q