

UNCLASSIFIED

PE NUMBER: 0401839F
 PE TITLE: Airlift/Other Tactical Data Link

Exhibit R-2, RDT&E Budget Item Justification	DATE May 2009
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Cost (\$ in Millions)	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	4.300	7.923	0.000	0.000	0.000	0.000	0.000	0.000	0.000	19.008
5040 Airlift/Other Tactical Data Link	4.300	7.923	0.000	0.000	0.000	0.000	0.000	0.000	0.000	19.008

(U) A. Mission Description and Budget Item Justification

Tactical Data Links (TDL), as a subset of the broader Airborne Network, 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), Variable Message Format (VMF), Integrated Broadcast Service (IBS), Tactical Targeting Network Technology (TTNT) and Multifunction Advanced Data Link (MADL).

This effort provides critical capability and enhancements to the Airborne Network by creating common development, integration and interoperability across the Air Mobility and Special Operations Forces (SOF) Fleets. This development effort incorporates Line of Sight (LOS) and Beyond Line of Sight (BLOS) TDL capability into the Air Mobility and SOF Fleets to include, but not be limited to: C-17, KC-135, C-130, KC-10, C-5 and other Air Mobility, Refueling, and SOF aircraft. TDLs provide a secure, jam-resistant, digital-data-transfer-network capability with new and 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-6016D) and other data link interoperability standards including necessary 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 and federated networking components and applications; data gathering processes for future network-centric assessments for all Air Mobility Command (AMC) and Air Force Special Operations Command (AFSOC) platforms; and Joint Tactical Radio System (JTRS) migration activities.

Activities also include studies and analysis to support both current program planning and execution and future program planning.

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 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
(U) Previous President's Budget	0.000	0.000	0.000
(U) Current PBR/President's Budget	4.300	7.923	0.000
(U) Total Adjustments	4.300	7.923	
(U) Congressional Program Reductions			
Congressional Rescissions		-0.077	
Congressional Increases		8.000	
Reprogrammings	4.300		
SBIR/STTR Transfer			

(U) **Significant Program Changes:**

In FY09, Congress provided USAF requested transfer of \$12.612M APAF funding to \$8.0M RDT&E funds.

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Cost (\$ in Millions)		FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost to Complete	Total
5040	Airlift/Other Tactical Data Link	4.300	7.923	0.000	0.000	0.000	0.000	0.000	0.000	0.000	19.008
	Quantity of RDT&E Articles	0	0	0	0	0	0	0	0		

(U) A. Mission Description and Budget Item Justification

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Activities also include studies and analysis to support both current program planning and execution and future program planning.

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.

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

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
(U) MAF/Data Link Integration (DLI) program support	1.474	1.895	
(U) MAF/Data Link Integration (DLI) Group A Risk Reduction	2.399		
(U) MAF/Data Link Integration (DLI) ANI Enterprise Projects		1.028	
(U) MAF/Data Link Integration (DLI) Test & Certification	0.427		
(U) C-130 AMP AMF JTRS Risk Reduction		2.800	
(U) AFRL Lab Development		2.200	

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(U) <u>B. Accomplishments/Planned Program (\$ in Millions)</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
(U) Total Cost	4.300	7.923	0.000

		<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>FY 2014</u>	<u>FY 2015</u>	<u>Cost to</u>	<u>Total Cost</u>
		<u>Actual</u>	<u>Estimate</u>	<u>Complete</u>							
(U) RDT&E (3600)											
(U) 0207434F (Link 16 Sup & Sus)		186.371	192.460	0.000						Continuing	TBD
(U) 0207445F (Fighter TDL)		57.424	57.264	72.106							186.794
(U) 0207446F (Bomber TDL)		38.280	11.603	0.000							49.883
(U) 0207448F (C2ISR TDL)		1.745	1.719	1.667						Continuing	TBD
(U) 0604281F (TDN Enterprise)		0.000	0.000	88.444							
(U) Procurement (3010)											
(U) 0207434F (Link 16 Sup & Sus)		0.001	0.008	0.000						Continuing	TBD
(U) 0207445F (Fighter TDL)		24.877	5.788	9.616							40.281
(U) 0207446F (Bomber TDL)		4.426	0.000	0.000							4.426
(U) 0401839F (Airlift TDL)		12.394	0.000	0.000						Continuing	TBD
(U) Procurement (3080)											
(U) 0207434F (Link 16 Sup & Sus)		22.980	16.079	0.000						Continuing	TBD
(U) 0604281F (TDN Enterprise)		0.000	0.000	32.441							
(U) O&M (3400)											
(U) 0207434F (Link 16 Sup & Sus)		29.405	22.104	0.359						Continuing	TBD
(U) 0207445F (Fighter RD)		0.300	0.281	0.219							
(U) 0401839F (Airlift TDL)		3.907	6.469	10.242						Continuing	TBD
(U) 0604281F (TDN Enterprise)		0.000	0.000	34.850							

(U) **D. Acquisition Strategy**
 The 653rd Electronics Systems Group (ELSG) provides for common development of integration and interoperability across the entire Airborne Network and ensures that TDLs are procured and maintained as joint, end-to-end, command-and-control systems. Platform acquisition strategies vary by program, but the majority of

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development and integration is normally accomplished by the weapon system prime contractor.

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Exhibit R-3, RDT&E Project Cost Analysis

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(U) Cost Categories (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	Contract Method & Type	Performing Activity & Location	Total Prior to FY 2008 Cost	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date	Cost to Complete	Total Cost	Target Value of Contract
(U) <u>Product Development</u>												
Group A Risk Reduction/Design	Various	Various	4.800	2.399	May-08					0.000	7.199	TBD
C-130 AMP AMF JTRS Risk Reduction	Various	Various				2.800	Jan-09				2.800	
AFRL Lab Development	Various	AFRL, Dayton, Ohio				2.200	Jan-09				2.200	
Subtotal Product Development			4.800	2.399		5.000		0.000		0.000	12.199	TBD
Remarks:												
(U) <u>Support</u>												
Information Support Plan/Capability Development Document (ISP/CDD) Documentation at AMC	MIPR	NAVSEA Indian Head, MD	0.504								0.504	
Subtotal Support			0.504	0.000		0.000		0.000		0.000	0.504	0.000
Remarks:												
(U) <u>Test & Evaluation</u>												
Test	MIPR or PO	46th Test Squadron, JITC and CECOM	0.140	0.427	Sep-08						0.567	TBD
Subtotal Test & Evaluation			0.140	0.427		0.000		0.000		0.000	0.567	TBD
Remarks:												
(U) <u>Management</u>												
Program Office and Contractor Support	C/FFP	Various	0.000			0.000				0.000	0.000	TBD
Subtotal Management			1.341	1.474	Aug-08	1.895	Jan-09			0.000	4.710	TBD
Remarks:			1.341	1.474		1.895					4.710	TBD
(U) <u>Product Development</u>												
ANI Enterprise Development	Various	Various				1.028	Mar-09				1.028	
Subtotal Product Development			0.000	0.000		1.028		0.000		0.000	1.028	0.000
Remarks:												
(U) Total Cost			6.785	4.300		7.923		0.000		0.000	19.008	TBD

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Exhibit R-3 (PE 0401839F)

Exhibit R-4, RDT&E Schedule Profile

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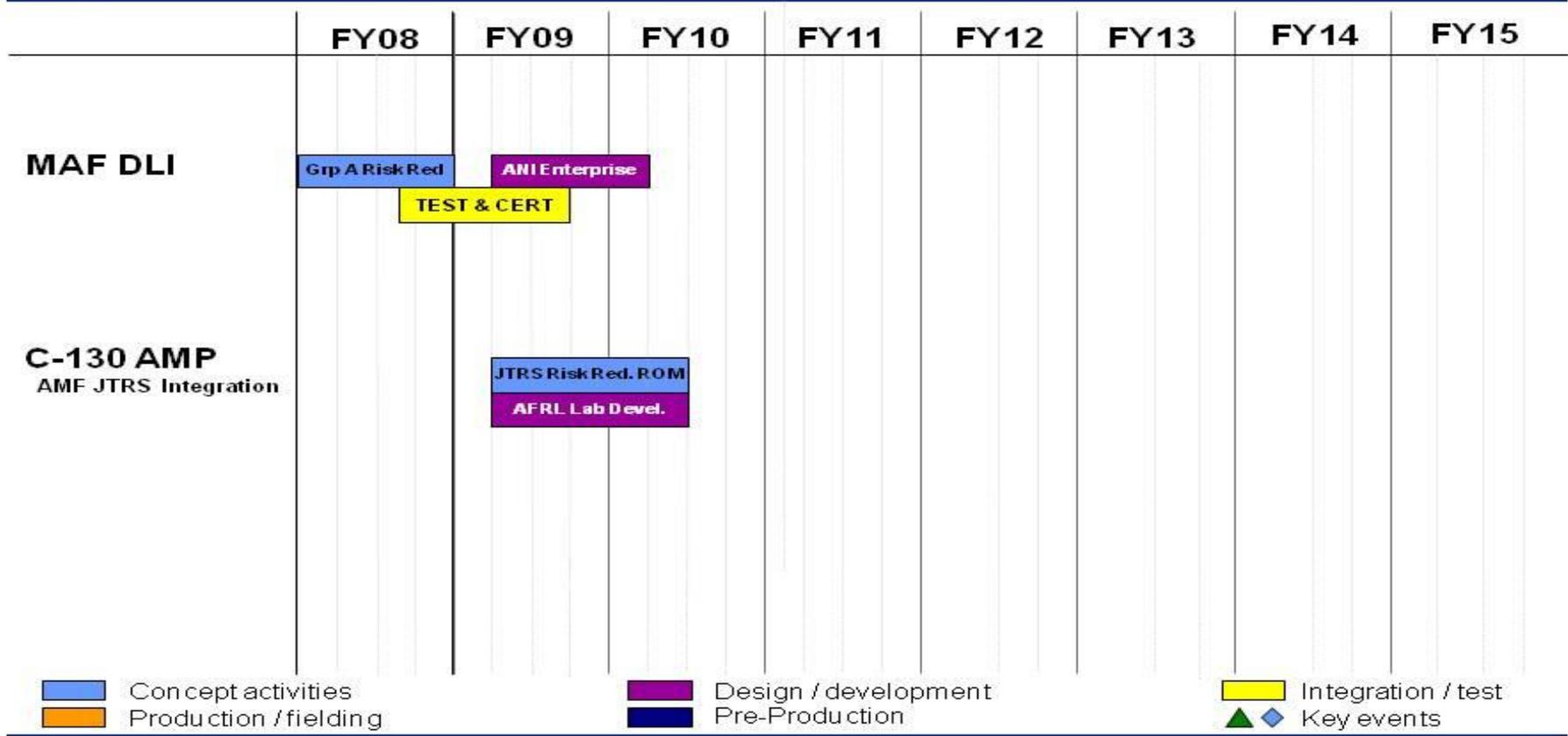
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MAF DLI Program Schedule (as of 20 Apr 2009)



PB10 R-Docs

Depicted by in stallation/production flow

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Exhibit R-4 (PE 0401839F)

Exhibit R-4a, RDT&E Schedule Detail

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(U) <u>Schedule Profile</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
(U) Group A Risk Reduction	1-4Q		
(U) AMF JTRS Risk Reduction		2-4Q	
(U) AFRL Lab Development		2-4Q	
(U) ANI Enterprise Projects		2-4Q	
(U) MAF/DLI Test & Certification	3-4Q	1-3Q	