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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Air Force									DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0207445F: FIGHTER TACTICAL DATA LINK							
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	22.756	-	-	-	-	-	-	-	-	Continuing	Continuing
675043: Fighter Tactical Data Link	22.756	-	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Tactical Data Links (TDL), as a subset of the broader Aerial Layer Network, are used in both peace time and combat environments to exchange information such as fixed formatted messages, data, radar tracks, target information, platform status, imagery, free text messaging and command assignments. TDLs provide interoperability, local and global connectivity, and situational awareness to the user when operating under rapidly changing operational conditions. TDLs increase mission effectiveness, providing enhanced situational awareness, positive combat identification of aircraft in the network, correlation of on- and off-board sensor data, digital machine to machine target and threat information sharing; enabling time critical targeting and other mission assignment tasking. 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), Intra-Flight Data Link (IFDL), and other Advanced Tactical Data Link technologies, such as Tactical Targeting Network Technology (TTNT), and Multifunction Advanced Data Link (MADL).

This effort provides critical capability and enhancements to the Aerial Layer Network by creating common development, integration and interoperability among all Air Force fighter platforms including but not limited to A-10, F-15A-E, F-16 Blocks 30/40/50, F-22A, and F-35 aircraft. The funds associated with the Fighter TDL PE ensure the Air Force (AF) fighter fleet maintains standardization; develops interoperable data link exchanges; and enables Global Strike (GS), Global Persistent Attack (GPA), Offensive and Defensive Counterair (OCA and DCA), Suppression of Enemy Air Defenses (SEAD), and Destruction of Enemy Air Defenses (DEAD) missions. Incorporation of TDLs on the fighter fleet also expands Line of Sight (LOS) and Beyond Line of Sight (BLOS) data link connectivity. Additional efforts aimed at maintaining interoperability amongst the platforms in this portfolio include: AF and Joint interoperability certification testing, waveform crypto modernization, updates to the Link-16 message standard (MIL-STD-6016D) and integration of applicable Interface Change Proposals (ICPs) within platform Operational Flight Programs and incorporating Interoperable Systems Management and Requirements Transformation (iSMART); a process which enables network centric interoperability assessments to be made more quickly and effectively.

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

Fighter Tactical Data Link program is in Budget Activity 7, Operational System Development, because this budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

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B. Program Change Summary (\$ in Millions)		FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget		85.492	-	-	-	-
Current President's Budget		22.756	-	-	-	-
Total Adjustments		-62.736	-	-	-	-
• Congressional General Reductions		-	-			
• Congressional Directed Reductions		-	-			
• Congressional Rescissions		-61.500	-			
• Congressional Adds		-	-			
• Congressional Directed Transfers		-	-			
• Reprogrammings		-	-			
• SBIR/STTR Transfer		-	-			
• Other Adjustments		-1.236	-	-	-	-
Change Summary Explanation						
FY11 Congressional Rescission, -\$61.500M, MADL - transfer to line 134 (F-22). The funds remaining in FY11 subsequent to the rescission were used as described in the following FY 2011 Effort Description.						
FY11 Congressional General Reduction of 1.236M in Other Adjustment row.						
C. Accomplishments/Planned Programs (\$ in Millions)				FY 2011	FY 2012	FY 2013
Title: TDL Enterprise				16.660	-	-
Description: Develop a well-documented, interoperable data link capability for Low Observable platforms in the anti access region. Explore options to enable interoperability between 4th & 5th generation fighters.						
FY 2011 Accomplishments:						
Finalized the Waveform Specification for the MADL Increment 1 capability. Began development of a new MADL Message Standard revision for future MADL increments/capabilities. Continued using modeling and simulation capabilities to develop MADL employment procedures and assess the mission utility of future MADL capabilities. Monitored Test and Evaluation activities on the F-35 and F-22A for MADL interoperability test planning. Explored options for 4th to 5th generation fighter interoperability. Continued developing a MADL enterprise Information Assurance strategy. Developed a roadmap for technology evolution.						
Title: Direct Support				6.096	-	-
Description: Fighter Tactical Data Link system engineering analysis, development, testing, integration, and technical support of common Fighter data link technology and capabilities.						

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C. Accomplishments/Planned Programs (\$ in Millions)										FY 2011	FY 2012	FY 2013
FY 2011 Accomplishments: Provided PMA in direct support of F-22A Advanced TDL development and MADL Enterprise.												
Accomplishments/Planned Programs Subtotals										22.756	-	-
D. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost	
• RDT&E AF, PE 0207448F: C2ISR TDL	1.528	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing	
• RDT&E AF, PE 0604281F: TDN Enterprise	192.882	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing	
• APAF, PE 0207445F: Fighter TDL	0.920	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing	
• APAF, PE 0604281F: TDN Enterprise	50.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	50.000	
• OPAF, PE 0604281F: TDN Enterprise	21.622	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	21.622	
• O&M AF, PE 0207445F: Fighter TDL	0.200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing	
• O&M AF, PE 0401839F: Air Mobility TDL	6.937	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing	
• O&M AF, PE 0604281F: TDN Enterprise	288.541	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing	
E. Acquisition Strategy												
Airborne Networking Division provides for common development, integration and interoperability across all Air Force platforms and ensures that Tactical Data Links are procured and maintained as a joint, end-to-end, command and control system. Platform acquisition strategies vary by program, but the majority of development and integration is normally accomplished by the weapon system prime contractors												
F. Performance Metrics												
Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.												

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 Air Force		DATE: February 2012
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Exhibit R-4A, RDT&E Schedule Details: PB 2013 Air Force			DATE: February 2012
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
F-22A Crypto and Enabler Hardware (HW) Design	1	2011	2	2011
F-22A Enabler HW Development	1	2011	4	2011
MADL Enterprise Message Standard Development	1	2011	4	2011
MADL Enterprise Waveform Spec Development	1	2011	4	2011
MADL Enterprise Modeling and Simulation	1	2011	4	2011