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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Air Force									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604281F: TACTICAL DATA NETWORKS ENTERPRISE							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	0.000	87.444	102.941	30.000	132.941	67.790	40.507	43.037	34.930	Continuing	Continuing
655050: TDL System Integration	0.000	57.784	58.181	0.000	58.181	39.215	22.550	23.847	22.346	Continuing	Continuing
655262: Family of Gateways	0.000	29.660	44.760	30.000	74.760	28.575	17.957	19.190	12.584	Continuing	Continuing
Note In FY 2010, Project 655050, TDL System Integration and 655262, Family of Gateways, efforts transferred from Program Element 0207434F Link 16 Support and Sustainment to this Program Element 0604281F Tactical Data Networks Enterprise to more accurately reflect activities executed in this PE. In FY 2011 funding totals include \$30M requested for Overseas Contingency Operations.											
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 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), Intra-Flight Data Link (IFDL), Multifunction Advanced Data Link (MADL), Tactical Targeting Network Technology (TTNT), Flexible Access Secure Transfer (FAST) and Radar Common Data Link (R-CDL). This effort provides critical capability and enhancements to the Airborne Network by facilitating common development, integration and interoperability among ground and air platforms. 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 data link networks across all deployed joint and allied platforms. The 653rd Electronic Systems Group (653rd ELSG) performs several cross-platform activities to ensure proper integration of TDL capabilities and interoperability of TDL networks. TDL efforts include incorporating changes and additions to data link message standards (e.g. MIL-STD-6016C), incorporating TDL enhancements and Interoperable Systems Management and Requirements Transformation (iSMART), a process which enables network centric interoperability assessments to be made more quickly and effectively. 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 program participates in the development, testing, and implementation of international standards (to include NATO standardization agreements) to ensure joint, allied, and coalition interoperability. The program also includes Link 16 operational and exercise support, including support of the USAF Network Design Facility.											

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APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604281F: TACTICAL DATA NETWORKS ENTERPRISE	
<p>Gateway systems enable combat forces to exchange information quickly and accurately by bridging disparate airborne, terrestrial, and/or space-based C4ISR networks to interoperate, enhancing operational effects within individual networks. The AF continues to utilize these systems (Joint Air Defense System Integrator (JADSI), Joint Range Extension (JRE), Pocket J, and Link 16 Alaska (LAK)) to fill information (voice & data) gaps increasing situational awareness across the DoD. The Program offices continue spiral development on enhancements for theater-wide operational and tactical users and maintain DoD standards for Link 16 and SADL protocols to ensure joint interoperability. Activities include interface definitions, operating procedures and protocols for AOCs, Homeland Defense, COACs, and Air National Guard.</p> <p>STRATCOM's Distributed Nuclear Command and Control (DNC2) requires a system of systems approach in the development of capabilities for improving the Airborne Network to include air and ground components. STRATCOM's requirement expresses capabilities that are used in a combat environment to exchange information such as messages, data, radar tracks, target information, platform status, imagery, data fusion/correlation and command assignments.</p> <p>This effort provides critical capability for STRATCOM's classified DNC2 capabilities. A subset of this capability will be the development of STRATCOM's Phoenix Architecture that allows distribution of critical data from airborne assets to ground components for analysis, decision making and retasking of critical assets. STRATCOM and Air Combat Command's Multi-Source Battlespace Awareness (MSBA) Enabling Concept is the driving force in satisfying STRATCOM's and ACC future requirements. Funding will be used to develop CONEMPS, Studies, Risk Reduction activities, technology insertion, and associated Modeling and Simulation functions to validate Concepts and deliver classified capabilities over the next few years. Improvements to Gateways (air and ground) functionality will be enhanced that will expand LOS/BLOS, fusion and Multi-Level Security capabilities. This will allow critical data sharing from Low Observable assets and other classified systems to increase mission effectiveness, provide situational awareness, correlate on and off-board sensor data sharing target and threat informal and provide critical information via data link and or other functions to accomplish time critical targeting and other mission update functions. Resulting development efforts will ensure effectiveness and efficiency of the Global Strike CONOPS and Global Persistent Attack CONOPS and will incorporate interoperability and netcentricity across the Enterprise.</p> <p>The Air Force is leading the effort to develop a materiel solution to satisfy a CENTCOM Joint Urgent Operational Need (JUON) within the time parameters specified by the DEPSECDEF. The Battlefield Airborne Communications Node (BACN) JUON calls for 24/7 operation of the BACN payload to support current operations. BACN provides interoperability between disparate Tactical Data Links (TDLs) by receiving the various signals, bridging and forwarding them via an array of waveforms. This functionality permits single network operations and translation between Link 16 and Situational Awareness Data Link (SADL), as well as beyond line-of-sight (BLOS) connectivity. BACN enhances this capability by connecting to the airborne IP network allowing information exchange. The BACN payload is an airborne data processing and communications system that integrates a suite of commercial off-the-shelf (COTS) processor, storage and information technology (IT) equipment and existing military airborne communications systems. The BACN payload also integrates existing and newly developed applications and services to provide range extension and connectivity for dissimilar communications systems that process, translate, transmit and store critical data for end users (e.g., Combined Air Operations Center, Tactical Air Control Parties, Special Operations forces, and airborne command and control and tactical platforms). A prototype BACN equipped BD-700 has been operating in theater since December 2008 per Deployment Order issued 29 August 2008. The BACN JUON is comprised of the BACN payload integrated onto two BD-700s and two Global Hawk Block 20 air vehicles operating as a system.</p>		

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Air Force				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE			
3600: Research, Development, Test & Evaluation, Air Force		PE 0604281F: TACTICAL DATA NETWORKS ENTERPRISE			
BA 5: Development & Demonstration (SDD)					
Common Link Integration Processing (CLIP) is an Air Force program to develop a common, reusable, configurable, and extensible tactical data link message processing solution for airborne maritime, and fixed-site systems.					
Activities also include studies and analysis to support both current program planning and execution and future program planning.					
This program is in budget activity 5 (System Development and Demonstration (SDD)) because it supports mature system development, integration and demonstrations, initial fielding support activities, operational support activities, and support of special projects.					
B. Program Change Summary (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	0.000	88.444	0.000	0.000	0.000
Current President's Budget	0.000	87.444	102.941	30.000	132.941
Total Adjustments	0.000	-1.000	102.941	30.000	132.941
• Congressional General Reductions		-5.000			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		4.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.000	0.000	102.941	30.000	132.941
Change Summary Explanation					
FY 2011 funding totals include \$30M requested for Overseas Contingency Operations.					
FY10 Congressional marks include a \$-5.0M cut to PE 0604281F (Tactical Data Networks Enterprise), for "Excess to need". An increase of \$4.0M for "Global UAS Networking and Interoperability System (GUNIS)" was also made to PE 0604281F. GUNIS is a Marine Corps program and the mark to this PE is an error.					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>				R-1 ITEM NOMENCLATURE PE 0604281F: <i>TACTICAL DATA NETWORKS ENTERPRISE</i>				PROJECT 655050: <i>TDL System Integration</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
655050: <i>TDL System Integration</i>	0.000	57.784	58.181	0.000	58.181	39.215	22.550	23.847	22.346	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
<p>Note</p> <p>In FY 2010, Project 655050, TDL System Integration efforts transferred from Program Element 0207434F Link 16 Support and Sustainment to this Program Element 0604281F Tactical Data Networks Enterprise to more accurately reflect activities executed in this PE. Project 655050, TDL System Integration will remain.</p> <p>FY10 Congressional marks include a \$-5.0M cut to PE 0604281F (Tactical Data Networks Enterprise), for "Excess to need". This reduction should be from Project 655050. An increase of \$4.0M for "Global UAS Networking and Interoperability System (GUNIS)" was also made to PE 0604281F. GUNIS is a Marine Corps program and the mark to this PE is an error.</p> <p>A. Mission Description and Budget Item Justification</p> <p>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), Variable Message Format (VMF), Integrated Broadcast Service (IBS), Intra-Flight Data Link (IFDL), Multifunction Advanced Data Link (MADL), Tactical Targeting Network Technology (TTNT), Flexible Access Secure Transfer (FAST), Advanced Tactical Data Link (ATDL), and Radar Common Data Link (R-CDL).</p> <p>The number of Air Force platforms hosting TDLs is expanding from C2 aircraft (E-3, E-8, etc.) to the fighter, bomber, ISR, tanker, airlift and other tactical fleets (F-15, F-16, F-22A, 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 653rd Electronic Systems Group (653rd ELSG) include, but are not limited to: enabling and supporting the transformation to network-centric operations, Network Enabled 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.</p>											

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APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)		R-1 ITEM NOMENCLATURE PE 0604281F: TACTICAL DATA NETWORKS ENTERPRISE		PROJECT 655050: TDL System Integration		
In addition, this project funds the development and integration of the Joint Interface Control Officer (JICO) - Support System (JSS). JSS is an AF-led joint program to develop a TDL management toolkit to enable JICOs to plan multi-TDL architectures, manage data exchange requirements, execute and monitor a multi-TDL network, and respond to correct network deficiencies.						
Joint Interoperability of Tactical Command and Control Systems (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 Data Links (TDLs, Link-16 and Link-11), 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.						
Activities also include studies and analysis to support both current program planning and execution and future program planning.						
This program is in Budget Activity 5 (System Development and Demonstration (SDD)) because it supports mature system development, integration and demonstrations, initial fielding support activities, and development of special projects.						
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
MAJOR THRUST: TDN MANAGEMENT AND INITIAL FIELDING		0.000	9.118	11.581	0.000	11.581
FY 2009 Accomplishments: In FY 2009: Efforts were part of PE 0207434F						
FY 2010 Plans: In FY 2010: Joint Interface Control Officer Support System (JSS) completes production representative development and system testing (DT&E, OT&E) required for FY10 Milestone C decision. TDL Integration, Fielding and Support provides initial fielding support for units/platforms fielding a data link capability. This support consists of organic and contractor teams that provide Tactics, Techniques &						

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APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)		R-1 ITEM NOMENCLATURE PE 0604281F: TACTICAL DATA NETWORKS ENTERPRISE		PROJECT 655050: TDL System Integration	
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Procedures (TTP) training, equipment and operations expertise needed to set-up initial TDL operations and field installations. Develops TDL architectures for implementation at AF and Joint locations worldwide resulting in a greater than 20% increase in TDL mission capability. Supports AF and Joint TDL experiments. FY 2011 Base Plans: In FY 2011: Joint Interface Control Officer Support System (JSS) completes production representative development and system testing (DT&E, OT&E) required for FY10 Milestone C decision. TDL Integration, Fielding and Support provides initial fielding support for units/platforms fielding a data link 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 operations and field installations. Develops TDL architectures for implementation at AF and Joint locations worldwide resulting in a greater than 20% increase in TDL mission capability. Supports AF and Joint TDL experiments. FY 2011 OCO Plans: In FY 2011 OCO: N/A					
MAJOR THRUST: NETWORK CENTRIC TRANSFORMATION FY 2009 Accomplishments: In FY 2009: Efforts were part of PE 0207434F FY 2010 Plans: In FY 2010: Network Centric Transformation activities including, but not limited to: enabling and supporting the transformation to network centric operations, Network Enabled Weapons (previously Weapons Data Link), Network Centric Capability Assessment, Link 16 network centric enhancements, and Tactical Targeting Network Technology (TTNT). Maintain developmental equipment; test support;	0.000	34.981	34.479	0.000	34.479

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force				DATE: February 2010		
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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
fielding/non-recurring training; network support; crypto support; spectrum support; gateway support; data link tool support; and support operational working groups. FY 2011 Base Plans: In FY 2011: Network Centric Transformation activities including, but not limited to: enabling and supporting the transformation to network centric operations, Network Enabled Weapons (previously Weapons Data Link), Network Centric Capability Assessment, Link 16 network centric enhancements, and Tactical Targeting Network Technology (TTNT). 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. FY 2011 OCO Plans: In FY 2011 OCO: N/A						
MAJOR THRUST: TDN INTEROPERABILITY TEST AND CONFIGURATION MANAGEMENT FY 2009 Accomplishments: In FY 2009: Efforts were part of 0207434F FY 2010 Plans: In FY 2010: Joint Interoperability of Tactical Command and Control Systems includes tactical data link management, architecture development and certification testing. Implementation and interoperability scheduling with the A-10, F-15, F-16, B-52, B-1, B-2, and other weapon systems. Software updates and interoperability testing with the F-15C, E-3, E-8, Control and Reporting Center (CRC), interoperable Systems Management and Requirements Transformation (iSMART), and other weapon systems. Perform tactical data link roadmap requirements, configuration management, and Air Force Participating Test Unit activities (AFPTU).		0.000	7.126	5.285	0.000	5.285

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: In FY 2011: Joint Interoperability of Tactical Command and Control Systems includes tactical data link management, architecture development and certification testing. Implementation and interoperability scheduling with the A-10, F-15, F-16, B-52, B-1, B-2, and other weapon systems. Software updates and interoperability testing with the F-15C, E-3, E-8, Control and Reporting Center (CRC), interoperable Systems Management and Requirements Transformation (iSMART), and other weapon systems. Perform tactical data link roadmap requirements, configuration management, and Air Force Participating Test Unit activities (AFPTU).						
FY 2011 OCO Plans: In FY 2011 OCO: N/A						
MAJOR THRUST: TACTICAL DATA LINK ACQUISITION MANAGEMENT		0.000	6.559	6.836	0.000	6.836
FY 2009 Accomplishments: In FY 2009: Efforts were part of PE 0207434F						
FY 2010 Plans: In FY 2010: Includes the 640th Electronic Systems Squadron (640th ELSS) program management support, coalition interoperability management, A&AS and MITRE support.						
FY 2011 Base Plans: In FY 2011: Includes the 640th Electronic Systems Squadron (640th ELSS) program management support, coalition interoperability management, A&AS and MITRE support.						
FY 2011 OCO Plans: In FY 2011 OCO: N/A						
Accomplishments/Planned Programs Subtotals		0.000	57.784	58.181	0.000	58.181

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE			PROJECT				
3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)				PE 0604281F: TACTICAL DATA NETWORKS ENTERPRISE			655050: TDL System Integration				
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• PE 0207434F: Link 16 Sup & Sus, (RDT&E)	278.961	65.619	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
• PE 0207445F: Fighter TDL, (RDT&E)	55.069	66.872	85.492	0.000	85.492	169.748	118.655	0.000	0.000	0.000	0.000
• PE 0207446F: Bomber TDL, (RDT&E)	21.603	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
• PE 0207448F: C2ISR TDL, (RDT&E)	1.671	1.659	1.584	0.000	1.584	1.608	1.633	1.658	1.682	0.000	0.000
• PE 0401839F: Airlift TDL, (RDT&E)	7.700	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
• PE 0207434F (1): Link 16 Sup & Sus, (APAF)	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
• PE 0207445F (2): Fighter TDL, (APAF)	5.788	9.585	0.929	0.000	0.929	7.695	6.925	7.043	12.785	0.000	0.000
• PE 0207446F (3): Bomber TDL, (APAF)	0.000	0.000	0.000	0.000	0.000	0.339	0.337	0.368	0.972	0.000	0.000
• PE 0207448F (4): C2ISR TDL, (APAF)	0.000	0.000	0.000	0.000	0.000	0.959	0.912	0.927	1.729	0.000	0.000
• PE 0207434F (5): Link 16 Sup & Sus, (OPAF)	16.079	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
• PE 0604281F: TDN Enterprise, (OPAF)	0.000	32.343	21.742	0.000	21.742	9.270	0.337	0.311	0.240	0.000	0.000
• PE 0207434F (6): Link 16 Sup & Sus, (O&M)	131.597	0.309	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
• PE 0207445F (7): Fighter TDL, (O&M)	0.208	0.198	0.219	0.000	0.219	0.221	0.257	0.258	0.268	0.000	0.000
• PE 0401839F (8): Airlift TDL, (O&M)	1.574	8.175	7.857	0.000	7.857	3.629	1.634	1.666	2.944	0.000	0.000

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<u>C. Other Program Funding Summary (\$ in Millions)</u>											
<u>Line Item</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u> <u>Base</u>	<u>FY 2011</u> <u>OCO</u>	<u>FY 2011</u> <u>Total</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• PE 0604281F (9): <i>TDN Enterprise, (O&M)</i>	0.000	33.727	31.382	0.000	31.382	19.165	17.303	20.026	21.534	0.000	0.000
<u>D. Acquisition Strategy</u> The 653rd Electronic Systems Group (ELSG) provides for common development, integration and interoperability across the entire Airborne Network and ensures that 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 contractor.											
<u>E. Performance Metrics</u> 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-3, RDT&E Project Cost Analysis: PB 2011 Air Force											DATE: February 2010			
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Product Development (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
TDN Management and Initial Fielding	Various/ Various	Various Various	0.000	10.107	Jan 2010	11.581	Nov 2010	0.000		11.581	0.000	21.688	Continuing	
Network Centric Transformation (TTNT, NEW, Link 16 enhancements)	Various/ Various	Various Various	0.000	32.864	Jan 2010	34.479	Dec 2010	0.000		34.479	0.000	67.343	Continuing	
TDN Interoperability Test and Configuration Management (AFPTU, JINTACCS, iSMART)	Various/ Various	Various Various	0.000	7.126	Jan 2010	5.285	Dec 2010	0.000		5.285	0.000	12.411	Continuing	
TDL Acquisition Management (Coalition Interoperability)	Various/ Various	Various Various	0.000	0.691	Jan 2010	0.704	Nov 2010	0.000		0.704	0.000	1.395	Continuing	
Subtotal			0.000	50.788		52.049		0.000		52.049	0.000	102.837		
Remarks														
Test and Evaluation (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Various Test Centers	Various/ Various	Various Various	0.000	2.500	Jan 2010	2.500	Dec 2010	0.000		2.500	0.000	5.000	Continuing	

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force											DATE: February 2010																																																			
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>				R-1 ITEM NOMENCLATURE PE 0604281F: <i>TACTICAL DATA NETWORKS ENTERPRISE</i>				PROJECT 655050: <i>TDL System Integration</i>																																																						
<p>Test and Evaluation (\$ in Millions)</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Cost Category Item</th> <th rowspan="2">Contract Method & Type</th> <th rowspan="2">Performing Activity & Location</th> <th rowspan="2">Total Prior Years Cost</th> <th colspan="2">FY 2010</th> <th colspan="2">FY 2011 Base</th> <th colspan="2">FY 2011 OCO</th> <th>FY 2011 Total</th> <th rowspan="2">Cost To Complete</th> <th rowspan="2">Total Cost</th> <th rowspan="2">Target Value of Contract</th> </tr> <tr> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> </tr> </thead> <tbody> <tr> <td align="right" colspan="3">Subtotal</td> <td align="right">0.000</td> <td align="right">2.500</td> <td></td> <td align="right">2.500</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">2.500</td> <td align="right">0.000</td> <td align="right">5.000</td> <td></td> </tr> </tbody> </table> <p>Remarks</p>														Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Subtotal			0.000	2.500		2.500		0.000		2.500	0.000	5.000															
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Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract																																																	
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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Air Force

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force
BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604281F: TACTICAL DATA NETWORKS
ENTERPRISE

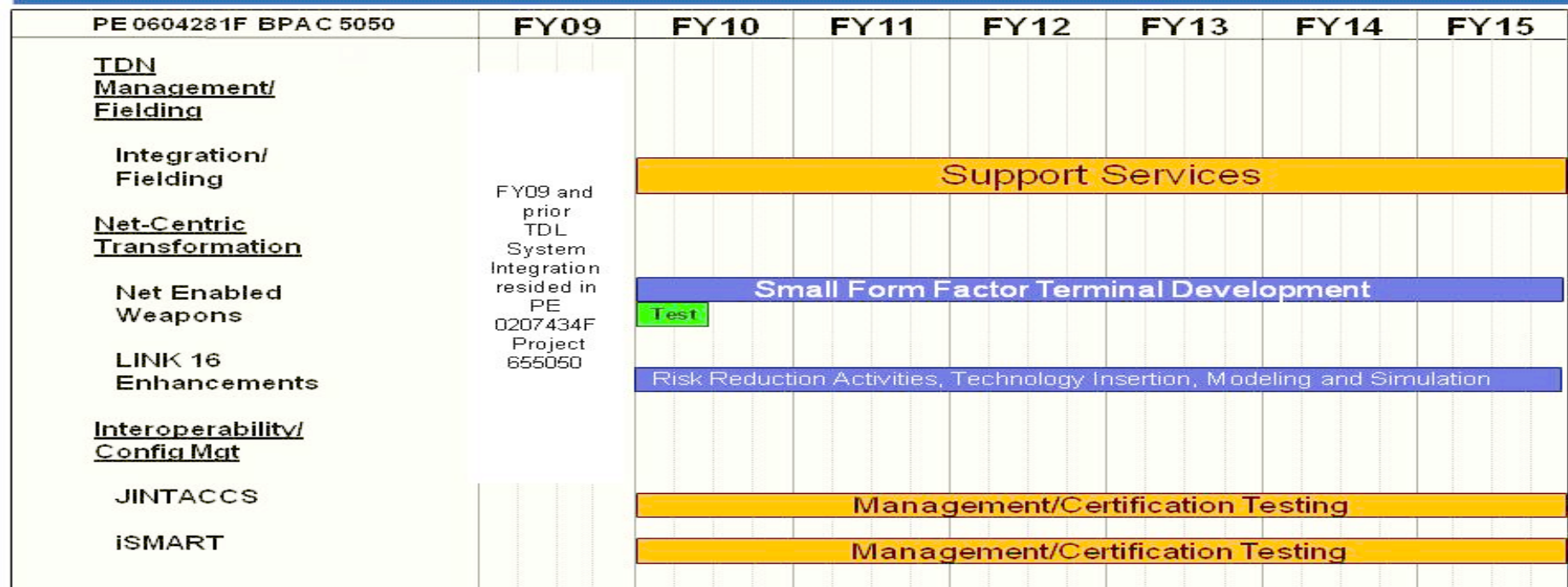
PROJECT

655050: TDL System Integration



Tactical Data Networks Enterprise/ Tactical Data Link System Integration

4 December 2009



As of 4 Dec 09

▲ Contract Awards

■ Delivery Milestones

Program Phases
■ Development/Demonstration
■ Test
■ Integration/Fielding

Integrity - Service - Excellence

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Air Force			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604281F: <i>TACTICAL DATA NETWORKS ENTERPRISE</i>	PROJECT 655050: <i>TDL System Integration</i>	

Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
TDL Integration & Fielding Support	1	2010	4	2011
Network Enabled Weapons Development	1	2010	4	2011
Network Enabled Weapons Test & Certification	1	2010	2	2010
LINK 16 Enhancements Development	1	2010	4	2011
JINTACCS Management/Certification Testing	1	2010	4	2011
iSMART Management/Certification Testing	1	2010	4	2011

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>				R-1 ITEM NOMENCLATURE PE 0604281F: <i>TACTICAL DATA NETWORKS ENTERPRISE</i>				PROJECT 655262: <i>Family of Gateways</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
655262: <i>Family of Gateways</i>	0.000	29.660	44.760	30.000	74.760	28.575	17.957	19.190	12.584	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
<p>Note</p> <p>In FY 2010, Project 655262, Family of Gateways, efforts transferred from Program Element 0207434F Link 16 Support and Sustainment to this Program Element 0604281F Tactical Data Networks Enterprise to more accurately reflect activities executed in this PE. Project 655262 will remain.</p> <p>In FY 2011 funding totals include \$30M requested for Overseas Contingency Operations.</p> <p>A. Mission Description and Budget Item Justification</p> <p>Gateway systems enable combat forces to exchange information quickly and accurately by bridging discrete airborne, terrestrial, maritime, and space-based C4ISR networks to produce operational effects not possible within individual networks. Gateway functions include: 1) enabling interoperability among otherwise incompatible systems by translating between data formats, protocols, and communication mediums, 2) extending the range of Line-of-Sight constrained systems through relay functions or by routing through Beyond-Line-of-Sight links, 3) consolidating data from multiple networks into high capacity links for transmission to key C2ISR nodes, 4) routing information to and from communications disadvantaged users, 5) correlating data from multiple sources to increase utility and improve accuracy, and 6) providing application hosting, shared data storage, on-demand information access, smart data forwarding, and system monitoring/management. A primary benefit is that gateways provide cost-effective modernization and achieve network-centric warfighting effects without modification of individual platforms.</p> <p>Existing gateways include the Joint Air Defense System Integrator (JADSI), Joint Range Extension (JRE) functionality [which includes the JRE Transparent Multi-Platform Gateway (TMPG) Equipment Package (JTEP)], Pocket J, and Roll-On Beyond-line-of-sight Enhancement (ROBE). These legacy gateways, which are fielded in multiple Joint and Service C2 centers and platforms, primarily provide tactical data link range extension and interoperability. The AF continues to enhance the interoperability and capabilities of fielded gateways through processing capability upgrades, operating system updates, display/graphical user interface upgrades, incorporation of additional messaging standards and protocols, and completion of gateway architecture fielding.</p> <p>The Air Force is leading the effort to develop a materiel solution to satisfy the CENTCOM Joint Urgent Operational Need (JUON) within the time parameters specified by the DEPSECDEF. The Battlefield Airborne Communications Node (BACN) JUON calls for 24/7 operation of the BACN payload to support current operations. The BACN payload provides interoperability between disparate Tactical Data Links (TDLs) by receiving the various signals, bridging and forwarding them via an array of waveforms. This functionality permits single network operations and translation between Link 16 and Situational Awareness Data Link (SADL), as well as beyond line-of-sight (BLOS) connectivity. BACN enhances this capability by connecting to the airborne IP network allowing information exchange. The BACN payload is an</p>											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)		R-1 ITEM NOMENCLATURE PE 0604281F: TACTICAL DATA NETWORKS ENTERPRISE		PROJECT 655262: Family of Gateways		
airborne data processing and communications system that integrates a suite of commercial off-the-shelf (COTS) processor, storage and information technology (IT) equipment and existing military airborne communications systems. The BACN payload also integrates existing and newly developed applications and services to provide range extension and connectivity for dissimilar communications systems that process, translate, transmit and store critical data for end users (e.g., Combined Air Operations Center, Tactical Air Control Parties, Special Operations forces, and airborne command and control and tactical platforms). A prototype BACN equipped BD-700 has been operating in theater since December 2008 per Deployment Order issued 29 August 2008. The BACN JUON is comprised of the BACN payload integrated onto two BD-700s and two Global Hawk Block 20 air vehicles operating as a system.						
Common Link Integration Processing (CLIP) is a program to develop a common, reusable, configurable, and extensible tactical data link message processing solution for airborne, maritime, and fixed-site systems, with initial fielding on B-1 & B-52. The AF and Navy made equitable contributions to CLIP RDT&E funding through FY07. Program leadership transferred from the Navy to the AF in FY08. The AF is funding CLIP RDT&E beginning in FY08. CLIP is a software-only, weapon system-independent middleware application that provides gateway services among diverse message sets and waveforms. CLIP effectively isolates the host platform system software from changes in data link message format and processing. Because message processing is no longer embedded in mission software, message standard updates can be incorporated without costly mission software changes. The result is enhanced interoperability and significantly reduced integration and life-cycle sustainment costs.						
Activities also include studies and analysis to support both current program planning and execution and future program planning.						
This program is in Budget Activity 5 (System Development and Demonstration (SDD)) because it supports mature system development, integration and demonstrations, initial fielding support activities, operational support activities, and support of special projects.						
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
MAJOR THRUST: COMMON LINK INTEGRATION PROCESSING (CLIP)		0.000	16.923	16.113	0.000	16.113
FY 2009 Accomplishments: In FY 2009: CLIP efforts were part of PE 0207434F						
FY 2010 Plans: In FY 2010: CLIP extends development and integration of extensible tactical data link message processing on the B-1 and B-52.						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force				DATE: February 2010		
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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: In FY 2011: CLIP extends development and integration of extensible tactical data link message processing on the B-1 and B-52.						
FY 2011 OCO Plans: In FY 2011 OCO: N/A						
MAJOR THRUST: FIELDIED GATEWAYS SYSTEMS DEVELOPMENT		0.000	9.771	9.658	0.000	9.658
FY 2009 Accomplishments: In FY 2009: Other Gateway efforts were part of PE 0604281F						
FY 2010 Plans: In FY 2010: Other Gateways will continue development, integration, and testing efforts associated with JRE/JTEP, JADSI, Pocket J, LAK, SADL						
FY 2011 Base Plans: In FY 2011: Other Gateways will continue development, integration, and testing efforts associated with JRE/JTEP, JADSI, Pocket J, LAK, SADL						
FY 2011 OCO Plans: In FY 2011 OCO: N/A						
MAJOR THRUST: TACTICAL DATA LINK ACQUISITION MANAGEMENT		0.000	2.966	2.749	0.000	2.749
FY 2009 Accomplishments: In FY 2009: Efforts were part of 0207434F						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)		R-1 ITEM NOMENCLATURE PE 0604281F: TACTICAL DATA NETWORKS ENTERPRISE		PROJECT 655262: Family of Gateways		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: In FY 2010: Includes the 653rd Electronic Systems Group (653rd ELSG) program management support, coalition interoperability management, A&AS and MITRE support.						
FY 2011 Base Plans: In FY 2011: Includes the 653rd Electronic Systems Group (653rd ELSG) program management support, coalition interoperability management, A&AS and MITRE support.						
FY 2011 OCO Plans: In FY 2011 OCO: N/A						
MAJOR THRUST: STRATCOM DISTRIBUTED NUCLEAR COMMAND AND CONTROL (DNC2) FY 2009 Accomplishments: In FY 2009: N/A no activity on this effort FY 2010 Plans: In FY 2010: N/A no activity on this effort FY 2011 Base Plans: In FY 2011: Efforts will focus on architecture for distribution of data from airborne assets to ground components for analysis. Development effort for gateways that will allow for modeling and simulation, risk reduction activities, and associated technology insertion to deliver capabilities over the next few years. FY 2011 OCO Plans: In FY 2011 OCO: N/A		0.000	0.000	16.240	0.000	16.240
MAJOR THRUST: BATTLEFIELD AIRBORNE COMMUNICATIONS NODE (BACN)		0.000	0.000	0.000	30.000	30.000

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)			R-1 ITEM NOMENCLATURE PE 0604281F: TACTICAL DATA NETWORKS ENTERPRISE				PROJECT 655262: Family of Gateways				
B. Accomplishments/Planned Program (\$ in Millions)						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
FY 2009 Accomplishments: In FY 2009: BACN efforts were part of 0207434F											
FY 2010 Plans: In FY 2010: BACN efforts are part of 0207434F											
FY 2011 Base Plans: In FY 2010: N/A no activity on this effort											
FY 2011 OCO Plans: In FY 2011 OCO: BACN Pre-Planned Product Improvement (P3I), development, integration and testing of multiple high capacity voice and data links.											
Accomplishments/Planned Programs Subtotals						0.000	29.660	44.760	30.000	74.760	
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• PE 0207434F: Link 16 Sup & Sus, (RDT&E)	278.961	65.619	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
• PE 0207445F: Fighter TDL, (RDT&E)	55.069	66.872	85.492	0.000	85.492	169.748	118.655	0.000	0.000	0.000	0.000
• PE 0207446F: Bomber TDL, (RDT&E)	21.603	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
• PE 0207448F: C2ISR TDL, (RDT&E)	1.671	1.659	1.584	0.000	1.584	1.608	1.633	1.658	1.682	0.000	0.000
• PE 0401839F: Airlift TDL, (RDT&E)	7.700	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604281F: TACTICAL DATA NETWORKS ENTERPRISE				PROJECT 655262: Family of Gateways			
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• PE 0207434F. Link 16 Sup & Sus: (APAF)											
• PE 0207445F (1): Fighter TDL, (APAF)	5.788	9.585	0.929	0.000	0.929	7.695	6.925	7.043	12.785	0.000	0.000
• PE 0207446F (2): Bomber TDL, (APAF)	0.000	0.000	0.000	0.000	0.000	0.339	0.337	0.368	0.972	0.000	0.000
• PE 0207448F (3): C2ISR TDL, (APAF)	0.000	0.000	0.000	0.000	0.000	0.959	0.912	0.927	1.729	0.000	0.000
• PE 0207434F (4): Link 16 Sup & Sus, (OPAF)	16.079	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
• PE 0604281F: TDN Enterprise, (OPAF)	0.000	32.343	21.742	0.000	21.742	9.270	0.337	0.311	0.240	0.000	0.000
• PE 0207434F (5): Link 16 Sup & Sus, (O&M)	131.597	0.309	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
• PE 0207445F (6): Fighter TDL, (O&M)	0.208	0.198	0.219	0.000	0.219	0.221	0.257	0.258	0.268	0.000	0.000
• PE 0401839F (7): Airlift TDL, (O&M)	1.574	8.175	7.857	0.000	7.857	3.629	1.634	1.666	2.944	0.000	0.000
• PE 0604281F (8): TDN Enterprise, (O&M)	0.000	33.727	31.382	0.000	31.382	19.165	17.303	20.026	21.534	0.000	0.000
D. Acquisition Strategy											
The 653rd Electronic Systems Group (ELSG) provides for common development, integration and interoperability across the entire Airborne Network and ensures that 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 contractor.											
E. 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-3, RDT&E Project Cost Analysis: PB 2011 Air Force											DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>				R-1 ITEM NOMENCLATURE PE 0604281F: <i>TACTICAL DATA NETWORKS ENTERPRISE</i>				PROJECT 655262: <i>Family of Gateways</i>					
Product Development (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
CLIP Software updates, Integration and Testing	Various/ Various	Various Various	0.000	16.547	Feb 2010	16.113	Nov 2010	0.000		16.113	0.000	32.660	Continuing
STRATCOM DNC2	Various/ Various	Various Various	0.000	0.000	Feb 2010	15.880	Dec 2010	0.000		15.880	0.000	15.880	0.000
Other Gateways will continue development, integration, and testing efforts associated with JRE/JTEP, JADSI, Pocket J, LAK, SADL	Various/ Various	Various Various	0.000	9.554	Jan 2010	9.443	Jan 2011	0.000		9.443	0.000	18.997	0.000
BACN Pre-Planned Product Improvement (P3I)	TBD/TBD	ESC Hanscom AFB, MA	0.000	0.000		0.000	Jan 2011	30.000	Dec 2011	30.000	0.000	30.000	0.000
Subtotal			0.000	26.101		41.436		30.000		71.436	0.000	97.537	
Remarks													
Test and Evaluation (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Various Test Centers	PO	Various Various	0.000	0.593	Dec 2009	0.719	Dec 2010	0.000		0.719	0.000	1.312	0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force											DATE: February 2010																																																			
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>				R-1 ITEM NOMENCLATURE PE 0604281F: <i>TACTICAL DATA NETWORKS ENTERPRISE</i>				PROJECT 655262: <i>Family of Gateways</i>																																																						
<p>Test and Evaluation (\$ in Millions)</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Cost Category Item</th> <th rowspan="2">Contract Method & Type</th> <th rowspan="2">Performing Activity & Location</th> <th rowspan="2">Total Prior Years Cost</th> <th colspan="2">FY 2010</th> <th colspan="2">FY 2011 Base</th> <th colspan="2">FY 2011 OCO</th> <th>FY 2011 Total</th> <th rowspan="2">Cost To Complete</th> <th rowspan="2">Total Cost</th> <th rowspan="2">Target Value of Contract</th> </tr> <tr> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> </tr> </thead> <tbody> <tr> <td align="right" colspan="3">Subtotal</td> <td align="right">0.000</td> <td align="right">0.593</td> <td></td> <td align="right">0.719</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.719</td> <td align="right">0.000</td> <td align="right">1.312</td> <td align="right">0.000</td> </tr> </tbody> </table> <p>Remarks</p>														Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Subtotal			0.000	0.593		0.719		0.000		0.719	0.000	1.312	0.000														
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Project Cost Totals			0.000	29.660		44.760		30.000		74.760	0.000	104.420																																																		
<p>Remarks</p> <p>Total Prior Years Cost may include only FY 2009 data.</p>																																																														

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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Air Force

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force
BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604281F: TACTICAL DATA NETWORKS
ENTERPRISE

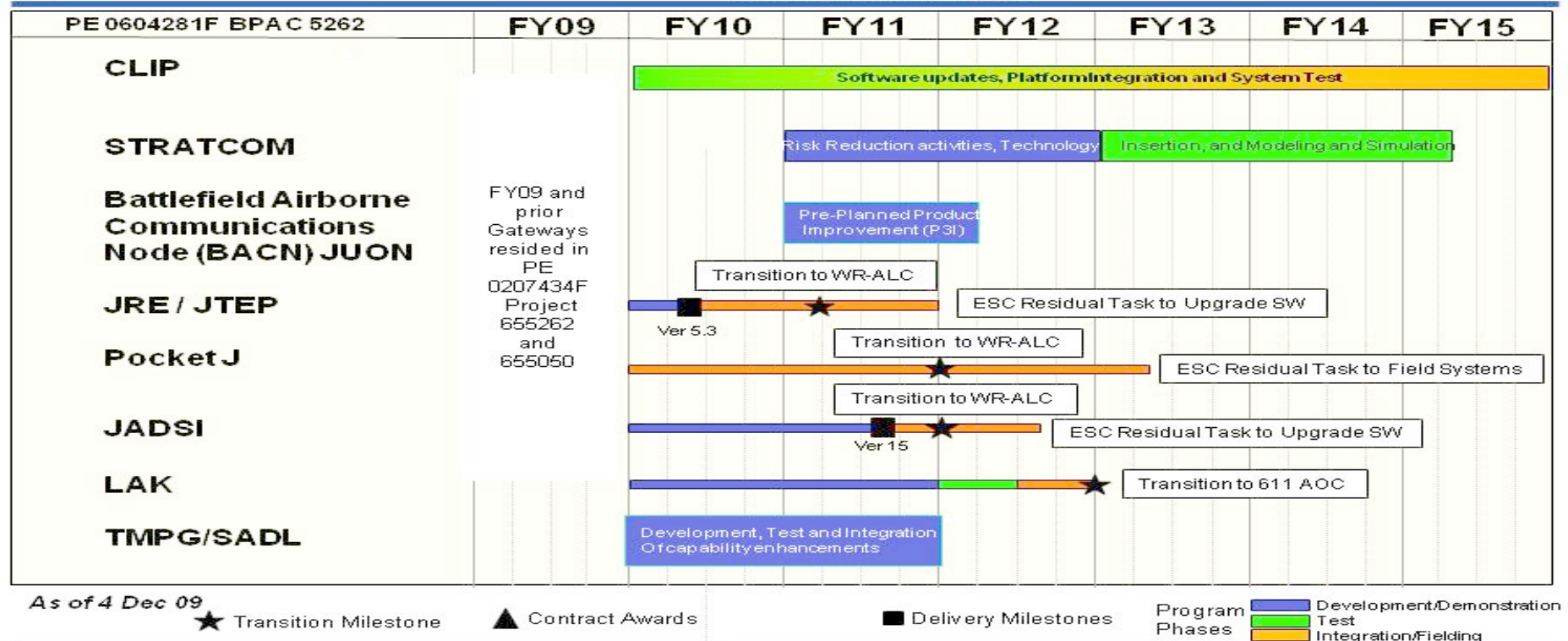
PROJECT

655262: Family of Gateways



Tactical Data Networks Enterprise Family of Gateways Schedules

4 December 2009



Integrity - Service - Excellence

1

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R-1 Line Item #66

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Air Force			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604281F: <i>TACTICAL DATA NETWORKS</i> <i>ENTERPRISE</i>	PROJECT 655262: <i>Family of Gateways</i>	

Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
CLIP Software updates, Integration and Testing	1	2010	4	2011
STRATCOM DNC 2 Development	1	2011	4	2011
BACN JUON Pre-Planned Product Improvement (P3I)	1	2011	4	2011
JRE/JTEP Development & Test of Ver 5.3	1	2010	2	2010
JRE/JTEP Product Delivery of Ver 5.3	2	2010	2	2010
JRE/JTEP Integration/Fielding of Ver 5.3	2	2010	1	2011
JRE/JTEP ESC Residual Task to Upgrade SW	2	2011	4	2011
Pocket J Integration/Fielding	1	2010	4	2011
JADSI Development	1	2010	3	2011
JADSI Product Delivery	3	2011	3	2011
JADSI Integration/Fielding	3	2011	4	2011
LAK	1	2010	4	2011
TMPG/SADL capability enhancements	1	2010	4	2011

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