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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Air Force									DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603850F: Integrated Broadcast Service (DEM/VAL)							
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	24.438	20.580	20.046	-	20.046	19.901	20.389	20.674	20.919	Continuing	Continuing
644778: Integrated Broadcast Service	24.438	20.580	20.046	-	20.046	19.901	20.389	20.674	20.919	Continuing	Continuing

Note
The program funding includes reductions for Overhead Reduction efficiencies that are not intended to impact program content. The efficiencies reductions total \$0.152M in FY12.

A. Mission Description and Budget Item Justification
The Integrated Broadcast Service (IBS) fulfills the warfighter's requirements for worldwide threat warning and situational awareness information with timely production and simultaneous dissemination of Intelligence, Surveillance, and Reconnaissance (ISR) derived combat information. It also provides target tracking data to support threat avoidance, targeting, force protection, and situational awareness. This information is continually refined in near real time by strategic, operational and tactical sensors. This PE funds/has previously funded IBS system development as described below.

- A Common Interactive Broadcast (CIB) on UHF satellite channel using a Common Message Format (CMF) and a MIL-STD Demand Assigned Multiple Access (DAMA) compliant waveform and Line of Sight (LOS) using the Wideband Networking Waveform (WNW) and Joint Tactical Terminal (JTT).
- IBS-Network Services (IBS-NS) includes two Global IBS Network Servers (GINS) and four Theater Interface Nodes (TINs) to support the geographic Combatant Commanders; all built to validated warfighter requirements.
- Two GINS that receive data from each theater and integrate this data into a worldwide picture available to all network/broadcast users.
- Four regional TINs, where out-of-theater (and local) users not directly receiving the broadcast can receive the information broadcast on the CIB. Additionally, the TIN will receive and inject data into the CIB for producers without access to the theater CIB.
- An XML-based Common Message Format (CMF) Data Element Dictionary (DED) that defines IBS messages for broadcast of IBS information over available communications paths including the CIB and other Global Information Grid (GIG) networks.
- A Modular Advanced TRanslation Interchange with XML (MATRIX) Reformatter that provides a modular, platform-independent, multi-use translator to support migration with legacy radios and provide a long term solution for IBS Full Operational Capability (FOC) radio users.

Funds the development of an evolving suite of interoperable planning and decision support capabilities comprised of software, hardware and communication products. This project will identify and implement an open, scalable system architecture that will accommodate growth as the virtual world grows and cyber operations change.

This program is in Budget Activity 4, Advanced Component Development and Prototypes (ACD&P) because efforts are necessary to evaluate integrated technologies, representative modes or prototype systems in a high fidelity and realistic operating environment.

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B. Program Change Summary (\$ in Millions)	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012 Base</u>	<u>FY 2012 OCO</u>	<u>FY 2012 Total</u>
Previous President's Budget	20.739	20.580	20.198	-	20.198
Current President's Budget	24.438	20.580	20.046	-	20.046
Total Adjustments	3.699	-	-0.152	-	-0.152
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	3.786	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-0.087	-	-0.152	-	-0.152

Change Summary Explanation

The program funding includes reductions for Overhead Reduction efficiencies that are not intended to impact program content. The efficiencies reductions total \$0.152M in FY12.

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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
644778: Integrated Broadcast Service	24.438	20.580	20.046	-	20.046	19.901	20.389	20.674	20.919	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

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This program is in Budget Activity 4, Advanced Component Development and Prototypes (ACD&P) because efforts are necessary to evaluate integrated technologies, representative modes or prototype systems in a high fidelity and realistic operating environment.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: Systems Engineering	1.299	0.519	0.525	-	0.525
Description: Continue systems engineering and development of architectures.					

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
FY 2010 Accomplishments: Continue systems engineering and development of architectures.						
FY 2011 Plans: Continue systems engineering and development of architectures.						
FY 2012 Base Plans: Continue systems engineering and development of architectures.						
FY 2012 OCO Plans:						
Title: IBS-NS Development		20.120	16.682	15.735	-	15.735
Description: Continue the Phase II/System Development and Demonstration of the GINS and TINs						
FY 2010 Accomplishments: Continue the Phase II/System Development and Demonstration of the GINS and TINs						
FY 2011 Plans: Continue the Phase II/System Development and Demonstration of the GINS and TINs						
FY 2012 Base Plans: Continue the Phase II/System Development and Demonstration of the GINS and TINs						
FY 2012 OCO Plans:						
Title: Test & Evaluation		0.887	1.079	1.361	-	1.361
Description: Continue Test & Evaluation						
FY 2010 Accomplishments: Continue Test & Evaluation						
FY 2011 Plans: Continue Test & Evaluation						
FY 2012 Base Plans: Continue Test & Evaluation						
FY 2012 OCO Plans:						

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B. Accomplishments/Planned Programs (\$ in Millions)							FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: Enterprise Systems Eng							0.700	0.700	0.700	-	0.700
Description: Enterprise Systems Engineering/CMF Integration/CIB Integration											
FY 2010 Accomplishments: Enterprise Systems Engineering/CMF Integration/CIB Integration											
FY 2011 Plans: Enterprise Systems Engineering/CMF Integration/CIB Integration											
FY 2012 Base Plans: Enterprise Systems Engineering/CMF Integration/CIB Integration											
FY 2012 OCO Plans:											
Title: System Program Office							1.432	1.600	1.725	-	1.725
Description: Maintain a Program Mgmt Office, including program supervision, finance and acquisition strategy execution.											
FY 2010 Accomplishments: Maintain a Program Mgmt Office, including program supervision, finance and acquisition strategy execution.											
FY 2011 Plans: Maintain a Program Mgmt Office, including program supervision, finance and acquisition strategy execution.											
FY 2012 Base Plans: Maintain a Program Mgmt Office, including program supervision, finance and acquisition strategy execution.											
FY 2012 OCO Plans:											
Accomplishments/Planned Programs Subtotals							24.438	20.580	20.046	-	20.046
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• PE 0305179F: Integrated Broadcast Service (IBS), WSC	12.434	12.612	9.993	0.000	9.993	9.805	10.121	11.082	11.064	Continuing	Continuing

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C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
832070 Intelligence Comm Equipment, OPAF											
• PE 0305179F (1): IBS, WSC	16.589	17.996	21.070	0.000	21.070	19.828	19.798	19.299	19.239	Continuing	Continuing
832070 Intelligence Comm Equipment, O&M											
D. Acquisition Strategy											
IBS used an evolutionary acquisition approach with a Program Definition/Risk Reduction phase (Spiral 1), followed by a full and open competition award to BTG/Titan/L-3Comm/L-3 Stratis to complete the Engineering, Manufacturing and Development (EMD) phase (Spiral 2-4).											
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 2012 Air Force										DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603850F: Integrated Broadcast Service (DEM/VAL)				PROJECT 644778: Integrated Broadcast Service					
Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Phase 2 Spiral 2 - 4	C/CPAF	BTG, Inc./Titan/L-3 Comm:Reston, VA	20.120	16.682	Nov 2010	15.735	Nov 2011	-		15.735	Continuing	Continuing	TBD
Subtotal			20.120	16.682		15.735		-		15.735			
Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Subtotal			-	-		-		-		-	0.000	0.000	0.000
Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Interoperability and Developmental Testing	MIPR	JITC:Ft Huachuca, AZ	0.504	0.700	Jan 2011	0.675	Jan 2012	-		0.675	Continuing	Continuing	TBD
Responsible Test Organization (RTO)	PO	46th Test Squadron:Eglin AFB, FL	0.374	0.368	Mar 2011	0.675	Mar 2012	-		0.675	0.000	1.417	0.000
Subtotal			0.878	1.068		1.350		-		1.350			
Management Services (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
SPO/Professional Acquisition Support Services (PASS), Engineering and Technical Acquisition Support Service (ETASS), Specialized Cost Service (SCS)	C/TBD	Various:Bedford, MA	1.441	1.611	Feb 2011	1.736	Feb 2012	-		1.736	Continuing	Continuing	TBD

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Management Services (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Systems Engineering	SS/CPFF	MITRE:Bedford, MA	1.299	0.519	Oct 2010	0.525	Oct 2011	-		0.525	Continuing	Continuing	TBD
Enterprise Engineering/CMF Integration/CIB Integration	SS/CPFF	L-3 Comm, IS:Greenville, TX	0.700	0.700	Mar 2011	0.700	Mar 2012	-		0.700	Continuing	Continuing	TBD
Subtotal			3.440	2.830		2.961		-		2.961			
			Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			24.438	20.580		20.046		-		20.046			

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Air Force		DATE: February 2011
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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Air Force			DATE: February 2011
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
IBS Operational Utility Event #1	4	2011	2	2012
IBS MOT&E	4	2012	2	2013
IBS-NS Limited Deployment Decision	2	2011	1	2012
Full Deployment Decision	4	2011	2	2012
MDA Final Program Review	3	2013	1	2014
IBS-NS Development/Production/Fielding	1	2010	3	2013
CIB Uplink Development/Testing/Fielding	1	2010	3	2012
CIB Planning Tool Development	1	2013	4	2015

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