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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Air Force **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>				PE 0603840F: <i>Global Broadcast Service (GBS)</i>							
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	31.149	18.171	5.680	-	5.680	2.337	-	-	-	Continuing	Continuing
65A023: <i>Satellite Broadcast Management Transition</i>	31.149	18.171	5.680	-	5.680	2.337	-	-	-	Continuing	Continuing

Note

The program funding includes overhead reduction efficiencies that are not intended to impact program content. The efficiencies reductions total \$0.070M in FY12.

Funding for the GBS ACAT I program (Project 4887, Global Broadcast Service) in PE 0603840F completed in FY08.

A. Mission Description and Budget Item Justification

Global Broadcast Service provides DoD with an efficient, high data rate broadcast capability from distributed information sources to dispersed warfighters who receive the broadcast directly on small, inexpensive user terminals. This Program Element funds the broadcast transmit activities associated with the GBS architecture. The GBS broadcast receive segment consists of Service-funded terminals, known as Receive Suites, which receive the broadcast and then disseminate information to local users. Service Receive Suites and the integration into service networks are funded in other Program Elements. GBS broadcast data includes video (especially from Unmanned Aerial Vehicles), imagery, logistics, weather data, maps and operational orders. The GBS space segment includes transponders on operational Navy satellites, currently Ultra High Frequency Follow-On (UFO) 8 and UFO 10, augmentation by commercial leased Ku-band transponders, and now the Wideband Global SATCOM (WGS) System.

Currently, the GBS broadcast segment consists of Satellite Broadcast Managers (SBMs) for the broadcast build and Primary Injection Points (PIPs) for the broadcast uplink, and the Transportable Satellite Broadcast Managers (TSBMs) for the broadcast build in theatre. The SBMs and PIPs, together known as Transmit Suites, are located at Navy facilities. The Theatre Injection Point (TIP) is a ground mobile satellite terminal suite transportable via two heavy High Mobility Multi-purpose Wheeled Vehicles (HMMWV) consisting of the TSBM and the Army Phoenix terminal.

During FY09-13, the broadcast creation transitions to existing Defense Information Systems Agency (DISA) Defense Enterprise Computing Centers (DECCs). This transition address SBM hardware/software obsolescence issues. The DECC transition contract was awarded on 15 May 09. This effort was designated as an ACAT III program and funding was realigned (i.e., a separate BPAC was created) to delineate between the current ACAT I GBS program and the ACAT III SBM Transition program.

In FY12, this effort continues to fund SBM transition/upgrade to DECCs, as well as, systems transmission security, test, information assurance, and Operational Requirements Document (ORD) III studies.

Funding is in Budget Activity 5, System Development and Demonstration, since program is fielding pre-production equipment.

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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	31.072	18.171	2.269	-	2.269
Current President's Budget	31.149	18.171	5.680	-	5.680
Total Adjustments	0.077	-	3.411	-	3.411
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	0.077	-	3.411	-	3.411

Change Summary Explanation

Additional \$3.411M in FY12 funds completion of GBS broadcast transition from stovepipe solution to Global Information Grid via Defense Information Systems Agency (DISA) Defense Enterprise Computing Centers (DECC).

Additional BTR of \$5.885M in FY10 for GBS SBM to DECC transition requirements. Not currently reflected

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>				R-1 ITEM NOMENCLATURE PE 0603840F: <i>Global Broadcast Service (GBS)</i>				PROJECT 65A023: <i>Satellite Broadcast Management Transition</i>			
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
65A023: <i>Satellite Broadcast Management Transition</i>	31.149	18.171	5.680	-	5.680	2.337	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Global Broadcast Service provides DoD with an efficient, high data rate broadcast capability from distributed information sources to dispersed warfighters who receive the broadcast directly on small, inexpensive user terminals. This Program Element funds the broadcast transmit activities associated with the GBS architecture. The GBS broadcast receive segment consists of Service-funded terminals, known as Receive Suites, which receive the broadcast and then disseminate information to local users. Service Receive Suites and the integration into service networks are funded in other Program Elements. GBS broadcast data includes video (especially from Unmanned Aerial Vehicles), imagery, logistics, weather data, maps and operational orders. The GBS space segment includes transponders on operational Navy satellites, currently Ultra High Frequency Follow-On (UFO) 8 and UFO 10, augmentation by commercial leased Ku-band transponders, and now the Wideband Global SATCOM (WGS) System.

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During FY09-13, the broadcast creation transitions to existing Defense Information Systems Agency (DISA) Defense Enterprise Computing Centers (DECCs). This transition address SBM hardware/software obsolescence issues. The DECC transition contract was awarded on 15 May 09. This effort was designated as an ACAT III program and funding was realigned (i.e., a separate BPAC was created) to delineate between the current ACAT I GBS program and the ACAT III SBM Transition program.

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Funding is in Budget Activity 5, System Development and Demonstration, since program is fielding pre-production equipment.

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

	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: Satellite Broadcast Management Transition	31.149	18.171	5.680	-	5.680

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force							DATE: February 2011				
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)			R-1 ITEM NOMENCLATURE PE 0603840F: Global Broadcast Service (GBS)				PROJECT 65A023: Satellite Broadcast Management Transition				
B. Accomplishments/Planned Programs (\$ in Millions)							FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Description: Develop a robust satellite broadcast management architecture and implement systems transmission security (TRANSEC).											
FY 2010 Accomplishments: Continue development of a robust satellite broadcast management architecture and implement systems transmission security (TRANSEC).											
FY 2011 Plans: Continue development of a robust satellite broadcast management architecture and implement systems transmission security (TRANSEC).											
FY 2012 Base Plans: Continue development of a robust satellite broadcast management architecture and implement systems transmission security (TRANSEC).											
FY 2012 OCO Plans: No OCO funding requested											
Accomplishments/Planned Programs Subtotals							31.149	18.171	5.680	-	5.680
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
• OPAF: PE 0303600F, GBS Transmit Strings	1.672	1.661	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
• OPAF (1): PE 0303601F, GBS Receive Suites/TIPs	14.125	26.602	16.417	0.000	16.417	0.000	0.000	0.000	0.000	Continuing	Continuing
• RDT&E: PE 0303601F, MILSATCOM Terminals, GBS Receive Suites	1.839	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
D. Acquisition Strategy											
Conduct a full and open competition to award a new contract to transfer Satellite Broadcast Management functionality to two Defense Enterprise Computing Center (DECC) facilities. The DECC will utilize a new hardware and software architecture to resolve impending Commercial off the Shelf (COTS) obsolescence, Information											

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Assurance compliance and sustainment issues. The new contract will also implement, as appropriate, follow-on GBS ORD III Pre-Planned Product Improvement capabilities into the GBS DECC-based system, as additional funding becomes available.		
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				R-1 ITEM NOMENCLATURE				PROJECT					
3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)				PE 0603840F: Global Broadcast Service (GBS)				65A023: Satellite Broadcast Management Transition					
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
DECC Transition	C/CPFF	Lockheed Martin Information Systems and Global Services:Gaithersburg, MD	23.723	9.541	Oct 2010	1.370	Oct 2011	-		1.370	Continuing	Continuing	0.000
TSBM Upgrade	TBD	TBD:TBD,	-	2.500	Nov 2010	-		-		-	Continuing	Continuing	0.000
Phase 2 Government System Integration	Various	Various:Various,	4.816	4.146	Nov 2010	1.993	Nov 2011	-		1.993	Continuing	Continuing	0.000
Subtotal			28.539	16.187		3.363		-		3.363			0.000
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
Program Support (Various)	Various	Various:Various,	1.577	1.642	Nov 2010	1.655	Dec 2011	-		1.655	Continuing	Continuing	0.000
Subtotal			1.577	1.642		1.655		-		1.655			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
Test and Evaluation (Various)	Various	Various:Various,	1.033	0.342	Nov 2010	0.662	Nov 2011	-		0.662	Continuing	Continuing	0.000
Subtotal			1.033	0.342		0.662		-		0.662			0.000
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
Subtotal			-	-		-		-		-	0.000	0.000	0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Air Force								DATE: February 2011						
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				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				31.149	18.171		5.680		-		5.680			0.000

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
DECC Transition Contract Award	3	2010	3	2016
Final Design Review	1	2010	1	2010
Systems Acceptance Test	4	2011	4	2011
Operational Turnover	4	2012	4	2012

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