

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)

DATE

February 2003

BUDGET ACTIVITY

PE NUMBER AND TITLE

PROJECT

05 - System Development and Demonstration (SDD)**0603840F Global Broadcast Service (GBS)****4887**

COST (\$ in Thousands)	FY 2002 Actual	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
4887 Global Broadcast Service (GBS)	34,035	22,253	38,147	33,490	9,720	2,446	2,230	5,497	0	147,818
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0	0

(U) **A. Mission Description**

Global Broadcast Service will provide DoD with efficient, high data rate broadcast of information provided by many distributed information sources to dispersed warfighters who will receive the broadcast directly on small, inexpensive user terminals in accordance with the GBS Operational Requirements Document (ORD) validated by the Joint Requirements Oversight Council in Apr 1995. GBS Broadcast data includes imagery, logistics and weather data, maps, operational orders, and video. GBS space segment includes packages on Navy operational satellites UFO 8, 9, and 10 providing near-worldwide service, augmentation by commercial leased Ku-band packages, and throughput on future wideband satellites. GBS Broadcast Management and Terminal segments include uplink sites and receive equipment which integrate with Service fixed- and tactical-network equipment through standard commercial interfaces. Service production Receive Suite and integration into service networks are funded in other PEs.

(U) **FY 2002 (\$ in Thousands)**

(U) \$0 Accomplishments/Planned Program
 (U) \$25,807 Continued System Development and Test
 (U) \$2,668 Continued Phase 2 Government System Integration
 (U) \$2,480 Continued Program Support
 (U) \$1,200 Completed Fielding RDT&E Receive Suites
 (U) \$1,880 Continued System Test & Evaluation Support
 (U) \$34,035 Total

(U) **FY 2003 (\$ in Thousands)**

(U) \$0 Accomplishments/Planned Program
 (U) \$16,589 Continue System Development and Test
 (U) \$2,183 Continue Phase 2 Government System Integration
 (U) \$2,290 Continue Program Support
 (U) \$1,191 Continue System Test & Evaluation Support
 (U) \$22,253 Total

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Exhibit R-2 (PE 0603840F)

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PROJECT

05 - System Development and Demonstration (SDD)**0603840F Global Broadcast Service (GBS)****4887**(U) **A. Mission Description Continued**(U) **FY 2004 (\$ in Thousands)**

(U) \$0	Accomplishments/Planned Program
(U) \$25,702	Continue System Development and Test
(U) \$7,766	Continue Phase 2 Government System Integration
(U) \$3,271	Continue Program Office and other related support activities
(U) \$1,408	Continue System Test & Evaluation Support
(U) \$38,147	Total

(U) **B. Budget Activity Justification**

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

(U) **C. Program Change Summary (\$ in Thousands)**

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>Total Cost</u>
(U) Previous President's Budget	34,202	22,589	16,792	133,697
(U) Appropriated Value	34,544	22,589		
(U) Adjustments to Appropriated Value				
a. Congressional/General Reductions	-509	-239		
b. Small Business Innovative Research				
c. Omnibus or Other Above Threshold Reprogram		-97		
d. Below Threshold Reprogram				
e. Rescissions				
(U) Adjustments to Budget Years Since FY 2003 PBR			21,355	
(U) Current Budget Submit/FY 2004 PBR	34,035	22,253	38,147	147,818

(U) **Significant Program Changes:**

The GBS Program has experienced several programmatic problems that resulted in a schedule breach from the Acquisition Program Baseline (APB) ground segment schedule outlined in the Dec 99 Selected Acquisition Report (SAR). The program plans to have a new baseline approved during 2QFY03 to reflect completion of Initial Operational Capability (IOC) 1 capabilities and incremental delivery of IOC 2 and 3 by 4QFY05. FY04 and FY05 funding was increased to incorporate an Internet Protocol (IP) architecture that will facilitate satisfaction of IOC 2 and 3 requirements. Program will continue system development and test with architecture based on the Internet Protocol. The GBS program received \$7,000 DERF funding in FY02.

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0603840F Global Broadcast Service (GBS)

4887

(U) **D. Other Program Funding Summary (\$ in Thousands)**

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	
(U) AF RDT&E										
(U) Other APPN										

Note: All the Services and several DoD agencies have many programs which interface with or support GBS. Examples include: Defense Information System Network (DISN); DISA Information Dissemination Management Program; ARPA Battlefield Awareness and Data Dissemination (BADD) Advanced Concept Tactical Demonstration (ACTD); Navy UFO Program; Army Ground Terminal Programs; Navy SATCOM Ship Terminal Program; and Air Force MILSATCOM Terminals (PE 0303601F); AF GBS Receive Terminals (Project 836780, line P-67, PE 0303601F, Milstar Satellite Comm Sys, Other Procurement; AF Ground Multiband Terminal (GMT) Development; and AF Wideband Terminal (AWT) Development.

(U) **E. Acquisition Strategy**

The acquisition strategy has been revised to a spiral development/incremental build approach using Integrated Product Development (IPD)/Integrated Product Team (IPT) approach. Program will maintain a single integration contractor for the GBS Phase 2 system while incorporating cross program/system IPTs for total system performance.

(U) **F. Schedule Profile**

	<u>FY 2002</u>				<u>FY 2003</u>				<u>FY 2004</u>			
	1	2	3	4	1	2	3	4	1	2	3	4
(U) Previous effort performed under PE0603854F												
(U) IOC 1									X			
(U) IOC 2 and 3 (4QFY05)												

* = Completed Event; X = Planned Event

Note: Declaration of IOC 1 is awaiting validation of ORD satisfaction by operational testing. Meanwhile the system continues to support operational missions in both CENTCOM and EUCOM.

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)								DATE February 2003			
BUDGET ACTIVITY					PE NUMBER AND TITLE				PROJECT		
05 - System Development and Demonstration (SDD)					0603840F Global Broadcast Service (GBS)				4887		
(U) A. Project Cost Breakdown (\$ in Thousands)											
					FY 2002		FY 2003		FY 2004		
(U)	Continue System Development and Test				25,807		16,589		25,702		
(U)	Continue Phase 2 Government System Integration				2,668		2,183		7,766		
(U)	Continue Program Support				2,480		2,290		3,271		
(U)	Continue Fielding Activities				1,200		0		0		
(U)	Continue System Test & Evaluation Support				1,880		1,191		1,408		
(U)	Total				34,035		22,253		38,147		
(U) B. Budget Acquisition History and Planning Information (\$ in Thousands)											
(U) Performing Organizations:											
<u>Contractor or</u>		<u>Contract</u>									
<u>Government</u>	<u>Method/Type</u>	<u>Award or</u>	<u>Performing</u>	<u>Project</u>							
<u>Performing</u>	<u>or Funding</u>	<u>Obligation</u>	<u>Activity</u>	<u>Office</u>	<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>	
<u>Activity</u>	<u>Vehicle</u>	<u>Date</u>	<u>EAC</u>	<u>EAC</u>	<u>to FY 2002</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>Complete</u>	<u>Program</u>	
<u>Product Development Organizations</u>											
	Raytheon System Corp	CPAF	18 Nov 97	104,886	104,886	0	25,807	16,589	25,702	34,345	102,443
	Phase 2 Government System	Various	Various		23,442	0	2,668	2,183	7,766	10,718	23,335
	Integration										
<u>Support and Management Organizations</u>											
	Program Support - Various	Various	N/A	N/A	0	2,480	2,290	3,271	5,271	13,312	
	Fielding - Various		N/A	N/A	0	1,200				1,200	
	Sustainment (Vendor TBD)		N/A	N/A	0	0				0	
<u>Test and Evaluation Organizations</u>											
	Various	Various	N/A	N/A	0	1,880	1,191	1,408	3,049	7,528	
(U) Government Furnished Property:											
		<u>Contract</u>									
	<u>Method/Type</u>	<u>Award or</u>									
<u>Item</u>	<u>or Funding</u>	<u>Obligation</u>	<u>Delivery</u>		<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>	
<u>Description</u>	<u>Vehicle</u>	<u>Date</u>	<u>Date</u>		<u>to FY 2002</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>Complete</u>	<u>Program</u>	
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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2003		
BUDGET ACTIVITY				PE NUMBER AND TITLE			PROJECT		
05 - System Development and Demonstration (SDD)				0603840F Global Broadcast Service (GBS)			4887		
(U) <u>Government Furnished Property Continued:</u>									
	<u>Contract</u>								
	<u>Method/Type</u>	<u>Award or</u>							
<u>Item</u>	<u>or Funding</u>	<u>Obligation</u>	<u>Delivery</u>	<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>
<u>Description</u>	<u>Vehicle</u>	<u>Date</u>	<u>Date</u>	<u>to FY 2002</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>Complete</u>	<u>Program</u>
<u>Product Development Property</u>									
<u>Support and Management Property</u>									
<u>Test and Evaluation Property</u>									
				<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>
<u>Subtotals</u>				<u>to FY 2002</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>Complete</u>	<u>Program</u>
Subtotal Product Development				0	28,475	18,772	33,468	45,063	125,778
Subtotal Support and Management				0	3,680	2,290	3,271	5,271	14,512
Subtotal Test and Evaluation				0	1,880	1,191	1,408	3,049	7,528
Total Project				0	34,035	22,253	38,147	53,383	147,818

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