

UNCLASSIFIED
CLASSIFICATION

							DATE	February, 2004		
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				P-1 ITEM NOMENCLATURE Satellite Communications Systems			SUBHEAD			
	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TO COMP	TOTAL	
QUANTITY										
COST (in millions)	158.898	234.836	130.564	108.223	57.955	142.197	219.327	Continuing	Continuing	

PROGRAM COVERAGE: The Satellite Communications (SATCOM) Systems P-1 line provides funds for procurement of shipboard terminal equipment for ship-to-ship, ship-to-shore and ship-to-aircraft tactical communications via earth orbiting relay satellites in the ultra high frequency (UHF), super high frequency (SHF), and extremely high frequency (EHF) bands. This includes radio frequency (RF) equipment and baseband equipment assembled and grouped into systems and subsystems structured to address specific naval communications requirements. These systems provide processors and peripheral equipment that control the RF links for message traffic, direct data transfer and secure voice communications. They are selected and oriented by communications traffic levels, types of communications and operational missions. These procurements are scheduled to meet the satellite communications requirements established by the Chief of Naval Operations (CNO) in the Fleet Communications Planning and Programming documents. The Navy SATCOM Program provides a communications architecture for seamless, rapid and reliable switching and transfer of large volumes of information (voice, video, data or imagery), including Next Generation Network (NGN) requirements both Afloat and Ashore.

JUSTIFICATION OF BUDGET YEAR REQUIREMENTS:

SHF SYSTEMS: The Navy has been expanding its use of SHF for communications in support of Navy Tactical and Joint Task Force (JTF) Operating Forces Afloat through a phased implementation plan. In FY01, AN/WSC-6(V)2 and AN/WSC-6(V)4 were modified to a standard AN/WSC-6(V)5 configuration to provide dual RF channel capability to flag capable platforms and large combatants. In FY02-03, legacy (V) 4 antennas have been replaced to provide enhanced capability and logistical support. AN/WSC-6(V)7 and AN/WSC-6(V)9 will be utilized to accommodate expanding SHF SATCOM capability to other combatants, combat logistics force ships, and mine countermeasure support ships. Under the Submarine High Data Rate (SUB HDR) program, the Navy is exploring the technical feasibility of Defense Satellite Communications Systems (DSCS) support of wideband capabilities for attack submarines. This line also provides SHF shore based modem equipment for high data rate communications with Fleet units via the DSCS. Shore based terminals have an operational requirement to support joint, theater and Navy unique command, control, communications, support and intelligence circuits for voice, data, video and imagery to the extent they are required on SHF platforms. FY03 funds procured and installed N-STEP/TELEPORT modems to provide shore side compatibility with SHF equipped ships and to support fleet and Battle Group capacity requirements. Funding will also support ancillary hardware related to Automated Digital Multiplexing System (ADMS). The AN/WSC-6(V)7 and (V)9 contracts expire in FY04 and FY05 respectively. The AN/WSC-6(V)10 terminal will be a follow-on to these contracts to complete the required terminal fielding and will meet all the requirements of the current WSC-6 and WSC-8 terminals and the Wideband Gapfiller Satellite System.

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BUDGET ITEM JUSTIFICATION SHEET (Continuation)		DATE	February, 2004
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	SUBHEAD	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	Satellite Communications Systems	321500	52NR
<p>EHF TERMINALS: This program provides for the acquisition of the Navy's EHF Satellite Communications Program (NESP) terminals in four semi-concurrent phases. Phase I of the NESP program procures Low Data Rate (LDR) jam resistant, low probability of intercept EHF SATCOM terminals along with required baseband equipment, modification kits and other ancillary equipment for submarines, surface ships and shore stations. This equipment is required to meet the electromagnetic threat environment projected for the next decade. This requirement is contained in the NESP NDCP dated Apr 89 and the JROC validated Milstar ORD of Jun 92. Phase II of the NESP program procures Navy EHF Communications Controllers (NECCs) which provides for the exchange of computer-to-computer tactical communications over the survivable EHF satellite links. NECC provides network management; multiplexing and channel sharing; resource management; communications management/planning; network control/monitoring; and communications protocols such as circuit switching and packet switching. NECC requirements are outlined in the NESP NDCP dated Apr 89 and must be fully fielded with deploying battle groups and shore sites to support tactical information exchange over EHF SATCOM. Phase III of the NESP program procures Full MILSTAR LDR Operational Capabilities (FMLOC). FMLOC efforts include Agile Beam Management (ABM), Over-the-Air-Rekey (OTAR), and In-Band Control (IBC) capabilities required by the JROC validated Milstar ORD. Additionally, the Processor Upgrade Program (PUP) must be implemented to support terminal throughput and memory requirements of Phase III capabilities. Phase III efforts will provide essential EHF operational communications capabilities with the current MILSTAR satellites. Similarly, IBCs will provide interoperable voice communications on all EHF satellites (MILSTAR, UHF Follow-On (UFO), and FLTSAT EHF Package (FEP)). Phase III also includes procurement of Interim Polar modification kits. An EHF polar communications capability is available using an EHF package on a classified host in the Molniya orbit. To use this polar capability, terminals will require minor modifications. In addition, shore gateways are necessary to provide connectivity from the Interim Polar satellite to other EHF satellite constellations. Phase IV of the NESP program consists of a Medium Data Rate (MDR) capability which will provide the only protected (jam resistant and low probability of intercept/detection) MDR communications from 4.8 kilobits per second (Kbps) to 1.544 megabits per second (Mbps) to all major fleet combatants with MILSTAR Satellites 4-6. To meet initial MDR capability requirements for the fleet, the Navy procured MDR appliqués which is retrofitted into existing legacy LDR terminals. The requirement for MDR is outlined in the JROC validated Milstar ORD. Prior to receiving the MDR appliqué, existing legacy LDR terminals must have Phase III upgrades due to processing throughput and memory requirements of MDR. Remaining MDR requirements will be satisfied through procurement of the LDR/MDR Follow-On Terminal (FOT) which incorporates LDR/MDR capabilities into a consolidated terminal that provides the same EHF functionality as a legacy LDR terminal with an MDR appliqué. The LDR/MDR FOT will have Phase III FMLOC capabilities incorporated into their baseline. The LDR/MDR FOT Antenna Group includes procurement of Radar Cross Section (RCS) modification kits to meet Navy Passive Counter Measure Ships (PCMS) RCS Specifications. During Phase IV, a Time Division Multiple Access (TDMA) Interface Processor (TIP) will be procured and integrated into the NECC. The purpose of TIP is to provide near real-time data transfer between Tactical Data Processors (TDP) together with support for ADNS data exchange using a common suite of EHF Services. This capability is necessary for effective utilization of the anti-jam/low probability of intercept (AJ/LPI) and survivable capabilities of the EHF LDR/MDR system.</p>			

Exhibit P-40, Budget Item Justification
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BUDGET ITEM JUSTIFICATION SHEET (Continuation)

DATE

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APPROPRIATION/BUDGET ACTIVITY

OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE

Satellite Communications Systems

SUBHEAD

321500 52NR

COMMERCIAL SATELLITES: Lessons learned from Desert Storm documented the necessity of an alternate commercial communications service for logistics and operational support requirements to reduce saturation of communications on military tactical satellites. ASD(C3I) in a letter of 8 Nov 1993, directed the use of commercial satellite (COMMERSAT) to augment current and future Military Satellite Communications (MILSATCOM) systems. This relieved the congestion on military tactical satellite communications systems while enhancing the overall Navy tactical communications capacity and reducing competition with tactical data on limited tactical satellite assets. The COMMERSAT program uses commercial off-the-shelf (COTS)/non-developmental item (NDI) equipment, software, and service with minimal adaptation for the naval environment. Variants of commercially available International Maritime Satellite (INMARSAT) terminals will be procured in the next few years. Various types are required to satisfy different requirements on flagships, aircraft carriers, amphib ships, combatants and auxiliary ships. The COMMERSAT Operational Requirements Document (ORD) mandates INMARSAT M terminals on Mine Counter-Measures ships. Since INMARSAT M terminals are no longer in production, INMARSAT B terminals will be procured and installed for Mine Counter-Measure ships. Earlier INMARSAT A installations will be upgraded to INMARSAT B, B HSD or dual B systems. There will also be procurement of additional shore equipment, and modifications to established INMARSAT systems for 128 kbps wideband capability, thus providing greater capability to the Fleet. The AN/WSC-8 capability aboard surface combatants will be implemented using the SHF AN/WSC-6(V)9 suite of equipment.

GLOBAL BROADCAST SERVICE (GBS): GBS is the Navy portion of a joint program with the Air Force as Executive Service. GBS augments other (MILSATCOM) systems and provides a continuous, high speed, one way information flow of high volume data to units ashore, afloat and special operations. GBS supports routine operations, training and military exercises, special activities, crises, situational awareness, weapons targeting, reconnaissance and transition to and conduct of opposed operations short of nuclear war. GBS provides the capability to quickly disseminate large information products to various joint, small combat and combat support elements. FY04 and FY05 funds procure and install receiving equipment in various configurations customized to each type of ship for Phase II of the GBS program in support of UHF follow-on (UFO) satellite flights 8, 9, and 10. For ship and submarine receive suites, antennas and ancillary equipment such as Asynchronous Transfer Mode (ATM) in-line encryptors will be procured. Shipboard and submarine receive broadcast manager (RBM) equipment will be procured through the GBS Systems Contract executed by the Air Force. FY04 and FY05 continues procurement and installation of shore terminals to support ship, submarine, and shore training and integration facilities. For shore receive suites, all components including antennas and RBMs will be procured through the GBS Systems (Air Force) contract . A Mission Need Statement for GBS was signed, 3 AUG 1995, and an Operational Requirements Document (ORD) was signed on 30 April 97 and was updated with revised Navy Force Structure by JROC on 23 May 01.

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BUDGET ITEM JUSTIFICATION SHEET (Continuation)		DATE	February, 2004
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	SUBHEAD	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	Satellite Communications System	321500	52NR

JMINI Control System: The Joint UHF Military Satellite Communications Network Integrated Control System (JMINI) is a joint interest program with the Navy designated as the lead service as directed by the Military Communications Electronics Board (MCEB). The JMINI Control System will provide dynamic centralized control of joint 5-kHz and 25-kHz UHF MILSATCOM voice and data resources (channels and Time Division Multiple Access (TDMA) time slots) via a globally integrated system of four control stations to be located at each of the three Naval Computer and Telecommunications Area Master Station (NCTAMS) sites plus Naval Computer and Telecommunications Station (NCTS) Guam. The globally integrated system consists of two major subsystems. The first subsystem provides communications resource planning and management via secure Wide Area Network (WAN) connections between the control stations and remote users and is known as the Network Management System (NMS). Based on a revised ORD, 64 NMS units are required; one at each control station plus 60 remote units to be installed at ORD-defined locations. The second subsystem provides the RF connectivity (modems, radios, antennas) between the NMS and the UHF MILSATCOM user terminals worldwide and is known as the Channel Controller. There are 56 channel controllers required per control station. Funds in FY04-FY05 continue the hardware procurement and installation for the four control stations and the remote NMS units.

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COST ANALYSIS									DATE	February, 2004	
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT			P-1 ITEM NOMENCLATURE Satellite Communications Systems 321500						SUBHEAD 52NR		
COST CODE	ELEMENT OF COST	ID CODE	TOTAL COST IN THOUSANDS OF DOLLARS								
			FY 2003		FY 2004			FY 2005			
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
NR101	MINI DAMA				4,600			0			0
NR101	MINI DAMA Field Change Upgrade Kits	A			4,600			0			0
NR105	5/25 KHZ SATCOM				7,947			0			0
NR105	5/25 KHz SATCOM--UHF Modems	A	18	116.4	2,096						
NR105	5/25 KHz SATCOM--DMR	B	14	90.4	1,265						
NR105	TRIDENT - MD-1324A Modem		14	327.6	4,586						
NR105	TRIDENT - MD-1324A Modem Ship Alt kits										
NR106	SHF SATCOM				15,586			72,997			7,782
NR106	SHF Terminals--AN/WSC-6(V)5 Mod kits - Ship Upgrades	A	Var	Var.	285	Var	Var.	1,385			
NR106	SHF Terminals-- AN/WSC-6 7 Ft Antenna - Ship	A	10	216.3	2,163	9	306.2	2,756			
NR106	SHF Terminals--AN/WSC-6(V)7 - Ship	A	6	1,308.0	7,848	16	921.3	14,741			
NR106	SHF Terminals--AN/WSC-6(V)7 - Ship Upgrades	A				Var.	Var.	5,526			
NR106	SHF Terminals--AN/WSC-6(V)7 - Ship (Backfits)	A	6	83.3	500	12	88.0	1,056			
NR106	SHF Terminals --AN/WSC-6(V)7 - Shore	A				1	80.0	80			
NR106	SHF Terminals--AN/WSC-6(V)9 - Ship	B	3	1,277.0	3,831	20	1,637.0	32,739			
NR106	SHF Terminals -- AN/WSC-6(V)7 Modems	A	36	15.1	543						
NR106	SHF Terminals -- AN/WSC-6(V)9 Modems - Shore	A	20	20.8	416						
NR106	SHF Terminals -- EBEM Modems - Ship	A				119	10.1	1,200	1	10.0	10
NR106	SHF Terminals -- EBEM Modems - Shore	A				106	14.2	1,510	60	11.3	676
NR106	SHF Terminals--AN/WSC-6(V)10 Ship	B				4	2,434.5	9,738	1	2,440.0	2,440
NR106	SHF Terminals--AN/WSC-6(V)10 - Ship Upgrades	B				1	2,266.0	2,266	2	2,328.0	4,656

Remarks:
MINI DAMA
FY03 Congressional Plus-up.
All US MINI DAMA units receive this software upgrade

5/25KHz
Beginning in FY04, DMR transfers to BLI 3010 and transitions to Joint Tactical Radio System M/F.

SHF SATCOM
AN/WSC-6(V)10 Ship Upgrades were formerly identified as AN/WSC-6(V)9 Ship (Backfits)

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Exhibit P-5, Cost Analysis Justification
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COST ANALYSIS											DATE		February, 2004		
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE Satellite Communications Systems 321500				SUBHEAD 52NR				
COST CODE	ELEMENT OF COST	ID CODE	TOTAL COST IN THOUSANDS OF DOLLARS												
			PY		FY 2003		FY 2004		FY 2005						
			QTY	TOTAL COST	QTY	UNIT COST		TOTAL COST	QTY	UNIT COST		QTY	UNIT COST	TOTAL COST	
NR107	EHF SATCOM			652,352				18,331						8,028	
NR107	EHF Terminals -AN/USC-38(V) FOT - Ship	A	275	467,033	11	1,287.2		14,160	39	752.4		Var.		1,894	
NR107	EHF Terminals --AN/USC-38(V) FOT - Shore	A	70	105,247	Var.	773									
NR107	EHF Terminals -NECC - Ship	A	225	28,697	12	232.3		2,788	21	180.3		3,786	10	543.6	
NR107	EHF Terminals --NECC - Shore	A	57	6,447	Var.	550		6	133.0		798	3	232.4	5,437	
NR107	EHF Terminals -MDR Appliques - Ship	A	61	35,725		60								697	
NR107	EHF Terminals --Interim Polar Gateway - Shore	A	2	5,703											
NR107	EHF Terminals --Polar Equipment			3,500											
NR112	Commercial Satellite			2,874				2,059						3,309	
NR112	Comm. Satellite--INMARSAT B (Ship)	A	1	96	9	63.4		571							
NR112	Comm. Satellite--INMARSAT B (Ship) Equip. Upgrade - Handover	A	17	559	1	37.0		37							
NR112	Comm. Satellite--INMARSAT B (Ship) Equip. Upgrade - 128Kbps Wideband	A			20	46.1		921	80	28.8		2,302	86	29.2	
NR112	Comm. Satellite--INMARSAT B (Shore)	A	4	308										2,514	
NR112	Comm. Satellite--INMARSAT B HSD KITS	A	8	144	4	18.0		72	8	17.9		143			
NR112	Comm. Satellite--C band/CWSP (Ship)	A			Var.	458						577	Var.	795	
NR112	Comm. Satellite--C band/CWSP (Shore)	A	9	1,767											
NR117	Global Broadcast Service (GBS)			31,775				8,569						9,162	
NR117	Global Broadcast Service- Single (Receive Suite)	B	17	9,146											
NR117	Global Broadcast Service-Dual (Receive Suite)	B	13	8,204											
NR117	Global Broadcast Service - Conversion Kits/Backfits/Upgrades	B	6	2,623	0			8,569	Var.						
NR117	Global Broadcast Service-Subs (Receive Suite)	B	32	9,429								19,980	15	610.8	
NR117	Global Broadcast Service - Shore	B	15	2,373					7	396.1		2,773		9,162	
NR118	JMINI Control System			12,624				3,954						6,245	
NR118	JMINI Control System - NMS	A	22	12,624	7	564.9		3,954	12	638.3		7,659	10	624.5	

Remarks:

EHF Terminals

Fluctuations in unit price are a result of the mix between Ship, Shore and Sub procurements. Unit costs include necessary RCS radome kits, field change kits and ancillary equipment.

AN/USC-38 (V) FOT Quantities of "Var." in FY03 and FY05 reflect procurement of supporting ancillary equipment.

NECC FY03 and out includes MDR (TIP) capability.

FY05 NECC unit cost increase due to procurement of TIP card for integration into NECC chassis

MDR PY-FY03 procurements include field change kits and ancillary equipment required for installations.

INMARSAT

INMARSAT B Equipment upgrades - The antenna handover upgrade will modify the dual antenna system to include handover capability. The 128 Kbps wideband upgrade will increase the modems channel throughput capability from 64Kbps to 128Kbps.

FY03 - INMARSAT B Equipment upgrades (128 Kbps) unit cost includes \$300K NRE

CWSP

FY04 - Procurement quantities consist of PAC transponder and gateway equipment, Norfolk/Martelsham T-3 equipment, second Hawaii gateway hardware, modems and infrastructure upgrades.

FY05- Procurement quantities consist of European gateway equipment and modems

GBS

PY - GBS Unit costs vary due to mix of Ship, Submarine and Shore terminal configurations and to quantity discounts afforded by other Services buys per year.

GBS - Conversion Kits/ Backfits/ Upgrades. Six equipment conversion kits purchased in FY02 to convert twelve (12) PY single antenna assets to six (6) dual antenna configurations. In FY03-04, Ship and Shore "various" backfit and upgrade kits will be purchased and installed

GBS - FY05 quantity is IP backfits only. 17 sub backfits and 4 dual antenna system backfits.

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COST ANALYSIS											DATE		
APPROPRIATION ACTIVITY OP.N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT					P-1 ITEM NOMENCLATURE Satellite Communications Systems 321500					SUBHEAD 52NR			
COST CODE	ELEMENT OF COST	ID CODE	TOTAL COST IN THOUSANDS OF DOLLARS										
			PY	FY 2003			FY 2004			FY 2005			
QTY	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
NR555	PRODUCTION SUPPORT			106,984			11,436			17,415			13,308
NR777	INSTALLATION FMP Installation FMP DSA - SATCOM Ship Non-FMP Installation			534,052 469,969 24,233 64,083			72,721 68,390 7,518 4,331			77,062 66,472 12,808 10,590			82,730 74,638 6,498 8,092
	TOTAL BLI 3215			1,346,184			145,203			234,836			130,564
	PBD 172 Deferral						13,695						
	SPAWAR TOTAL			1,346,184			158,898			234,836			130,564
	NFN Shore Comm Equip and Fly Away Terminals - DERF			11,459									

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PROCUREMENT HISTORY AND PLANNING										A. DATE February, 2004		
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				C. P-1 ITEM NOMENCLATURE Satellite Communications Systems						SUBHEAD 52NR		
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
NR101	MINI DAMA Field Change Upgrade Kits	03	Titan, CA	FFP	SPAWAR		Jun-04	Jun-05			YES	N/A
NR105	5/25 KHz SATCOM--UHF Modems	03	Viasat, CA	IDIQ	SPAWAR		Nov-02	Jul-03	18	116.4	YES	N/A
D. REMARKS												
FY03 - MINI DAMA contract award pending JTRS waiver												

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Exhibit P-5a, Procurement History and Planning
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PROCUREMENT HISTORY AND PLANNING										A. DATE	February, 2004	
B. APPROPRIATION/BUDGET ACTIVITY				C. P-1 ITEM NOMENCLATURE						SUBHEAD		
OP.N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				Satellite Communications Systems						321500 52NR		
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
NR106	SHF Terminals-- AN/WSC-6 7 Ft Antenna - Ship	03	Raytheon, Boston, MA	C/FFP (OPT)	SPAWAR		May-03	Feb-04	10	216.3	YES	N/A
NR106	SHF Terminals-- AN/WSC-6 7 Ft Antenna - Ship	04	Raytheon, Boston, MA	C/FFP (OPT)	SPAWAR		Feb-04	Nov-04	9	306.2	YES	N/A
NR106	SHF Terminals--AN/WSC-6(V)7 - Ship	03	Raytheon, Boston, MA	C/FFP (OPT)	SPAWAR		May-03	May-04	6	1308.0	YES	N/A
NR106	SHF Terminals--AN/WSC-6(V)7 - Ship	04	Raytheon, Boston, MA	C/FFP (OPT)	SPAWAR		Feb-04	Feb-05	16	921.3	YES	N/A
NR106	SHF Terminals--AN/WSC-6(V)7 - Ship (Backfits)	03	Raytheon, Boston, MA	C/FFP (OPT)	SPAWAR		May-03	May-04	6	83.3	YES	N/A
NR106	SHF Terminals--AN/WSC-6(V)7 - Ship (Backfits)	04	Raytheon, Boston, MA	C/FFP (OPT)	SPAWAR		Feb-04	Dec-04	12	88.0	YES	N/A
NR106	SHF Terminals --AN/WSC-6(V)7 - Shore	04	Raytheon, Boston, MA	C/FFP (OPT)	SPAWAR		Feb-04	Feb-05	1	80.0	YES	N/A
D. REMARKS												
FY03 - Increased unit cost to the (V)7 terminal price is due to the inclusion of the NRE for the Dual Channel (V) 7 ECP and (V) 7 Dual channel terminals												
FY04 - Increased unit cost to the 7 ft antenna is due to the Sole Source modification to the contract.												

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OP.N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				Satellite Communications Systems 321500						52NR		
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
NR106	SHF Terminals--AN/WSC-6(V)9 - Ship	03	Harris Corp, Melbourne, FL	C/FFP (OPT)	SPAWAR		Jun-03	Apr-04	3	1,277.0	YES	N/A
NR106	SHF Terminals--AN/WSC-6(V)9 - Ship	04	Harris Corp, Melbourne, FL	C/FFP (OPT)	SPAWAR		Feb-04	Jun-05	20	1,637.0	YES	N/A
NR106	SHF Terminals -- AN/WSC-6(V)7 Modems	03	Raytheon, MA	C/FFP (OPT)	SPAWAR		May-03	May-04	36	15.1	YES	N/A
NR106	SHF Terminals -- AN/WSC-6(V)9 Modems - Shore	03	Harris Corp, Melbourne, FL	C/FFP (OPT)	SPAWAR		Aug-03	Aug-04	20	20.8	YES	N/A
NR106	SHF Terminals -- EBEM Modems - Ship	02	VIASAT, Carlsbad, CA	C/FFP (OPT)	CECOM		Jul-02	Mar-04	10	139.0	YES	N/A
NR106	SHF Terminals -- EBEM Modems - Ship	04	VIASAT, Carlsbad, CA	C/FFP (OPT)	CECOM		Apr-04	Oct-04	119	10.1	YES	N/A
NR106	SHF Terminals -- EBEM Modems - Ship	05	VIASAT, Carlsbad, CA	C/FFP (OPT)	CECOM		Dec-04	Jun-05	1	10.0	YES	N/A
NR106	SHF Terminals -- EBEM Modems - Shore	04	VIASAT, Carlsbad, CA	C/FFP (OPT)	CECOM		Apr-04	Oct-04	106	14.2	YES	N/A
NR106	SHF Terminals -- EBEM Modems - Shore	05	VIASAT, Carlsbad, CA	C/FFP (OPT)	CECOM		Nov-04	May-05	60	11.3	YES	N/A
NR106	SHF Terminals--AN/WSC-6(V)10 Ship	04	Harris Corp, Melbourne, FL	C/FFP (OPT)	SPAWAR		Feb-04	Jun-05	4	2,434.5	YES	N/A
NR106	SHF Terminals--AN/WSC-6(V)10 Ship	05	Harris Corp, Melbourne, FL	C/FFP (OPT)	SPAWAR		Dec-04	Dec-05	1	2,440.0	YES	N/A
NR106	SHF Terminals--AN/WSC-6(V)10 - Ship Upgrades	04	Harris Corp, Melbourne, FL	C/FFP (OPT)	SPAWAR		Feb-04	Jun-05	1	2,266.0	YES	N/A
NR106	SHF Terminals--AN/WSC-6(V)10 - Ship Upgrades	05	Harris Corp, Melbourne, FL	C/FFP (OPT)	SPAWAR		Dec-04	Dec-05	2	2,328.0	YES	N/A
D. REMARKS												
FY02 - Unit cost of the EBEM Modems - Ship includes NRE.												
FY04 - Increased unit cost to the (V)9 terminal price is due to the inclusion of Ka-Ready capability.												

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PROCUREMENT HISTORY AND PLANNING										A. DATE		
B. APPROPRIATION/BUDGET ACTIVITY				C. P-1 ITEM NOMENCLATURE					SUBHEAD			
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				Satellite Communications Systems					321500 52NR			
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
NR107	EHF Terminals--AN/USC-38(V) FOT - Ship	02	Raytheon, Marlborough, MA	C/FFP (OPT)	SPAWAR		Jan-02	Jul-03	22	1029.0	YES	N/A
NR107	EHF Terminals--AN/USC-38(V) FOT - Ship	03	Raytheon, Marlborough, MA	C/FFP (OPT)	SPAWAR		Dec-02	Jun-04	11	1287.2	YES	N/A
NR107	EHF Terminals--AN/USC-38(V) FOT - Ship	04	Raytheon, Marlborough, MA	C/FFP (OPT)	SPAWAR		Mar-04	Sep-05	39	752.4	YES	N/A
NR107	EHF Terminals --AN/USC-38(V) FOT - Shore	02	Raytheon, Marlborough, MA	C/FFP (OPT)	SPAWAR		Jan-02	Mar-04	1	1852.0	YES	N/A
NR107	EHF Terminals--NECC - Ship	04	SPAWAR System Center	Work Request	SPAWAR		Nov-03	Mar-04	21	180.3	YES	N/A
NR107	EHF Terminals--NECC - Ship	05	SPAWAR System Center	Work Request	SPAWAR		Nov-04	Mar-05	10	543.6	YES	N/A
NR107	EHF Terminals --NECC - Shore	04	SPAWAR System Center	Work Request	SPAWAR		Nov-03	Mar-04	6	133.0	YES	N/A
NR107	EHF Terminals --NECC - Shore	05	SPAWAR System Center	Work Request	SPAWAR		Nov-04	Mar-05	3	232.4	YES	N/A
D. REMARKS												
FY02 EHF terminal AN/USC-38(V) Ship and Shore are on the same contract and have 12 months from the date of first delivery to complete the contract. The shore procurement will be delivered last.												

DD FORM 2446, JUN 87

UNCLASSIFIED
CLASSIFICATION

PROCUREMENT HISTORY AND PLANNING											A. DATE	February, 2004			
B. APPROPRIATION/BUDGET ACTIVITY				C. P-1 ITEM NOMENCLATURE							SUBHEAD				
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				Satellite Communications Systems							321500				
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE			
NR112	Comm. Satellite--INMARSAT B (Ship) Equip. Upgrade - 128Kbps Wideband	04	Mackay Comm Edison, NJ	C/FP (OPT)	SSC/SD		Nov-03	Feb-04	80	28.8	YES	N/A			
NR112	Comm. Satellite--INMARSAT B (Ship) Equip. Upgrade - 128Kbps Wideband	05	Mackay Comm Edison, NJ	C/FP (OPT)	SSC/SD		Nov-04	Feb-05	86	29.2	YES	N/A			
NR112	Comm. Satellite--INMARSAT B HSD KITS	04	D&E Tech Wallingford, CT	C/FP (OPT)	SSC/CHS		Nov-03	Feb-04	8	17.9	YES	N/A			
NR117	Global Broadcast Service - Backfits/Upgrades	04	Raytheon, Marlborough, MA & Reston, VA	CPAF/(OPT)	USAF		Feb-04	Aug-04			YES	N/A			
NR117	Global Broadcast Service - Backfits	05	Raytheon, Marlborough, MA & Reston, VA	CPAF/(OPT)	USAF		Feb-05	Aug-05	15	610.8	YES	N/A			
NR117	Global Broadcast Service - Shore	04	Raytheon, Marlborough, MA & Reston, VA	CPAF/(OPT)	USAF		Feb-04	Oct-04	7	396.1	YES	N/A			
NR118	JMINI Control System - NMS	04	SAIC, San Diego, CA	CPFF	SSC-SD		Dec-03	Jul-04	12	638.3	Yes	N/A			
NR118	JMINI Control System - NMS	05	SAIC, San Diego, CA	CPFF	SSC-SD		Oct-04	Jul-05	10	624.5	Yes	N/A			
D. REMARKS:															

UNCLASSIFIED

February, 2004

MODIFICATION TITLE: Satellite Communications Systems
 COST CODE NR101
 MODELS OF SYSTEMS AFFECTED: MINI DAMA
 DESCRIPTION/JUSTIFICATION: Provides 5KHz and 25KHz UHF Communications capability for submarines and other disadvantaged users.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	<u>PY</u>	\$	<u>FY 02</u>	\$	<u>FY 03</u>	\$	<u>FY 04</u>	\$	<u>FY 05</u>	\$	<u>FY 06</u>	\$	<u>FY 07</u>	\$	<u>FY 08</u>	\$	<u>FY 09</u>	\$	<u>TC</u>	\$	<u>Total</u>	\$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment																						
Equipment Nonrecurring																						
Field Change Upgrade Kits																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Production Support																						
Other (DSA)																						
Interim Contractor Support																						
Installation of Hardware*																						
PRIOR YR EQUIP																						
FY 02 EQUIP																						
FY 03 EQUIP																						
FY 04 EQUIP																						
FY 05 EQUIP																						
FY 06 EQUIP																						
FY 07 EQUIP																						
FY 08 EQUIP																						
FY 09 EQUIP																						
FY TC EQUIP																						
TOTAL INSTALLATION COST		10.2		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		10.2
TOTAL PROCUREMENT		42.9		6.6		4.6		0.0		0.0		0.0		0.0		0.0		0.0		0.0		54.1

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEAD-TIME:

PRODUCTION LEAD-TIME: 12 Months

CONTRACT DATES:

FY 2003: Jun-04 FY 2004: NA FY 2005: NA FY 2006: NA

DELIVERY DATES:

FY 2003: Jun-05 FY 2004: NA FY 2005: NA FY 2006: NA

INSTALLATION SCHEDULE:

<u>PY</u>	1	2	<u>FY 04</u>	3	4	1	2	<u>FY 05</u>	3	4	1	2	<u>FY 06</u>	3	4

INPUT

77

OUTPUT

77

INSTALLATION SCHEDULE:

	1	2	<u>FY 07</u>	3	4	1	2	<u>FY 08</u>	3	4	1	2	<u>FY 09</u>	3	4	<u>TC</u>	<u>TOTAL</u>

INPUT

0 77

OUTPUT

0 77

Notes/Comments

PY - No installation required for upgrade kits.

FY02 and FY03 - Congressional Plus-up. Field Change Upgrade kits do not require installation.

All MINI DAMA units will receive software upgrade kits.

Exhibit P-3a, Individual Modification
 Justification
 Unclassified
 Classification

MODIFICATION TITLE: Satellite Communications Systems
 COST CODE NR105
 MODELS OF SYSTEMS AFFECTED: 5/25 KHz SATCOM--UHF Modems
 DESCRIPTION/JUSTIFICATION: Provides the modulation demodulation capability at 5 KHz bandwidth in the UHF spectrum

321500

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY Qty	\$	FY 02 Qty	\$	FY 03 Qty	\$	FY 04 Qty	\$	FY 05 Qty	\$	FY 06 Qty	\$	FY 07 Qty	\$	FY 08 Qty	\$	FY 09 Qty	\$	TC Qty	\$	Total Qty	\$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment																						
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																				2	0.2	
Production Support																				2.6		
Other (DSA)																				1.2		
Interim Contractor Support																						
Installation of Hardware*																						
PRIOR YR EQUIP	404	12.7	7	1.6	18	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	429	15.0	
FY 02 EQUIP	404	12.7	6	1.3	18	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	410	14.0	
FY 03 EQUIP			1	0.2															1	0.2		
FY 04 EQUIP																			18	0.7		
FY 05 EQUIP																			0	0.0		
FY 06 EQUIP																			0	0.0		
FY 07 EQUIP																			0	0.0		
FY 08 EQUIP																			0	0.0		
FY 09 EQUIP																			0	0.0		
FY TC EQUIP																			0	0.0		
TOTAL INSTALLATION COST		12.7		1.6		0.7		0.0		0.0		0.0		0.0		0.0		0.0		0.0	15.0	
TOTAL PROCUREMENT		32.6		2.9		3.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	38.5	

METHOD OF IMPLEMENTATION:

CONTRACT DATES: FY 2003: Nov-02 FY 2004: NA FY 2005: NA FY 2006: NA

DELIVERY DATES: FY 2003: Jul-03 FY 2004: NA FY 2005: NA FY 2006: NA

INSTALLATION SCHEDULE:

PY	1	2	FY 04	3	4	1	2	FY 05	3	4	1	2	FY 06	3	4

INPUT

429

OUTPUT

429

INSTALLATION SCHEDULE:

	1	2	FY 07	3	4	1	2	FY 08	3	4	1	2	FY 09	3	4	TC	TOTAL
INPUT																0	429
OUTPUT																0	429

Notes:

FY02: Two (2) units procured as training equipment do not require SPAWAR install funds

Exhibit P-3a, Individual Modification
 Justification
 Unclassified
 Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE: Satellite Communications Systems
 COST CODE NR105
 MODELS OF SYSTEMS AFFECTED 5/25 KHz SATCOM--DMR
 DESCRIPTION/JUSTIFICATION: Provides 5KHz and 25 KHz UHF bandwidth capability and provides the framework for meeting the current and future SATCOM and Line of Sight (LOS) communications requirements in the 20MHz to 2 GHz spectrum.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES

FINANCIAL PLAN: (\$ in millions)

	PY Qty	\$	FY 02 Qty	\$	FY 03 Qty	\$	FY 04 Qty	\$	FY 05 Qty	\$	FY 06 Qty	\$	FY 07 Qty	\$	FY 08 Qty	\$	FY 09 Qty	\$	TC Qty	\$	Total Qty	\$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring Equipment	41 58	26.2 3.3	Var	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	41 58	26.5 3.3		
Equipment Nonrecurring (Racks)																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Production Support																						
Other (DSA)																						
Interim Contractor Support																						
Installation of Hardware*	0	0.0	28 28	0.0 0.0	1	0.0 0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	29 29	0.0 0.0		
PRIOR YR EQUIP																						
FY 02 EQUIP																						
FY 03 EQUIP																						
FY 04 EQUIP																						
FY 05 EQUIP																						
FY 06 EQUIP																						
FY 07 EQUIP																						
FY 08 EQUIP																						
FY 09 EQUIP																						
FY TC EQUIP																						
TOTAL INSTALLATION COST	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL PROCUREMENT	43.9	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.5			

METHOD OF IMPLEMENTATION ADMINISTRATIVE LEAD-TIME: 2 Months PRODUCTION LEAD-TIME: 8 Months

CONTRACT DATES: FY 2003: NA FY 2004: NA FY 2005: NA FY 2006: NA

DELIVERY DATES: FY 2003: NA FY 2004: NA FY 2005: NA FY 2006: NA

INSTALLATION SCHEDULE: PY 1 2 FY 04 3 4 1 2 FY 05 3 4 1 2 FY 06 3 4

INPUT 29

OUTPUT 29

INSTALLATION SCHEDULE: PY 1 2 FY 07 3 4 1 2 FY 08 3 4 1 2 FY 09 3 4 TC TOTAL

INPUT 0 29

OUTPUT 0 29

Notes/Comments

Note 1: DMR unit includes four channels per box.
 Note 2: DMR racks included under Equipment Non-Recurring line.
 FY02 procurements consist of ancillary equipment for the SSN 21 and SSN 23 (each kit includes one 500 watt HF power amplifier and one Sunair 9000 HF transceiver), SSN 21 receives one set and SSN23 receives two sets.
 FY02: 24 DMRs provided to Military Sealift Command (MSC), 2 DMR units provided to SSC-SD lab, 2 DMR units provided to SSC-CH lab. No installation cost to SPAWAR.
 FY03 and prior implemented under the Digital Modular Radio Program as JTRS-M/F Block 0.
 FY03 - Pentagon DMR unit installed at no cost to SPAWAR
 FY04 - Balance of DMR installations transitioned to BLI 3010 (JTRS-M/F) in FY04

Exhibit P-3a, Individual Modification
 Justification
 Unclassified
 Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE: MD-1324A Modem (Trident IP)
 COST CODE NR105
 MODELS OF SYSTEMS AFFECTED: **TRIDENT - MD-1324A Modem**
 DESCRIPTION/JUSTIFICATION: Procurement of Modems for Trident IP

321500

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	<u>PY</u>		<u>FY 02</u>		<u>FY 03</u>		<u>FY 04</u>		<u>FY 05</u>		<u>FY 06</u>		<u>FY 07</u>		<u>FY 08</u>		<u>FY 09</u>		<u>TC</u>	<u>Total</u>	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty
RDT&E																					
PROCUREMENT:																					
Kit Quantity																					
Installation Kits																					
Installation Kits Nonrecurring																					
Equipment																					
Equipment/Ship Alt Kits																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Production Support																					
DSA																					
Installation of Hardware																					
PRIOR YR EQUIP																					
FY 02 EQUIP																					
FY 03 EQUIP																					
FY 04 EQUIP																					
FY 05 EQUIP																					
FY 06 EQUIP																					
FY 07 EQUIP																					
FY 08 EQUIP																					
FY 09 EQUIP																					
FY TC EQUIP																					
TOTAL INSTALLATION COST	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL PROCUREMENT COST	1.4	1.3	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.5

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEAD-TIME: PRODUCTION LEAD-TIME: 6 months

CONTRACT DATES: FY 2003: Feb-03 FY 2004: NA FY 2005: NA FY 2006:

DELIVERY DATES: FY 2003: Aug-03 FY 2004: NA FY 2005: NA FY 2006:

INSTALLATION SCHEDULE:	<u>PY</u>	<u>FY 04</u>				<u>FY 05</u>				<u>FY 06</u>			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT		17											

OUTPUT 17

INSTALLATION SCHEDULE:	<u>PY</u>	<u>FY 07</u>				<u>FY 08</u>				<u>FY 09</u>				<u>TC</u>	<u>TOTAL</u>
		1	2	3	4	1	2	3	4	1	2	3	4		
INPUT														0	17
OUTPUT														0	17

Notes/Comments:

FY02: Shore assets are turnkey installations provided by NUWC, Newport.

PY-FY03: Trident Refit Facilities (TRF) are fully funded NAVSEA activities providing SSBN support. Installations provided by TRF.

Exhibit P-3a, Individual Modification
 Justification
 Unclassified
 Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE: Satellite Communications Systems
 COST CODE NR106
 MODELS OF SYSTEMS AFFECTED: SHF Terminals-- AN/WSC-6(V)5 Mod Kits - Ship
 DESCRIPTION/JUSTIFICATION: High data rate SHF satellite communications for intra and inter service message, data, voice and video transmission and reception.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY Qty	FY 02 Qty	\$	FY 03 Qty	\$	FY 04 Qty	\$	FY 05 Qty	\$	FY 06 Qty	\$	FY 07 Qty	\$	FY 08 Qty	\$	FY 09 Qty	\$	TC Qty	\$	Total Qty	\$
RDT&E																					
PROCUREMENT:																					
Kit Quantity																					
Installation Kits																					
Installation Kits Nonrecurring																					
Equipment																					
Terminal Upgrades																					
Production Support																					
Other (DSA)																					
Interim Contractor Support																					
Installation of Hardware*																					
PRIOR YR EQUIP																					
FY 02 EQUIP																					
FY 03 EQUIP																					
FY 04 EQUIP																					
FY 05 EQUIP																					
FY 06 EQUIP																					
FY 07 EQUIP																					
FY 08 EQUIP																					
FY 09 EQUIP																					
FY TC EQUIP																					
TOTAL INSTALLATION COST		9.6	1.0	0.0	0.0	0.0	0.0	0.9	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.2	
TOTAL PROCUREMENT		41.6	1.0	0.3	1.4	1.2	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.6	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEAD-TIME: 1 Month PRODUCTION LEAD-TIME: 12 Months

CONTRACT DATES: FY 2003: NA FY 2004: NA FY 2005: NA FY 2006: NA

DELIVERY DATES: FY 2003: NA FY 2004: NA FY 2005: NA FY 2006: NA

INSTALLATION SCHEDULE: PY 1 2 3 4 FY 04 1 2 3 4 FY 05 1 2 3 4 FY 06 1 2 3 4

INPUT

19

OUTPUT

19

INSTALLATION SCHEDULE: PY 1 2 3 4 FY 07 1 2 3 4 FY 08 1 2 3 4 FY 09 1 2 3 4 TC TOTAL
INPUT 0 19
OUTPUT 0 19Notes/Comments
PY Procurements- 3 mod kits were procured but not installed. One destroyed on pier, one will remain as an Engineering Model at Contractor Facility, one install canceled per Fleet request, ship will now receive dual channel (V)7 vice aging (V)5.

FY02 - FY00 Procurement was installed in FY02 at Shore Training Facility (FTC Norfolk) in FY02

FY03- Terminal Upgrades include NAVSSI interface cards (no installation funds required) and 1 Electromagnetic Interface (EMI) kit to remain at Original Equipment Manufacturer (OEM) for integration testing.

FY04: Terminal Upgrades include NAVSSI interface cards/production backfits and shock and vibration upgrades.

Exhibit P-3a, Individual Modification
Justification
Unclassified
Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE: Satellite Communications Systems
 COST CODE NR106
 MODELS OF SYSTEMS AFFECTED: SHF Terminals-- AN/WSC-6(V)5 Mod Kits - Shore
 DESCRIPTION/JUSTIFICATION: AN/WSC-6(V)5 terminals provide training and technical support for high data rate SHF satellite communications for inter and intra service message, data, voice and video transmission.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY Qty	\$	FY 02 Qty	\$	FY 03 Qty	\$	FY 04 Qty	\$	FY 05 Qty	\$	FY 06 Qty	\$	FY 07 Qty	\$	FY 08 Qty	\$	FY 09 Qty	\$	TC Qty	\$	Total Qty	\$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Production Support																						
Other (DSA)																						
Interim Contractor Support																						
Installation of Hardware*																						
PRIOR YR EQUIP																						
FY 02 EQUIP	1	0.8	1	0.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	1.3		
FY 02 EQUIP	1	0.8	1	0.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	1.3		
FY 03 EQUIP																						
FY 04 EQUIP																						
FY 05 EQUIP																						
FY 06 EQUIP																						
FY 07 EQUIP																						
FY 08 EQUIP																						
FY 09 EQUIP																						
FY TC EQUIP																						
TOTAL INSTALLATION COST		0.8		0.5		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	1.3	
TOTAL PROCUREMENT		1.7		0.5		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	2.2	
METHOD OF IMPLEMENTATION:																						

CONTRACT DATES:	FY 2003:	NA	FY 2004:	NA	FY 2005:	NA	FY 2006:	NA												
DELIVERY DATES:	FY 2003:	NA	FY 2004:	NA	FY 2005:	NA	FY 2006:	NA												
INSTALLATION SCHEDULE:	PY	1	2	FY 04 3	4	1	2	FY 05 3	4	1	2	FY 06 3	4							
INPUT		2																		
OUTPUT		2																		
INSTALLATION SCHEDULE:		1	2	FY 07 3	4	1	2	FY 08 3	4	1	2	FY 09 3	4	TC		TOTAL				
INPUT															0		2			
OUTPUT															0		2			

Notes/Comments
 FY02 Installation from FY00 Ship Procurement (Trainer).

Exhibit P-3a, Individual Modification
 Justification
 Unclassified
 Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE: Satellite Communications Systems
 COST CODE NR106
 MODELS OF SYSTEMS AFFECTED: SHF Terminals-- AN/WSC-6 7 Ft Antenna - Ship
 DESCRIPTION/JUSTIFICATION: High data rate SHF satellite communications for intra and inter service message, data, voice and video transmission and reception.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY Qty	\$	FY 02 Qty	\$	FY 03 Qty	\$	FY 04 Qty	\$	FY 05 Qty	\$	FY 06 Qty	\$	FY 07 Qty	\$	FY 08 Qty	\$	FY 09 Qty	\$	TC Qty	\$	Total Qty	\$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	12	3.2	5	0.7	10	2.2	9	2.8											85	21.3	121	30.1
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Production Support																						
Other (DSA)																						
Interim Contractor Support																						
Installation of Hardware*	12	4.4	0	0.0	4	1.2	10	4.0	8	5.9	0	0.0	0	0.0	0	0.0	0	0.0	85	35.6	119	51.1
PRIOR YR EQUIP	12	4.4			4	1.2	10	4.0	8	5.9	0	0.0	0	0.0	0	0.0	0	0.0	12	4.4	4	1.2
FY 02 EQUIP																					10	4.0
FY 03 EQUIP																					8	5.9
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY 06 EQUIP																					0	0.0
FY 07 EQUIP																					0	0.0
FY 08 EQUIP																					0	0.0
FY 09 EQUIP																					0	0.0
FY TC EQUIP																					85	35.6
TOTAL INSTALLATION COST		4.4		0.0	1.2		4.0		5.9		0.0		0.0		0.0		0.0		0.0		35.6	51.1
TOTAL PROCUREMENT		8.8		0.9	3.9		7.4		6.2		0.0		0.0		0.0		0.0		0.0		65.8	92.9

METHOD OF IMPLEMENTATION:

	ADMINISTRATIVE LEAD-TIME: 1 Month				PRODUCTION LEAD-TIME: 9 Months											
CONTRACT DATES:	FY 2003:	May-03			FY 2004:	Feb-04			FY 2005:	NA			FY 2006:	NA		
DELIVERY DATES:	FY 2003:	Feb-04			FY 2004:	Nov-04			FY 2005:	NA			FY 2006:	NA		
INSTALLATION SCHEDULE:	PY	1	2	3	4	1	2	3	4	1	2	3	4			
INPUT		16		4	6			4	4							
OUTPUT		16		4	6			4	4							
INSTALLATION SCHEDULE:		FY04				FY05				FY06						
INPUT		1	2	3	4	1	2	3	4	1	2	3	4			
OUTPUT		1	2	3	4	1	2	3	4	1	2	3	4			
		FY07				FY08				FY09				TC	TOTAL	
INPUT															85	119
OUTPUT															85	119

Notes/Comments

FY02 - One Unit reassigned to AIRLANT.

FY04 - One Unit to remain at Original Equipment Manufacturer (OEM) for integration testing

FY05 - Install unit cost increase due to platform specific requirements such as single vs dual antenna configuration.

Exhibit P-3a, Individual Modification
 Justification
 Unclassified
 Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE: Satellite Communications Systems
 COST CODE NR106
 MODELS OF SYSTEMS AFFECTED: SHF Terminals--AN/WSC-6(V)7 - Ship
 DESCRIPTION/JUSTIFICATION: Provides high data rate SHF satellite communications for intra and inter service message, data, voice and video transmission and reception.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	TC	Total
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	Qty	\$
RDT&E PROCUREMENT:											
Kit Quantity											
Installation Kits											
Installation Kits Nonrecurring											
Equipment - Single Channel (V)7	24	20.9	3	4.1	4	5.9	12	12.0			43 42.9
NRE				1.0	2	2.0	4	2.7			1.0
Equipment - Dual Channel V(7)								5.5			6 4.7
Terminal upgrades											5.5
Production Support		7.8		4.0		1.1		1.9			14.8
Other (DSA)		1.0		1.6		0.6		1.4			6.0
Interim Contractor Support											
Installation of Hardware*	14	22.5	4	6.9	7	11.8	7	9.4	9	0	47 74.1
PRIOR YR EQUIP	14	22.5	4	6.9	5	7.7	1	1.3		0	23 37.2
FY 02 EQUIP					2	4.0	6	8.1			3 5.4
FY 03 EQUIP											6 8.1
FY 04 EQUIP							9	13.6	6		15 23.4
FY 05 EQUIP											0 0.0
FY 06 EQUIP											0 0.0
FY 07 EQUIP											0 0.0
FY 08 EQUIP											0 0.0
FY 09 EQUIP											0 0.0
FY TC EQUIP											0 0.0
TOTAL INSTALLATION COST	22.5		6.9		11.8		9.4		13.6		0.0
TOTAL PROCUREMENT	52.3		17.7		21.3		33.0		14.4		0.0

METHOD OF IMPLEMENTATION:

	ADMINISTRATIVE LEAD-TIME:				1 Month	PRODUCTION LEAD-TIME:				12 Months			
	FY 2003:	May-03			FY 2004:	Feb-04			FY 2005:	NA	FY 2006:	NA	
	FY 2003:	May-04			FY 2004:	Feb-05			FY 2005:	NA	FY 2006:	NA	
INSTALLATION SCHEDULE:	PY	FY04				FY05				FY 06			
INPUT	25	1	2	3	4	1	2	3	4	1	2	3	
OUTPUT	25				4				5				
		FY 07				FY 08				FY 09			
INSTALLATION SCHEDULE:		1	2	3	4	1	2	3	4	1	2	3	4
INPUT											0		47
OUTPUT											0		47

Notes/Comments

PY - One (1) unit procured with FY99 Shore funds installed FY00 Ship, Two (2) of the FY00 procurements will be installed at shore sites, one (1) in FY01 and one (1) in FY02.

FY04 - One dual channel terminal will remain at the Original Equipment Manufacturer (OEM) for integration testing.

FY04 - FY04 is the last year to procure on this contract, however, there are no install availabilities for the last six ships until FY06.

Exhibit P-3a, Individual Modification
 Justification
 Unclassified
 Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE: Satellite Communications Systems
 COST CODE NR106
 MODELS OF SYSTEMS AFFECTED: SHF Terminals--AN/WSC-6(V)7 - Ship (Backfits)
 DESCRIPTION/JUSTIFICATION: Equipment to modify installed AN/WSC-6 (V) 7 system to meet Radar Cross Section reduction specifications.

321500

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	TC	Total
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	\$
RDT&E											
PROCUREMENT:											
Kit Quantity											
Installation Kits - RCS Backfit	4	0.4	8	0.6	6	0.5	12	1.1			30
Installation Kits - WGS Backfits											0.0
Equipment Nonrecurring - RCS Backfit		0.9									0.9
Engineering Change Orders											
Data											
Training Equipment											
Production Support											0.4
Other (DSA)											0.4
Interim Contractor Support											
Installation of Hardware*											
PRIOR YR EQUIP	4	0.4	4	0.4	10	1.3	8	0.9	4	0.4	30
FY 02 EQUIP	4	0.4	4	0.4	4	0.5	6	0.8			3.5
FY 03 EQUIP											0.4
FY 04 EQUIP											1.0
FY 05 EQUIP											0.8
FY 06 EQUIP											0.0
FY 07 EQUIP											0.0
FY 08 EQUIP											0.0
FY 09 EQUIP											0.0
FY TC EQUIP											0.0
TOTAL INSTALLATION COST		0.0	0.4	0.4	1.3	0.9	0.4	0.0	0.0	0.0	3.5
TOTAL PROCUREMENT		1.3	1.2	1.0	2.8	1.1	0.4	0.0	0.0	0.0	7.8

METHOD OF IMPLEMENTATION:

	ADMINISTRATIVE LEAD-TIME:				1 Month	PRODUCTION LEAD-TIME:				10 Months RCS					
INSTALLATION SCHEDULE:	PY	1	2	3	4		1	2	3	4		1	2	3	4
INPUT	8	4	3	3					6	2		2	2		
OUTPUT	8	4	3	3					6	2		2	2		
INSTALLATION SCHEDULE:		1	2	3	4		1	2	3	4		1	2	3	4
INPUT													0	30	
OUTPUT													0	30	

Notes/Comments

FY04 - FY04 is the last year to procure on this contract, however, there are no install availabilities for the last four ships until FY06.

Exhibit P-3a, Individual Modification
 Justification
 Unclassified
 Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE:
COST CODE
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION:

Satellite Communications Systems

NR106

SHF Terminals --AN/WSC-6(V)7 - Shore

AN/WSC-6(V)7 terminals provide training and technical support for high data rate SHF satellite communications for inter and intra service message, data, voice and video transmission.

321500

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY Qty	\$	FY 02 Qty	\$	FY 03 Qty	\$	FY 04 Qty	\$	FY 05 Qty	\$	FY 06 Qty	\$	FY 07 Qty	\$	FY 08 Qty	\$	FY 09 Qty	\$	TC Qty	\$	Total Qty	\$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	2	1.5	0	0.2																2	1.7	
Equipment-WGS Backfits																				0	0.0	
Equipment- Dual Channel Backfits																				1	0.1	
Data																				0	0.0	
Training Equipment																				0	0.0	
Production Support																				1.8	0.0	
Other (DSA)																				0	0.0	
Interim Contractor Support																				0	0.0	
Installation of Hardware*	1	0.8	2	1.2	0	0.0	0	0.0	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	4	2.2	
PRIOR YR EQUIP	1	0.8	2	1.2																3	2.0	
FY 02 EQUIP																				0	0.0	
FY 03 EQUIP																				0	0.0	
FY 04 EQUIP																				1	0.2	
FY 05 EQUIP																				0	0.0	
FY 06 EQUIP																				0	0.0	
FY 07 EQUIP																				0	0.0	
FY 08 EQUIP																				0	0.0	
FY 09 EQUIP																				0	0.0	
FY TC EQUIP																				0	0.0	
TOTAL INSTALLATION COST		0.8		1.2		0.0		0.0		0.2		0.0		0.0		0.0		0.0		0.0	2.2	
TOTAL PROCUREMENT		4.1		1.4		0.0		0.1		0.2		0.0		0.0		0.0		0.0		0.0	5.8	

METHOD OF IMPLEMENTATION:

CONTRACT DATES: FY 2003: NA FY 2004: Feb-04 FY 2005: NA FY 2006:

DELIVERY DATES: FY 2003: NA FY 2004: Feb-05 FY 2005: NA FY 2006:

INSTALLATION SCHEDULE:	PY	FY04				FY05				FY 06			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT		3					1						
OUTPUT		3					1						

INSTALLATION SCHEDULE:	PY	FY07				FY08				FY 09				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4		
INPUT														0	4
OUTPUT														0	4

Notes/Comments

PY: FY99 Unit installed on Ship, FY01- One (1) install routed from FY00 Ship Procurement .

FY02 - Zero (0) quantity is ancillary baseband equipment

FY02 - One (1) install routed from FY00 Ship Procurement

Exhibit P-3a, Individual Modification
Justification
Unclassified
Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE: Satellite Communications Systems
 COST CODE NR106
 MODELS OF SYSTEMS AFFECTED: SHF Terminals--AN/WSC-6(V9) - Ship
 DESCRIPTION/JUSTIFICATION: Provides high data rate SHF satellite communications for intra and inter service message, data, voice and video transmission and reception.

321500

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY Qty	\$	FY 02 Qty	\$	FY 03 Qty	\$	FY 04 Qty	\$	FY 05 Qty	\$	FY 06 Qty	\$	FY 07 Qty	\$	FY 08 Qty	\$	FY 09 Qty	\$	TC Qty	\$	Total Qty	\$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment - C/X Terminal	5	6.7	5	4.9	3	3.8		20	31.3		(FY04 through FY09 procurements transferred to (V)10 Ship)									13	15.4	
Equipment-C/X/Ka Ready Terminal								var	1.5										20	31.3		
Terminal Upgrades																				1.5	0.0	
Data																				0.0	0.0	
Training Equipment																				0.0	0.0	
Production Support																				14.4	14.4	
Other (DSA)																				6.3	6.3	
Interim Contractor Support																				0.0	0.0	
Installation of Hardware*	1	1.9	1	1.7	3	4.6	6	9.0	8	12.1	12	17.7	0	0.0	0	0.0	0	0.0	0.0	31	47.0	
PRIOR YR EQUIP	1	1.9	1	1.7	1	1.5	3	3.1	3	4.5										3	5.1	
FY 02 EQUIP																				5	7.6	
FY 03 EQUIP																				3	4.5	
FY 04 EQUIP																				20	29.8	
FY 05 EQUIP																				0	0.0	
FY 06 EQUIP																				0	0.0	
FY 07 EQUIP																				0	0.0	
FY 08 EQUIP																				0	0.0	
FY 09 EQUIP																				0	0.0	
FY TC EQUIP																				0	0.0	
TOTAL INSTALLATION COST		1.9		1.7		4.6		9.0		12.1		17.7		0.0		0.0		0.0		0.0	47.0	
TOTAL PROCUREMENT		14.8		11.2		11.5		47.6		12.5		18.3		0.0		0.0		0.0		0.0	115.9	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEAD-TIME: 1 Month PRODUCTION LEAD-TIME: 10 Months/16 months

CONTRACT DATES: FY 2003: Jun-03 FY 2004: Feb-04 FY 2005: NA FY 2006: NA

DELIVERY DATES: FY 2003: Apr-04 FY 2004: Jun-05 FY 2005: NA FY 2006: NA

INSTALLATION SCHEDULE:	PY	1	2	FY04	3	4	1	2	FY05	3	4	1	2	FY06	3	4

INPUT 5 3 3 3 5 7 5

OUTPUT 5 3 3 3 5 7 5

INSTALLATION SCHEDULE:	FY07				FY08				FY09				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT 0 31

OUTPUT 0 31

Notes/Comments

Two (2) FY00 C/X terminal procurements will be installed at shore sites, one (1) in FY01 and one (1) in FY02.

(V)9 C/X/Ka Ready Terminal is equal to (V)10 terminal without Ka-specific hardware and software components. With addition of (V)10 upgrade, C/X/Ka Ready (V)9 will be converted to (V)10 terminal.

FY04 - Terminal upgrades are various procurements of C-Band EMI mitigation kits.

Exhibit P-3a, Individual Modification
Justification
Unclassified
Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE: Satellite Communications Systems
 COST CODE NR106
 MODELS OF SYSTEMS AFFECTED: SHF Terminals--AN/WSC-6(V)9 - Shore
 DESCRIPTION/JUSTIFICATION: Provides high data rate SHF satellite communications for intra and inter service message, data, voice and video transmission and reception.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	TC	Total
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty
RDT&E											
PROCUREMENT:											
Kit Quantity											
Installation Kits											
Installation Kits Nonrecurring											
Equipment											
Equipment-WGS Backfit											
Engineering Change Orders											
Data											
Training Equipment											
Production Support											0.0
Other (DSA)											
Interim Contractor Support											
Installation of Hardware*	1	0.4	1	0.5	0	0.0	0	0.0	0	0.0	0.8
Installation of Modems											0.0
PRIOR YR EQUIP	1	0.4	1	0.5							0.8
FY 02 EQUIP											0.0
FY 03 EQUIP											0.0
FY 04 EQUIP											0.0
FY 05 EQUIP											0.0
FY 06 EQUIP											0.0
FY 07 EQUIP											0.0
FY 08 EQUIP											0.0
FY 09 EQUIP											0.0
FY TC EQUIP											0.0
TOTAL INSTALLATION COST	0.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
TOTAL PROCUREMENT	0.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8

METHOD OF IMPLEMENTATION:

CONTRACT DATES:	FY 2003:	NA	FY 2004:	NA	FY 2005:	NA	FY 2006:	NA
DELIVERY DATES:	FY 2003:	NA	FY 2004:	NA	FY 2005:	NA	FY 2006:	NA
INSTALLATION SCHEDULE:	PY	1 2 <u>FY04</u> 3 4		1 2 <u>FY05</u> 3 4		1 2 <u>FY06</u> 3 4		
INPUT		2						
OUTPUT		2						
INSTALLATION SCHEDULE:		1 2 <u>FY07</u> 3 4		1 2 <u>FY08</u> 3 4		1 2 <u>FY09</u> 3 4		
INPUT							0	2
OUTPUT							0	2

Notes/Comments

FY install is from FY00 Ship Procurement. FY02 Installation from FY00 Ship procurement (trainer).

Exhibit P-3a, Individual Modification
 Justification
 Unclassified
 Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE: Satellite Communications Systems
 COST CODE NR106
 MODELS OF SYSTEMS AFFECTED: SHF Terminals -- SUBHDR SHF Mod Kit
 DESCRIPTION/JUSTIFICATION: Provides high data rate SHF satellite communications for intra and inter service message, data, voice and video transmission and reception for submarines.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY Qty	\$	FY 02 Qty	\$	FY 03 Qty	\$	FY 04 Qty	\$	FY 05 Qty	\$	FY 06 Qty	\$	FY 07 Qty	\$	FY 08 Qty	\$	FY 09 Qty	\$	TC Qty	\$	Total Qty	\$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment																						
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Production Support																						
Other (DSA)																						
Interim Contractor Support																						
Installation of Hardware*																						
PRIOR YR EQUIP	7	0.6																				
FY 02 EQUIP	7	0.2	0	0.0	0	0.0	0	0.0	0	0.0	12	4.2										
FY 03 EQUIP																						
FY 04 EQUIP																						
FY 05 EQUIP																						
FY 06 EQUIP																						
FY 07 EQUIP																						
FY 08 EQUIP																						
FY 09 EQUIP																						
FY TC EQUIP																						
TOTAL INSTALLATION COST	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	2.0		
TOTAL PROCUREMENT	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	18.2	23.6		

METHOD OF IMPLEMENTATION:

CONTRACT DATES: FY 2003: NA FY 2004: NA FY 2005: NA FY 2006: Nov-05

DELIVERY DATES: FY 2003: NA FY 2004: NA FY 2005: NA FY 2006: Feb-07

	PY	1	2	FY 04	3	4	1	2	FY05	3	4	1	2	FY06	3	4
--	----	---	---	-------	---	---	---	---	------	---	---	---	---	------	---	---

INPUT

7

OUTPUT

7

	1	2	FY 07	3	4	1	2	FY08	3	4	1	2	FY09	3	4	TC	TOTAL
--	---	---	-------	---	---	---	---	------	---	---	---	---	------	---	---	----	-------

INPUT

8

4

48

67

OUTPUT

8

4

48

67

Notes/Comments

Exhibit P-3a, Individual Modification
Justification
Unclassified
Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE: Satellite Communications Systems
 COST CODE NR106
 MODELS OF SYSTEMS AFFECTED: SHF Terminals -- AN/WSC-6(V)7 Modems
 DESCRIPTION/JUSTIFICATION: Shore side modems for compatibility with the AN/WSC-6(V)7 terminals to support increased SHF capacity.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES

FINANCIAL PLAN: (\$ in millions)

	PY	FY 02		FY 03		FY 04		FY 05		FY 06		FY 07		FY 08		FY 09		TC	Total
	Qty	\$	Qty	\$															
RDT&E																			
PROCUREMENT:																			
Kit Quantity																			
Installation Kits																			
Installation Kits Nonrecurring																			
Equipment																			
Equipment Nonrecurring																			
Engineering Change Orders																			
Data																			
Training Equipment																			
Production Support																			
Other (DSA)																			
Interim Contractor Support																			
Installation of Hardware*																			
PRIOR YR EQUIP																			
FY 02 EQUIP	68	2.2			36	0.5												104	2.8
FY 03 EQUIP																			
FY 04 EQUIP																			
FY 05 EQUIP																			
FY 06 EQUIP																			
FY 07 EQUIP																			
FY 08 EQUIP																			
FY 09 EQUIP																			
FY TC EQUIP																			
TOTAL INSTALLATION COST		3.8		0.4	0.0		1.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		5.2
TOTAL PROCUREMENT		9.2		0.4	0.6		1.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		11.2
METHOD OF IMPLEMENTATION																			

ADMINISTRATIVE LEAD-TIME: 1 Month PRODUCTION LEAD-TIME: 12 Months

CONTRACT DATES:	FY 2003:	May-03	FY 2004:	NA	FY 2005:	N/A	FY 2006:	N/A											
DELIVERY DATES:	FY 2003:	May-04	FY 2004:	NA	FY 2005:	N/A	FY 2006:	N/A											
INSTALLATION SCHEDULE:	PY	1	2	3	4	1	2	3	4	1	2	3	4						
INPUT		68		18	18														
OUTPUT		68		18	18														
INSTALLATION SCHEDULE:		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	TC	TOTAL
INPUT																		0	104
OUTPUT																		0	104

Notes/Comments

Exhibit P-3a, Individual Modification
 Justification
 Unclassified
 Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE: Satellite Communications Systems
 COST CODE NR106
 MODELS OF SYSTEMS AFFECTED: SHF Terminals -- AN/WSC-6(V)9 Modems - Shore
 DESCRIPTION/JUSTIFICATION: Shore side modems for compatibility with the AN/WSC-6(V)9 terminals to support increased SHF capacity.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY Qty	\$	FY 02 Qty	\$	FY 03 Qty	\$	FY 04 Qty	\$	FY 05 Qty	\$	FY 06 Qty	\$	FY 07 Qty	\$	FY 08 Qty	\$	FY 09 Qty	\$	TC Qty	\$	Total Qty	\$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment																						
Advanced MODEM NRE																						
Data																						
Training Equipment																						
Production Support																						
Other (DSA)																						
Interim Contractor Support																						
Installation of Hardware*																						
PRIOR YR EQUIP																						
FY 02 EQUIP																						
FY 03 EQUIP																						
FY 04 EQUIP																						
FY 05 EQUIP																						
FY 06 EQUIP																						
FY 07 EQUIP																						
FY 08 EQUIP																						
FY 09 EQUIP																						
FY TC EQUIP																						
TOTAL INSTALLATION COST		0.2		0.2		0.0		0.6		0.0		0.0		0.0		0.0		0.0		0.0		1.0
TOTAL PROCUREMENT		1.7		0.2		0.4		0.6		0.0		0.0		0.0		0.0		0.0		0.0		3.0

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEAD-TIME: 1 Month PRODUCTION LEAD-TIME: 12 Months

CONTRACT DATES:

FY 2003: Aug-03 FY 2004: NA FY 2005: NA FY 2006: NA

DELIVERY DATES:

FY 2003: Aug-04 FY 2004: NA FY 2005: NA FY 2006: NA

INSTALLATION SCHEDULE:

PY	1	2	3	4	1	2	3	4	1	2	3	4

INPUT

12 20

OUTPUT

12 20

INSTALLATION SCHEDULE:

	1	2	3	4	1	2	3	4	1	2	3	4	TC	TOTAL

INPUT

0 32

OUTPUT

0 32

Notes/Comments

Exhibit P-3a, Individual Modification
 Justification
 Unclassified
 Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE: Satellite Communications Systems
 COST CODE NR106
 MODELS OF SYSTEMS AFFECTED: SHF Terminals -- EBEM Modems - Ship
 DESCRIPTION/JUSTIFICATION: Shore side modems for compatibility with the AN/WSC-6(V)9 terminals to support increased SHF capacity.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY Qty	\$	FY 02 Qty	\$	FY 03 Qty	\$	FY 04 Qty	\$	FY 05 Qty	\$	FY 06 Qty	\$	FY 07 Qty	\$	FY 08 Qty	\$	FY 09 Qty	\$	TC Qty	\$	Total Qty	\$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment																						
Advanced MODEM NRE																						
Data																						
Training Equipment																						
Production Support																						
Other (DSA)																						
Interim Contractor Support																						
Installation of Hardware*																						
PRIOR YR EQUIP																						
FY 02 EQUIP																						
FY 03 EQUIP																						
FY 04 EQUIP																						
FY 05 EQUIP																						
FY 06 EQUIP																						
FY 07 EQUIP																						
FY 08 EQUIP																						
FY 09 EQUIP																						
FY TC EQUIP																						
TOTAL INSTALLATION COST	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.9	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	4.1	4.1	
TOTAL PROCUREMENT	0.0	1.4	0.0	0.0	2.9	3.1	2.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.7	0.7	11.1	11.1	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEAD-TIME: 1 MONTH PRODUCTION LEAD-TIME: 6 MONTHS

CONTRACT DATES:	FY 2003:	NA	FY 2004:	Apr-04	FY 2005:	Dec-04	FY 2006:	Nov-05												
DELIVERY DATES:	FY 2003:	NA	FY 2004:	Oct-04	FY 2005:	Jun-05	FY 2006:	May-06												
INSTALLATION SCHEDULE:	PY	1	2	FY04 3	4	1	2	FY05 3	4	1	2	FY06 3	4							
INPUT	0					48	48	22				1	22	23						
OUTPUT	0					48	48	22				1	22	23						
INSTALLATION SCHEDULE:		1	2	FY07 3	4	1	2	FY08 3	4	1	2	FY09 3	4							
INPUT		6	6									5	5			16		202		
OUTPUT		6	6									5	5			16		202		

Notes/Comments

FY02: Ten (10) MODEMs required for production acceptance testing, no installation required.

FY04 - One (1) EBEM (Enhanced Bandwidth Efficient Modem) will remain at Original Equipment Manufacturer (OEM) for integration testing.

Exhibit P-3a, Individual Modification
 Justification
 Unclassified
 Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE:

Satellite Communications Systems

321500

COST CODE:

NR106

MODELS OF SYSTEMS AFFECTED:

SHF Terminals -- EBEM Modems - Shore

DESCRIPTION/JUSTIFICATION:

Provides High Data Rate SHF Satellite Communications for the Intra and Inter service message, data, voice and video Transmission and reception.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

RDT&E

PROCUREMENT:

Kit Quantity

Installation Kits

Installation Kits Nonrecurring

Equipment

Equipment

Engineering Change Orders

Data

Training Equipment

Production Support

Other (DSA)

Interim Contractor Support

Installation of Hardware*

Installation of Modems

PRIOR YR EQUIP

FY 02 EQUIP

FY 03 EQUIP

FY 04 EQUIP

FY 05 EQUIP

FY 06 EQUIP

FY 07 EQUIP

FY 08 EQUIP

FY 09 EQUIP

FY TC EQUIP

TOTAL INSTALLATION COST

TOTAL PROCUREMENT

METHOD OF IMPLEMENTATION:

	<u>PY</u>	\$	<u>FY 02</u>	\$	<u>FY 03</u>	\$	<u>FY 04</u>	\$	<u>FY 05</u>	\$	<u>FY 06</u>	\$	<u>FY 07</u>	\$	<u>FY 08</u>	\$	<u>FY 09</u>	\$	<u>TC</u>	\$	<u>Total</u>	\$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment																						
Equipment																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Production Support																						
Other (DSA)																						
Interim Contractor Support																						
Installation of Hardware*																						
Installation of Modems																						
PRIOR YR EQUIP																						
FY 02 EQUIP																						
FY 03 EQUIP																						
FY 04 EQUIP																						
FY 05 EQUIP																						
FY 06 EQUIP																						
FY 07 EQUIP																						
FY 08 EQUIP																						
FY 09 EQUIP																						
FY TC EQUIP																						
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		2.6		0.0		0.0		0.0		0.0			2.6	
TOTAL PROCUREMENT		0.0		0.0		0.0		1.5		3.3		0.0		0.0		0.0		0.0			4.8	

ADMINISTRATIVE LEAD-TIME: 1 Month PRODUCTION LEAD-TIME: 6 Months

CONTRACT DATES:

FY 2003: NA FY 2004: Apr-04 FY 2005: Nov-04 FY 2006: NA

DELIVERY DATES:

FY 2003: NA FY 2004: Oct-04 FY 2005: May-05 FY 2006: NA

INSTALLATION SCHEDULE:

<u>PY</u>	1	2	<u>FY04</u>	1	2	<u>FY05</u>	1	2	<u>FY06</u>

INPUT

	1	2	3	4	1	2	3	4

OUTPUT

	1	2	3	4	1	2	3	4

INSTALLATION SCHEDULE:

	1	2	<u>FY07</u>	1	2	<u>FY08</u>	1	2	<u>FY09</u>	TC	<u>TOTAL</u>

INPUT

	1	2	3	4	1	2	3	4	TC	<u>TOTAL</u>

OUTPUT

	1	2	3	4	1	2	3	4	TC	<u>TOTAL</u>

Notes/Comments

Exhibit P-3a, Individual Modification
 Justification
 Unclassified
 Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE: Satellite Communications Systems
 COST CODE NR106
 MODELS OF SYSTEMS AFFECTED: SHF Terminals--AN/WSC-6(V)10 Ship
 DESCRIPTION/JUSTIFICATION: Provides High Data Rate SHF Satellite Communications for the Intra and Inter service message, data, voice and video Transmission and reception.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY Qty	\$	FY 02 Qty	\$	FY 03 Qty	\$	FY 04 Qty	\$	FY 05 Qty	\$	FY 06 Qty	\$	FY 07 Qty	\$	FY 08 Qty	\$	FY 09 Qty	\$	TC Qty	\$	Total Qty	\$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment																						
Data																						
Training Equipment																						
Production Support																						
Other (DSA)																						
Interim Contractor Support																						
Installation of Hardware*																						
PRIOR YR EQUIP																						
FY 02 EQUIP																						
FY 03 EQUIP																						
FY 04 EQUIP																						
FY 05 EQUIP																						
FY 06 EQUIP																						
FY 07 EQUIP																						
FY 08 EQUIP																						
FY 09 EQUIP																						
FY TC EQUIP																						
TOTAL INSTALLATION COST	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	1.6	17.7	0.0	10	14.7	16	23.5	42	62.0	0.0	0.0	0.0	
TOTAL PROCUREMENT	0.0	0.0	0.0	0.0	12.7	11.0	28.0	19.6	28.0	19.6	23.5	16.4	10	14.7	16	23.5	57.7	168.8	0.0	0.0	0.0	

METHOD OF IMPLEMENTATION:

CONTRACT DATES: FY 2003: NA FY 2004: Feb-04 FY 2005: Dec-04 FY 2006: Dec-05

DELIVERY DATES: FY 2003: NA FY 2004: Jun-05 FY 2005: Dec-05 FY 2006: Dec-06

INSTALLATION SCHEDULE:	PY	FY 04				FY 05				FY 06				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4		

INPUT	0					2	1							1	
	OUTPUT	0						2						1	1

INSTALLATION SCHEDULE:	PY	FY 07				FY 08				FY 09				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4		

INPUT	5	5	2							5	5			16	42
	OUTPUT	5	5	2						5	5			16	42

Notes/Comments

FY04 - One (V)10 terminal will remain at the Original Equipment Manufacturer (OEM) for integration testing.

Exhibit P-3a, Individual Modification
 Justification
 Unclassified
 Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE: Satellite Communications Systems
 COST CODE NR106
 MODELS OF SYSTEMS AFFECTED: SHF Terminals--AN/WSC-6(V)10 - Ship Upgrades
 DESCRIPTION/JUSTIFICATION: Equipment to convert installed AN/WSC-6 (V)9 system to (V)10 system.

321500

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES

FINANCIAL PLAN: (\$ in millions)

	PY	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	TC	Total
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	\$
RDT&E											
PROCUREMENT:											
Kit Quantity											
Installation Kits											
Installation Kits Nonrecurring											
Equipment - Upgrade the (V)9 C/X to (V)10											
Equipment - Upgrade (V)9 C/X/Ka Ready to (V)10											
Data											
Training Equipment											
Production Support											
Other (DSA)											
Interim Contractor Support											
Installation of Hardware*											
PRIOR YR EQUIP											
FY 02 EQUIP											
FY 03 EQUIP											
FY 04 EQUIP											
FY 05 EQUIP											
FY 06 EQUIP											
FY 07 EQUIP											
FY 08 EQUIP											
FY 09 EQUIP											
FY TC EQUIP											
TOTAL INSTALLATION COST	0.0	0.0	0.0	0.0	0.4	3.9	8.0	0.4	1.2	0.0	13.9
TOTAL PROCUREMENT	0.0	0.0	0.0	3.1	6.6	18.2	14.9	9.2	1.2	0.0	53.2
METHOD OF IMPLEMENTATION											

ADMINISTRATIVE LEAD-TIME: 1 Month PRODUCTION LEAD-TIME: 16/12 Months
 Ka Ready 6 Months

CONTRACT DATES: FY 2003: NA FY 2004: Feb-04 FY 2005: Dec-04 FY 2006: Dec-05

DELIVERY DATES: FY 2003: NA FY 2004: Jun-05 FY 2005: Dec-05 FY 2006: Dec-06

INSTALLATION SCHEDULE:	PY	1	2	FY 04	3	4	1	2	FY05	3	4	1	2	FY06	3	4
INPUT	0						1					2		4		8
OUTPUT	0											6		8		

INSTALLATION SCHEDULE:	1	2	FY 07	3	4	5	6	FY 08	7	8	9	10	FY 09	11	12	TC	TOTAL
INPUT	2		7	4		1					3			0		32	
OUTPUT	6		7			1					3			0		32	

Notes/Comments

AN/WSC-6(V)10 Ship Upgrades were formerly identified as AN/WSC-6(V)9 Ship (Backfits)

(V)9 C/X/Ka Ready Terminal is equal to (V)10 terminal without Ka-specific hardware and software components. With addition of (V)10 upgrade, C/X/Ka Ready (V)9 will be converted to (V)10 terminal.

FY04/05/06 - Upgrades to the (V)9 C/X terminals have higher unit cost due to initial 5 ship units are produced as complete terminals to begin the backfit process and the remaining units are solely backfits

Exhibit P-3a, Individual Modification
 Justification
 Unclassified
 Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE: Satellite Communications Systems
 COST CODE NR106
 MODELS OF SYSTEMS AFFECTED: SHF Terminals--AN/WSC-6(V)10 Shore
 DESCRIPTION/JUSTIFICATION: Provides High Data Rate SHF Satellite Communications for the Intra and Inter service message, data, voice and video Transmission and reception.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY Qty	\$	FY 02 Qty	\$	FY 03 Qty	\$	FY 04 Qty	\$	FY 05 Qty	\$	FY 06 Qty	\$	FY 07 Qty	\$	FY 08 Qty	\$	FY 09 Qty	\$	TC Qty	\$	Total Qty	\$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment - (V)10 Upgrade to the (V)9 C/X																						
Data																						
Training Equipment																						
Production Support																						
Other (DSA)																						
Interim Contractor Support																						
Installation of Hardware*																						
PRIOR YR EQUIP																						
FY 02 EQUIP																						
FY 03 EQUIP																						
FY 04 EQUIP																						
FY 05 EQUIP																						
FY 06 EQUIP																						
FY 07 EQUIP																						
FY 08 EQUIP																						
FY 09 EQUIP																						
FY TC EQUIP																						
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		0.0		0.0		0.3		0.0		0.0		0.0		0.3
TOTAL PROCUREMENT		0.0		0.0		0.0		0.0		0.0		1.8		0.3		0.0		0.0		0.0		2.1

METHOD OF IMPLEMENTATION:

CONTRACT DATES: FY 2003: NA FY 2004: NA FY 2005: NA FY 2006: Dec-05

DELIVERY DATES: FY 2003: NA FY 2004: NA FY 2005: NA FY 2006: Dec-06

INSTALLATION SCHEDULE:	PY	1	2	FY 04	3	4	1	2	FY05	3	4	1	2	FY06	3	4
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INPUT

0

OUTPUT

0

INSTALLATION SCHEDULE:	1	2	FY 07	3	4	1	2	FY08	3	4	1	2	FY09	3	4	TC	TOTAL
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INPUT

1

OUTPUT

1

Notes/Comments

Exhibit P-3a, Individual Modification
 Justification
 Unclassified
 Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE: Satellite Communications Systems
 COST CODE NR107
 MODELS OF SYSTEMS AFFECTED: EHF Terminals--AN/USC-38(V) FOT - Ship
 DESCRIPTION/JUSTIFICATION: Provides jam resistant, low probability of intercept satellite communications and Full Milstar LDR Operational Capabilities (FMLOC) for shore stations, submarines and surface ships in an electromagnetic threat.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY Qty	\$	FY 02 Qty	\$	FY 03 Qty	\$	FY 04 Qty	\$	FY 05 Qty	\$	FY 06 Qty	\$	FY 07 Qty	\$	FY 08 Qty	\$	FY 09 Qty	\$	TC Qty	\$	Total Qty	\$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	253	444.4	22	22.6	11	14.2	39	29.3	Var.	1.9	Var.	1.4	0	0.0	0	0.0	0	0.0	11	16.6	336	530.5
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Production Support																						
Other (DSA)																						
Interim Contractor Support																						
Installation of Hardware*	203	224.0	22	18.8	24	19.0	28	18.7	15	10.8	11	8.8	0	0.0	0	0.0	0	0.0	11	9.0	314	309.1
PRIOR YR EQUIP	203	224.0	22	18.8	24	19.0	5	3.3	22	14.7	1	0.6	10	7.2	11	8.8					254	265.1
FY 02 EQUIP																					22	14.7
FY 03 EQUIP																					11	7.9
FY 04 EQUIP																					16	12.4
FY 05 EQUIP																					0	0.0
FY 06 EQUIP																					0	0.0
FY 07 EQUIP																					0	0.0
FY 08 EQUIP																					0	0.0
FY 09 EQUIP																					0	0.0
FY TC EQUIP																					11	9.0
TOTAL INSTALLATION COST	224.0		18.8		19.0		18.7		10.8		8.8		0.0		0.0		0.0		0.0		9.0	309.1
TOTAL PROCUREMENT	680.1		47.2		38.0		52.0		17.7		11.7		0.0		0.0		0.0		0.0		27.6	874.4

METHOD OF IMPLEMENTATION:

	ADMINISTRATIVE LEAD-TIME:				1 Month	PRODUCTION LEAD-TIME:				18 Months										
CONTRACT DATES:	FY 2003:	Dec-02			FY 2004:	Mar-04			FY 2005:	NA			FY 2006:	NA						
DELIVERY DATES:	FY 2003:	Jun-04			FY 2004:	Sep-05			FY 2005:	NA			FY 2006:	NA						
INSTALLATION SCHEDULE:	PY	1	2	FY04	3	4		1	2	FY05	3	4		1	2	FY06	3	4		
INPUT	249	5	10	10	3			5	4	0	6			5	3	3	0			
OUTPUT	245	4	5	10	10			3	5	4	0			6	5	3	3			
INSTALLATION SCHEDULE:		1	2	FY07	3	4		1	2	FY08	3	4		1	2	FY09	3	4	TC	TOTAL
INPUT																			11	314
OUTPUT																			11	314

Notes/Comments

Unit cost varies based on ship/sub configuration of procurement.

Production Support is required for AN-USC 38V terminal ongoing deliveries for production monitoring, acceptance testing and initial system familiarization.

PY Delta between procured and installed is due to: One (1) Production Representative Model (FY98) will be used as a Test Asset, the addition of two (2) ship configured terminals procured with FY00 shore funds.

FY04 is 18 SSBN/GN terminals for Submarine Warfare Division (N77). No SPAWAR installation funds required. Five (5) submarine Test and Training Equipment do not require installation.

FY05/FY06 quantity of "Var." reflects procurement of ancillary equipment.

Exhibit P-3a, Individual Modification
 Justification
 Unclassified
 Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE: Satellite Communications Systems
 COST CODE NR107
 MODELS OF SYSTEMS AFFECTED: EHF Terminals --AN/USC-38(V) FOT - Shore
 DESCRIPTION/JUSTIFICATION: Provides jam resistant, low probability of intercept satellite communications and Full Milstar LDR Operational Capabilities (FMLOC) for shore stations, submarines and surface ships in an electromagnetic threat.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY Qty	\$	FY 02 Qty	\$	FY 03 Qty	\$	FY 04 Qty	\$	FY 05 Qty	\$	FY 06 Qty	\$	FY 07 Qty	\$	FY 08 Qty	\$	FY 09 Qty	\$	TC Qty	\$	Total Qty	\$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	56	97.1	1	1.9	Var.	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	7	11.0	64	110.7
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Other - Equipment not requiring installation	13	6.3																	13	6.3		
Production Support		4.4		0.5		0.4		0.4											0.7		6.3	
Other (DSA)																						
Interim Contractor Support																						
Installation of Hardware*	39	45.0	0	0.0	1	1.7	6	5.6	4	3.8	5	4.9	0	0.0	0	0.0	0	0.0	7	7.4	62	68.3
PRIOR YR EQUIP	39	45.0	0	0.0	1	1.7	6	5.6	4	3.8	4	3.9	1	1.0					54		59.9	
FY 02 EQUIP																			1		1.0	
FY 03 EQUIP																			0		0.0	
FY 04 EQUIP																			0		0.0	
FY 05 EQUIP																			0		0.0	
FY 06 EQUIP																			0		0.0	
FY 07 EQUIP																			0		0.0	
FY 08 EQUIP																			0		0.0	
FY 09 EQUIP																			0		0.0	
FY TC EQUIP																			7		7.4	
TOTAL INSTALLATION COST	45.0	0.0	1.7		5.6	3.8	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7	7.4		68.3
TOTAL PROCUREMENT	152.8	2.3	2.9		6.0	3.8	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.0		19.0	

METHOD OF IMPLEMENTATION:

	ADMINISTRATIVE LEAD-TIME:				PRODUCTION LEAD-TIME:								
	1 Month				18 Months								
CONTRACT DATES:	FY 2003:	NA			FY 2004:	NA			FY 2005:	NA			
DELIVERY DATES:	FY 2003:	NA			FY 2004:	NA			FY 2005:	NA			
INSTALLATION SCHEDULE:	PY	1	2	FY04	3	4			1	2	FY05	3	4
INPUT	40	2	2	1	1				2	1	1	2	
OUTPUT	39	1	2	2	1				1	2	1	1	
INSTALLATION SCHEDULE:		1	2	FY07	3	4			1	2	FY08	3	4
INPUT									1	2	FY09	3	4
OUTPUT									2	1	2		
									2	1	2		
									7		62		
									7		62		

Notes/Comments

PY delta between procurement and installation reflects 2 Ship configured FOTs originally procured for training sites, transferred to Ship installations.

PY cost reflect procurement of 13 Single Channel Anti-Jam Man Portables (SCAMPS). Units do not require installation.

FY04: Production Support is required for AN-USC 38V terminal ongoing deliveries and installations for production monitoring, acceptance testing and initial system familiarization.

Exhibit P-3a, Individual Modification
 Justification
 Unclassified
 Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE: Satellite Communications Systems
 COST CODE NR107
 MODELS OF SYSTEMS AFFECTED:
EHF Terminals--NECC - Ship
 DESCRIPTION/JUSTIFICATION: Provides for satellite communications connectivity between shore stations, submarines, and surface ships. Includes network management; multiplexing and channel sharing; resource management; communications management/planning; network control/monitoring; circuit switching and packet switching.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY Qty	\$	FY 02 Qty	\$	FY 03 Qty	\$	FY 04 Qty	\$	FY 05 Qty	\$	FY 06 Qty	\$	FY 07 Qty	\$	FY 08 Qty	\$	FY 09 Qty	\$	TC Qty	\$	Total Qty	\$	
RDT&E																							
PROCUREMENT:																							
Kit Quantity																							
Installation Kits																							
Installation Kits Nonrecurring																							
Equipment	182	23.6	39	4.5	12	2.8	21	3.8	10	5.4	8	1.6	0	0.0	0	0.0	0	11	1.9	283	43.6		
Equipment Nonrecurring																							
Engineering Change Orders																							
Data																							
Other (Test Units)	4	0.6																	4	0.6			
Training Equipment																							
Production Support		2.4		0.7		0.2		0.5		0.4		0.3							0.1	4.6			
Other (DSA)		0.2		0.2		1.2		2.2		1.4		0.3							0.5	5.9			
Interim Contractor Support																							
Installation of Hardware*	172	12.8	34	4.0	27	3.9	17	7.7	13	8.8	9	3.5	0	0.0	0	0.0	0	11	2.9	283	43.7		
PRIOR YR EQUIP	172	12.8	10	1.2															182	14.0			
FY 02 EQUIP			24	2.9	15	2.2													39	5.1			
FY 03 EQUIP					12	1.8													12	1.8			
FY 04 EQUIP							17	7.7	4	2.7									21	10.4			
FY 05 EQUIP								9	6.1	1	0.4								10	6.4			
FY 06 EQUIP									8		3.2								8	3.2			
FY 07 EQUIP																			0	0.0			
FY 08 EQUIP																			0	0.0			
FY 09 EQUIP																			0	0.0			
FY TC EQUIP																			11	2.9	11	2.9	
TOTAL INSTALLATION COST		12.8		4.0		3.9		7.7		8.8		3.5		0.0		0.0		0.0		2.9	43.7		
TOTAL PROCUREMENT		39.7		9.4		8.2		14.1		16.0		5.7		0.0		0.0		0.0		5.4	98.4		

METHOD OF IMPLEMENTATION:

CONTRACT DATES:	FY 2003:	Feb-03	FY 2004:	Nov-03	FY 2005:	Nov-04	FY 2006:	Nov-05
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DELIVERY DATES:	FY 2003:	Jun-03	FY 2004:	Mar-04	FY 2005:	Mar-05	FY 2006:	Mar-06
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INSTALLATION SCHEDULE:	PY	FY04				FY05				FY06				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4		
INPUT	233	0	4	8	5	4	4	3	2	1	2	3	3		
OUTPUT	233	0	4	8	5	4	4	3	2	1	2	3	3		
INSTALLATION SCHEDULE:		FY07				FY08				FY09					
INPUT		1	2	3	4	1	2	3	4	1	2	3	4	11	283
OUTPUT														11	283

Notes/Comments

PY - Four test units procured in FY99. No install required.
 NECC cost includes addition of MDR (TIP) capability and backfit phase-in beginning in FY02. MDR (TIP) capability is integrated into NECC Chassis.

Exhibit P-3a, Individual Modification
 Justification
 Unclassified
 Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE: Satellite Communications Systems
 COST CODE NR107
 MODELS OF SYSTEMS AFFECTED: EHF Terminals --NECC - Shore
 DESCRIPTION/JUSTIFICATION: Provides for satellite communications connectivity between shore stations, submarines, and surface ships; includes network management, multiplexing and channel sharing, resource management, communications management/planning; network control/monitoring; circuit switching and packet switching.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY Qty	\$	FY 02 Qty	\$	FY 03 Qty	\$	FY 04 Qty	\$	FY 05 Qty	\$	FY 06 Qty	\$	FY 07 Qty	\$	FY 08 Qty	\$	FY 09 Qty	\$	TC Qty	Total \$
RDT&E																				
PROCUREMENT:																				
Kit Quantity																				
Installation Kits																				
Installation Kits Nonrecurring Equipment	46	4.9	9	1.2	Var.	0.6	6	0.8	3	0.7	3	0.7	0	0.0	0	0.0	0	0.0	67	8.9
Equipment Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Production Support																				
Other (DSA)		1.0		0.2																1.4
Other (Test Units)	2	0.3																	2	0.3
Interim Contractor Support																				
Installation of Hardware*	46	3.0	9	2.3	Var.	0.3	6	1.9	3	0.7	3	0.7	0	0.0	0	0.0	0	0.0	67	8.9
PRIOR YR EQUIP	46	3.0																	46	3.0
FY 02 EQUIP																			9	2.3
FY 03 EQUIP																			#####	0.3
FY 04 EQUIP																			6	1.9
FY 05 EQUIP																			3	0.7
FY 06 EQUIP																			3	0.7
FY 07 EQUIP																			0	0.0
FY 08 EQUIP																			0	0.0
FY 09 EQUIP																			0	0.0
FY TC EQUIP																			0	0.0
TOTAL INSTALLATION COST	3.0	2.3		0.3		1.9		0.7		0.7		0.7		0.0		0.0		0.0		8.9
TOTAL PROCUREMENT	9.2	3.8		0.8		2.8		1.4		1.4		1.4		0.0		0.0		0.0		19.5

METHOD OF IMPLEMENTATION:

	ADMINISTRATIVE LEAD-TIME:				PRODUCTION LEAD-TIME:								
	1 Months				4 Months								
CONTRACT DATES:	FY 2003:	NA			FY 2004:	Nov-03			FY 2005:	Nov-04			FY 2006:
DELIVERY DATES:	FY 2003:	NA			FY 2004:	Mar-04			FY 2005:	Mar-05			FY 2006:
INSTALLATION SCHEDULE:	PY	1	2	3	FY04	1	2	3	FY05	1	2	3	FY06
INPUT	55		2	2	2		1	1	1		1	1	1
OUTPUT	55		2	2	2		1	1	1		1	1	1
INSTALLATION SCHEDULE:		1	2	3	FY07	1	2	3	FY08	1	2	3	FY09
INPUT													0
OUTPUT													67

Notes/Comments

PY - Two test units procured in PY will not be installed.

FY02 - NECC cost includes MDR (TIP) capability integrated into NECC Chassis.

FY03 - In FY03, funds are used to procure and install TIP cards, not NECC quantities.

Exhibit P-3a, Individual Modification
 Justification
 Unclassified
 Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE: Satellite Communications Systems
 COST CODE NR107
 MODELS OF SYSTEMS AFFECTED: EHF Terminals--MDR Appliques - Ship
 DESCRIPTION/JUSTIFICATION: Provides for Applique and Antenna upgrades to the existing AN/USC-38 Low Data Rate (LDR) terminal to enable Medium Data Rate (MDR) communications capability.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY Qty	\$	FY 02 Qty	\$	FY 03 Qty	\$	FY 04 Qty	\$	FY 05 Qty	\$	FY 06 Qty	\$	FY 07 Qty	\$	FY 08 Qty	\$	FY 09 Qty	\$	TC Qty	\$	Total Qty	\$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	61	27.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	61	27.1	
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Production Support																						
Other (DSA)		2.9		0.1		0.1																3.1
Other		8.4		0.2		0.1																8.7
Interim Contractor Support																						
Installation of Hardware*																						
PRIOR YR EQUIP	45	12.3	2	0.9	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	48	14.1	
FY 02 EQUIP	45	12.3	2	0.9	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	48	14.1	
FY 03 EQUIP																						
FY 04 EQUIP																						
FY 05 EQUIP																						
FY 06 EQUIP																						
FY 07 EQUIP																						
FY 08 EQUIP																						
FY 09 EQUIP																						
FY TC EQUIP																						
TOTAL INSTALLATION COST		12.3		0.9		0.8		0.0		0.0		0.0		0.0		0.0		0.0			14.1	
TOTAL PROCUREMENT		50.8		1.2		1.0		0.0		0.0		0.0		0.0		0.0		0.0			52.9	

METHOD OF IMPLEMENTATION:

	ADMINISTRATIVE LEAD-TIME:				PRODUCTION LEAD-TIME: 15 Months															
CONTRACT DATES:	FY 2003:	NA	FY 2004:	NA	FY 2005:	NA	FY 2006:	NA												
DELIVERY DATES:	FY 2003:	NA	FY 2004:	NA	FY 2005:	NA	FY 2003:	NA												
INSTALLATION SCHEDULE:	PY	1	2	FY04	1	2	FY05	1	2	FY06	1	2	3	4						
INPUT		48																		
OUTPUT		48																		

	FY07				FY08				FY09				TC	TOTAL
INSTALLATION SCHEDULE:	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT													0	48
OUTPUT													0	48

Notes/Comments

MDR Applique installation plan reflects ten (10) transferred to shore and installed in PY. Three tests assets required no install.
 MDR Functionality incorporated in to AN/USC-38(V) Terminal.

Exhibit P-3a, Individual Modification
 Justification
 Unclassified
 Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE: Satellite Communications Systems
 COST CODE NR112
 MODELS OF SYSTEMS AFFECTED: Comm. Satellite--INMARSAT B (Ship)
 DESCRIPTION/JUSTIFICATION: Provides upgrade to the older INMARSAT A terminals giving ships the capability for Official phones, STU III, Debit Card Crew Phones, Internet, E-Mail, PC to PC, Video Teleconferencing and Facsimile.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY Qty	FY 02		FY 03		FY 04		FY 05		FY 06		FY 07		FY 08		FY 09		TC Qty	Total \$
		\$	Qty	\$	\$	Qty	\$	Qty	\$										
RDT&E																			
PROCUREMENT:																			
Kit Quantity																			
Installation Kits																			
Installation Kits Nonrecurring																			
Equipment	232	11.1	1	0.1	9	0.6												242	11.8
Equipment Upgrade																		0	0.0
Equipment Nonrecurring																		0	0.0
Engineering Change Orders																			
Data																			
Training Equipment																			
Production Support																			12.6
Other (DSA)																			3.2
Interim Contractor Support																			
Installation of Hardware*																			
PRIOR YR EQUIP	212	20.0	20	5.0	9	3.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	241	28.0	
FY 02 EQUIP	212	20.0	20	5.0													232	25.0	
FY 03 EQUIP					9	3.0											0	0.0	
FY 04 EQUIP																	9	3.0	
FY 05 EQUIP																	0	0.0	
FY 06 EQUIP																	0	0.0	
FY 07 EQUIP																	0	0.0	
FY 08 EQUIP																	0	0.0	
FY 09 EQUIP																	0	0.0	
FY TC EQUIP																	0.0	0.0	
TOTAL INSTALLATION COST	20.0		5.0		3.0		0.0		0.0		0.0		0.0		0.0		0.0	28.0	
TOTAL PROCUREMENT	41.8		9.3		4.6		0.0		0.0		0.0		0.0		0.0		0.0	55.7	

METHOD OF IMPLEMENTATION:

CONTRACT DATES:	FY 2003:	Nov-02	FY 2004:	NA	FY 2005:	NA	FY 2006:	NA
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DELIVERY DATES:	FY 2003:	Feb-03	FY 2004:	NA	FY 2005:	NA	FY 2006:	NA
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INSTALLATION SCHEDULE:	PY	FY04				FY05				FY06				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4		
INPUT	241													0	241
OUTPUT	241													0	241

INSTALLATION SCHEDULE:		FY07				FY08				FY09				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4		
INPUT														0	241
OUTPUT														0	241

Notes/Comments

PY install unit cost due to primarily single antenna systems, FY02-FY03 install unit cost primarily due to dual antenna systems
 FY02 procured one INMARSAT B terminal for Shock testing. No install funds required.

Exhibit P-3a, Individual Modification
 Justification
 Unclassified
 Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE: Satellite Communications Systems
 COST CODE NR112
 MODELS OF SYSTEMS AFFECTED: Comm. Satellite--INMARSAT B (Ship) Equip. Upgrade - Handover
 DESCRIPTION/JUSTIFICATION: Provides automatic handover to "dual" configured INMARSAT B ships. Provides enhanced voice capability and increased blockage profile.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY Qty	\$	FY 02 Qty	\$	FY 03 Qty	\$	FY 04 Qty	\$	FY 05 Qty	\$	FY 06 Qty	\$	FY 07 Qty	\$	FY 08 Qty	\$	FY 09 Qty	\$	TC Qty	\$	Total Qty	\$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	4	0.1	17	0.6	1	0.04															22	0.7
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Production Support																					0.0	
Other (DSA)																					0.0	
Interim Contractor Support																						
Installation of Hardware*	0	0.0	0	0.0	14	1.1	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	15	1.2	
PRIOR YR EQUIP					1	0.1														1	0.1	
FY 02 EQUIP					13	1.0														13	1.0	
FY 03 EQUIP																				1	0.1	
FY 04 EQUIP																				0	0.0	
FY 05 EQUIP																				0	0.0	
FY 06 EQUIP																				0	0.0	
FY 07 EQUIP																				0	0.0	
FY 08 EQUIP																				0	0.0	
FY 09 EQUIP																				0	0.0	
FY TC EQUIP																				0.0	0.0	
TOTAL INSTALLATION COST	0.0	0.0		1.1		0.1		0.0		0.0		0.0		0.0		0.0		0.0			1.2	
TOTAL PROCUREMENT	0.1	0.6		1.2		0.1		0.0		0.0		0.0		0.0		0.0		0.0			1.9	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEAD-TIME: 3 Months PRODUCTION LEAD-TIME: 3 Months

CONTRACT DATES: FY 2003: Nov-02 FY 2004: NA FY 2005: NA FY 2006: NA

DELIVERY DATES: FY 2003: Feb-03 FY 2004: NA FY 2005: NA FY 2006: NA

INSTALLATION SCHEDULE:	PY	1	2	FY04	3	4	1	2	FY05	3	4	1	2	FY06	3	4
INPUT		14		1												

OUTPUT	14	1	1	FY07	3	4	1	2	FY08	3	4	1	2	FY09	3	4	TC	TOTAL
INSTALLATION SCHEDULE:																		

INPUT	0	15
OUTPUT	0	15

Notes/Comments

PY - 3 test/lab units do not require installation

FY02 - 4 antenna handover units to be TYCOM assets. Do not require install funds.

FY03 - One installation delayed until FY04 due to ship availability.

Exhibit P-3a, Individual Modification
 Justification
 Unclassified
 Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE: Satellite Communications Systems
 COST CODE NR112
 MODELS OF SYSTEMS AFFECTED: Comm. Satellite--INMARSAT B (Ship) Equip. Upgrade - 128Kbps Wideband
 DESCRIPTION/JUSTIFICATION: Provides increased bandwidth (upto 128kbps) to the existing INMARSAT B (64 kbps) hardware

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	TC	Total
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty
RDT&E											
PROCUREMENT:											
Kit Quantity											
Installation Kits											
Installation Kits Nonrecurring											
Equipment											
Equipment Nonrecurring											
Engineering Change Orders											
Data											
Training Equipment											
Production Support											
Other (DSA)											
Interim Contractor Support											
Installation of Hardware*											
PRIOR YR EQUIP	0	0.0	0	0.0	8	0.3	84	1.7	92	1.8	184
FY 02 EQUIP					8	0.3	10	0.2	6	0.1	0.0
FY 03 EQUIP						74	1.5	86	1.7		
FY 04 EQUIP											
FY 05 EQUIP											
FY 06 EQUIP											
FY 07 EQUIP											
FY 08 EQUIP											
FY 09 EQUIP											
FY TC EQUIP											
TOTAL INSTALLATION COST		0.0		0.0		0.3		1.7		1.8	
TOTAL PROCUREMENT		0.0		0.0		1.2		5.7		6.0	
METHOD OF IMPLEMENTATION:											

CONTRACT DATES:	FY 2003:	Mar-03	FY 2004:	Nov-03	FY 2005:	Nov-04	FY 2006:	NA			
DELIVERY DATES:	FY 2003:	Jun-03	FY 2004:	Feb-04	FY 2005:	Feb-05	FY 2006:	NA			
INSTALLATION SCHEDULE:	PY	1	2	FY04	1	2	FY05	1	2	FY06	
INPUT	8		16	38	30	6	28	29	29		
OUTPUT	0		24	18	25	25	6	28	29	29	
INSTALLATION SCHEDULE:		1	2	FY07	1	2	FY08	1	2	FY09	TC TOTAL
INPUT											184
OUTPUT											184

Notes/Comments

FY03 includes \$300K NRE

FY03 - 2 units are test terminals. No install required.

Exhibit P-3a, Individual Modification
 Justification
 Unclassified
 Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE: Satellite Communications Systems
 COST CODE NR112
 MODELS OF SYSTEMS AFFECTED: Comm. Satellite--INMARSAT B (Shore)
 DESCRIPTION/JUSTIFICATION: Provides upgrade to the older INMARSAT A terminals providing the capability for Official phones, STU III, Debit Card Crew Phones, Internet, E-Mail, PC to PC, Video Teleconferencing and Facsimile.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	TC	Total
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	Qty	\$
RDT&E											
PROCUREMENT:											
Kit Quantity											
Installation Kits											
Installation Kits Nonrecurring											
Equipment											
Equipment Upgrade											
Engineering Change Orders											
Data											
Training Equipment											
Production Support											
Other (DSA)											
Interim Contractor Support											
Installation of Hardware*											
PRIOR YR EQUIP											
FY 02 EQUIP	0	0.0	4	0.2	0	0.0	0	0.0	0	4	0.2
FY 03 EQUIP			4	0.2						0	0.0
FY 04 EQUIP										0	0.0
FY 05 EQUIP										0	0.0
FY 06 EQUIP										0	0.0
FY 07 EQUIP										0	0.0
FY 08 EQUIP										0	0.0
FY 09 EQUIP										0	0.0
FY TC EQUIP										0	0.0
TOTAL INSTALLATION COST		0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
TOTAL PROCUREMENT		0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6

METHOD OF IMPLEMENTATION:

	ADMINISTRATIVE LEAD-TIME: 3 Months				PRODUCTION LEAD-TIME: 3 Months					
CONTRACT DATES:	FY 2003:	NA	FY 2004:	NA	FY 2005:	NA	FY 2006:	NA		
DELIVERY DATES:	FY 2003:	NA	FY 2004:	NA	FY 2005:	NA	FY 2006:	NA		
INSTALLATION SCHEDULE:	PY	1	2	FY04	1	2	FY05	1	2	FY06
INPUT		4								
OUTPUT		4								
INSTALLATION SCHEDULE:		1	2	FY07	1	2	FY08	1	2	FY09
INPUT										0
OUTPUT										0

Exhibit P-3a, Individual Modification
 Justification
 Unclassified
 Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE: Satellite Communications Systems
 COST CODE NR112
 MODELS OF SYSTEMS AFFECTED: Comm. Satellite--INMARSAT B HSD KITS
 DESCRIPTION/JUSTIFICATION: Provides upgrade to the INMARSAT B terminals giving ships the capability for simultaneous official phones, STU III, debit card crew phones, internet, e-mail, PC to PC, video teleconferencing and facsimile over a 64 kpbs channel.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	TC	Total
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty
RDT&E											
PROCUREMENT:											
Kit Quantity											
Installation Kits											
Installation Kits Nonrecurring											
Equipment											
Equipment Nonrecurring											
Engineering Change Orders											
Data											
Training Equipment											
Production Support											
Other (DSA)											
Interim Contractor Support											
Installation of Hardware*											
PRIOR YR EQUIP											
FY 02 EQUIP	152	5.1	8	0.1	4	0.1	8	0.1			172
FY 03 EQUIP											5.4
FY 04 EQUIP											
FY 05 EQUIP											
FY 06 EQUIP											
FY 07 EQUIP											
FY 08 EQUIP											
FY 09 EQUIP											
FY TC EQUIP											
TOTAL INSTALLATION COST		8.9	0.7	0.4	0.5	0.0	0.0	0.0	0.0	0.0	10.5
TOTAL PROCUREMENT		14.6	1.4	0.6	1.0	0.0	0.0	0.0	0.0	0.0	17.5

METHOD OF IMPLEMENTATION:

	ADMINISTRATIVE LEAD-TIME:				PRODUCTION LEAD-TIME:							
	3 Months				3 Months							
CONTRACT DATES:	FY 2003:	Nov-02			FY 2004:	Nov-03			FY 2005:	NA		FY 2006:
DELIVERY DATES:	FY 2003:	Feb-03			FY 2004:	Feb-04			FY 2005:	NA		FY 2006:
INSTALLATION SCHEDULE:	PY	1	2	3	4	1	2	3	4	1	2	3
INPUT		164	4	4								
OUTPUT		164	4	4								
INSTALLATION SCHEDULE:		1	2	3	4	1	2	3	4	1	2	3
INPUT										0		172
OUTPUT										0		172

Notes/Comments

Exhibit P-3a, Individual Modification
 Justification
 Unclassified
 Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE: Satellite Communications Systems
 COST CODE NR112
 MODELS OF SYSTEMS AFFECTED: Comm. Satellite--C band/CWSP (Ship)
 DESCRIPTION/JUSTIFICATION: Provides C and Ku wide band SATCOM terminals supporting capabilities such as Automated Digital Multiplexing System (ADMS), telemedicine, official and unofficial phones, public affairs officer information, imagery, Meteorology and Oceanography Command (METOC).

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY Qty	\$	FY 02 Qty	\$	FY 03 Qty	\$	FY 04 Qty	\$	FY 05 Qty	\$	FY 06 Qty	\$	FY 07 Qty	\$	FY 08 Qty	\$	FY 09 Qty	\$	TC Qty	Total \$
RDT&E																				
PROCUREMENT:																				
Kit Quantity																				
Installation Kits																				
Installation Kits Nonrecurring																				
Equipment	31 8	27.6 3.9	0	0.0	0	0.0	0.0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	31 var	27.6 4.4	
Equipment (Upgrade)					Var.	0.5														
Equipment Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																		2	2.6	
Production Support																		5.0		
Other (DSA)																		1.4		
Interim Contractor Support																				
Installation of Hardware	27 8	30.5 4.2	1	1.6	2	1.5	1	1.2	0	0.0	0	0.0	0	0.0	0	0.0	0	31 8	34.8 4.2	
Installation of Hardware(Upgrade)																		31 8	34.8 4.2	
PRIOR YR EQUIP	27 8	30.5 4.2	1	1.6	2	1.5	1	1.2										0 0	0.0 0.0	
FY 02 EQUIP																		0 0	0.0 0.0	
FY 02 EQUIP (Upgrade)																		0 0	0.0 0.0	
FY 03 EQUIP																		0 0	0.0 0.0	
FY 04 EQUIP																		0 0	0.0 0.0	
FY 05 EQUIP																		0 0	0.0 0.0	
FY 06 EQUIP																		0 0	0.0 0.0	
FY 07 EQUIP																		0 0	0.0 0.0	
FY 08 EQUIP																		0 0	0.0 0.0	
FY 09 EQUIP																		0 0	0.0 0.0	
FY TC EQUIP																		0 0	0.0 0.0	
TOTAL INSTALLATION COST	34.7	1.6		1.5		1.2		0.0		0.0		0.0		0.0		0.0			39.0	
TOTAL PROCUREMENT	73.3	2.7		2.6		1.4		0.0		0.0		0.0		0.0		0.0			79.9	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEAD-TIME: 3 Months PRODUCTION LEAD-TIME: 6-9 Months (4 months for upgrades)

CONTRACT DATES:	FY 2003:	NA	FY 2004:	NA	FY 2005:	NA	FY 2006:	NA
-----------------	----------	----	----------	----	----------	----	----------	----

DELIVERY DATES:	FY 2003:	NA	FY 2004:	NA	FY 2005:	NA	FY 2006:	NA
-----------------	----------	----	----------	----	----------	----	----------	----

INSTALLATION SCHEDULE:	PY	FY04				FY05				FY06				TC	TOTAL
		1	2	3	4		1	2	3	4		1	2	3	4

INPUT	38	1														0	39
OUTPUT	38	1														0	39

INSTALLATION SCHEDULE:	FY07				FY08				FY 09				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT																0	39
OUTPUT																0	39

Notes/Comments

PY: No install funds required for training equipment.

FY03 : Procure Commercial SATCOM antenna feedhorn equipment for upgrade from C-band to Ku-band capability. Installation will be performed by shipboard personnel.

FY03 :Install costs less than other years due to hull type (MHC).

FY04 : Install cost increase due to requirement for a sponson.

Exhibit P-3a, Individual Modification
 Justification
 Unclassified
 Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE:

Satellite Communications Systems

321500

COST CODE

NR112

MODELS OF SYSTEMS AFFECTED:

Comm. Satellite-C band/CWSP (Shore)

DESCRIPTION/JUSTIFICATION:

Provides C and Ku wide band SATCOM terminals supporting capabilities such as Automated Digital Multiplexing System (ADMS). Telemedicine, official and unofficial phones, public affairs officer information, imagery, Meteorology and Oceanography Command (METOC).

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	TC	Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E												
PROCUREMENT:												
Kit Quantity												
Installation Kits												
Installation Kits Nonrecurring												
Equipment	9	1.8	0	0.0	Var.	0.6	Var.	0.8	0	0.0	0	3.1
Equipment (Upgrade)												
Equipment Nonrecurring												
Engineering Change Orders												
Data												
Training Equipment												
Production Support											0	1.0
Other (DSA)												
Interim Contractor Support												
Installation of Hardware*												
Installation of Hardware(Upgrade)*												
PRIOR YR EQUIP	5	0.8	4	1.1	Var.	0.3	Var.	0.2	0	0.0	0	2.5
PRIOR YR EQUIP (Upgrade)											0	0.0
FY 02 EQUIP											0	0.0
FY 02 EQUIP (Upgrade)	5	0.8	4	1.1							9	1.9
FY 03 EQUIP											0	0.0
FY 04 EQUIP											Var.	0.0
FY 05 EQUIP											Var.	0.3
FY 06 EQUIP											Var.	0.2
FY 07 EQUIP											0	0.0
FY 08 EQUIP											0	0.0
FY 09 EQUIP											0	0.0
FY TC EQUIP											0	0.0
TOTAL INSTALLATION COST	0.0	0.8	1.1	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	2.5
TOTAL PROCUREMENT	0.0	3.1	1.1	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	6.6

METHOD OF IMPLEMENTATION:

CONTRACT DATES:

FY 2003:

FY 2004:

FY 2005:

FY 2006:

DELIVERY DATES:

FY 2003:

FY 2004:

FY 2005:

FY 2006:

INSTALLATION SCHEDULE:

PY

1 2 3 4

1 2 3 4

1 2 3 4

INPUT

9

Various

Various

OUTPUT

9

INSTALLATION SCHEDULE:

1 2 3 4

1 2 3 4

1 2 3 4

TC

TOTAL

INPUT

0

Var.

OUTPUT

0

Var.

Notes/Comments

FY04 - Procurement quantities consist of PAC transponder and gateway equipment, Norfolk/Martelsham T-3 equipment, second Hawaii gateway hardware, modems and infrastructure upgrades.

FY05- Procurement quantities consist of European gateway equipment and modems.

Exhibit P-3a, Individual Modification
Justification
Unclassified
Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE:

Satellite Communications Systems

321500

COST CODE

NR117

MODELS OF SYSTEMS AFFECTED:

Global Broadcast Service– Single (Receive Suite)

DESCRIPTION/JUSTIFICATION:

GBS with single antenna configuration: Commercial off the shelf (COTS) receive only satellite communications terminals with a single antenna, modems and ancillary hardware and processing equipment.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES

FINANCIAL PLAN: (\$ in millions)

	PY	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	TC	Total
RDT&E	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	\$
PROCUREMENT:											
Kit Quantity											
Installation Kits											
Installation Kits Nonrecurring											
Equipment	17	8.3	0	0.0	0	0.0	0	0.0	0	0.0	35.2
Equipment Backfit/Upgrade Kit											0.0
IP Backfit										7	4.1
Engineering Change Orders										7	4.1
Other		0.8									0.8
Training Equipment											
Production Support		1.6									1.6
Other (DSA)		0.1		0.0	0.2		0.0	0.0	0.0		2.8
Interim Contractor Support											
Installation of Hardware*	0	0.0	0	0.0	5	5.6	0	0.0	0	0.0	46
PRIOR YR EQUIP					5	5.6					23.1
FY 02 EQUIP											5.6
FY 03 EQUIP											0.0
FY 04 EQUIP											0.0
FY 05 EQUIP											0.0
FY 06 EQUIP											0.0
FY 07 EQUIP											0.0
FY 08 EQUIP											0.0
FY 09 EQUIP											0.0
FY TC EQUIP											0.0
FY TC EQUIP - IP Backfi											0.0
TOTAL INSTALLATION COST		0.0		0.0	5.6		0.0	0.0	0.0	0.0	17.5
TOTAL PROCUREMENT		10.9		0.0	5.8		0.0	0.0	0.0	0.0	51.0
METHOD OF IMPLEMENTATION											67.7

ADMINISTRATIVE LEAD-TIME: NA PRODUCTION LEAD-TIME: NA

CONTRACT DATES: FY 2003: NA FY 2004: NA FY 2005: NA FY 2006: NA

DELIVERY DATES: FY 2003: NA FY 2004: NA FY 2005: NA FY 2006: NA

INSTALLATION SCHEDULE:	PY	1	2	FY04	3	4	1	2	FY05	3	4

INPUT

PY

1 2

1 2

1 2

3 4

OUTPUT

PY

5

5

INSTALLATION SCHEDULE:	1	2	FY07	3	4	1	2	FY08	3	4	1	2	FY09	3	4	TC	TOTAL

INPUT

PY

1 2

1 2

1 2

3 4

OUTPUT

PY

41

46

Notes/Comments

PY - Unit cost varies due to mix of Ship, Shore, and quantity discounts afforded by other Services buys per year.

FY03 - twelve (12) PY assets are being converted to six (6) dual antenna configurations

Exhibit P-3a, Individual Modification
 Justification
 Unclassified
 Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE: Satellite Communications Systems
 COST CODE NR117
 MODELS OF SYSTEMS AFFECTED: Global Broadcast Service--Dual (Receive Suite)
 DESCRIPTION/JUSTIFICATION: GBS with dual antenna configuration: Commercial off the shelf (COTS) receive only satellite communications terminals with a single antenna, modems and ancillary hardware and processing equipment.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	TC	Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E PROCUREMENT:												
Kit - Equipment Conversion		6	2.6		Var.	1.5					6	4.1
Installation Kits	13	7.5	0	0.0	0	0.0	0	0.0	0	23	22.8	36
Equipment				8.6	0	0.0	0	0.0	0	6	4.2	30.3
IP Backfit NRE					14	7.1	6	4.2			26	8.6
IP Backfit Kit - Production Articles					73	1.2				73	1.2	15.5
KA 1Ghz LNB - ECP					12	1.3				12		1.3
Ku Backfit - ECP												0.7
Other		0.7										0.0
Training Equipment												0.0
Production Support		1.6	1.8		1.2		1.2					6.8
Other (DSA)		0.7	1.1		0.0		0.4					4.4
Interim Contractor Support												
Installation of Hardware*	8	2.6	5	2.7	5	3.5	0	0.0	12	30	16.7	28.5
PRIOR YR EQUIP	8	2.6	5	2.7	5	3.5			3.0	0	0.8	5.3
FY 02 EQUIP									0	1	6	4.3
FY 03 EQUIP									0			0.0
FY 04 EQUIP - IP/Ku Backfits							6	1.5				1.5
FY 05 EQUIP - IP/Ku Backfits							6	1.5				1.5
FY 06 EQUIP									0			0.0
FY 07 EQUIP									0			0.0
FY 08 EQUIP									0			0.0
FY 09 EQUIP									0			0.0
FY TC EQUIP										23	14.4	23
FY TC EQUIP - IP Backfit										6	1.5	14.4
TOTAL INSTALLATION COST		2.6	2.7	3.5	0.0	3.0	0.0	0.0	0.0	0.0	16.7	28.5
TOTAL PROCUREMENT		13.1	8.3	13.3	12.6	8.6	0.0	0.0	0.0	0.0	45.5	101.3

METHOD OF IMPLEMENTATION:

CONTRACT DATES:	FY 2003:	NA	FY 2004:	Feb-04	FY 2005:	Feb-05	FY 2006:	NA				
DELIVERY DATES:	FY 2003:	NA	FY 2004:	Aug-04	FY 2005:	Aug-05	FY 2006:	NA				
INSTALLATION SCHEDULE:	PY	1	2	FY04	1	2	FY05	1	2	FY06	1	2
INPUT		18			3	3	6					
OUTPUT		18			3	3	6					

INSTALLATION SCHEDULE:	1	2	FY07	1	2	FY08	1	2	FY09	TC	TOTAL
INPUT										30	60
OUTPUT										30	60

Notes/Comments

PY - Unit cost varies due to mix of Ship, Shore, and quantity discounts afforded by other Services buys per year.

FY02 - Six equipment conversion kits purchased to convert twelve (12) PY single antenna assets to six (6) dual antenna configurations.

FY04 Various: Procurement of Sub components to complete IP Conversion and PITCO of IP Backfit Kits

FY04 - 8 IP Back Fit Kit Production Articles are C4I lab assets and do not require installation.

FY04 - KA 1Ghz LNB is LRU and does not require installation funds

FY04 10 Ku Backfit Kits are installed in FY05 in conjunction with the 10 IP Backfit Kit installations. The other 2 Ku Backfit Kits are trainers and do not require install.

Exhibit P-3a, Individual Modification
 Justification
 Unclassified
 Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE: Satellite Communications Systems

321500

COST CODE

NR117

MODELS OF SYSTEMS AFFECTED: Global Broadcast Service--Subs (Receive Suite)

DESCRIPTION/JUSTIFICATION: GBS with submarine configuration: Commercial off the shelf (COTS) receive only satellite communications terminals with a SubHdR antenna modification, modems and ancillary hardware and processing equipment.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES

FINANCIAL PLAN: (\$ in millions)

	PY Qty	\$	FY 02 Qty	\$	FY 03 Qty	\$	FY 04 Qty	\$	FY 05 Qty	\$	FY 06 Qty	\$	FY 07 Qty	\$	FY 08 Qty	\$	FY 09 Qty	\$	TC Qty	\$	Total Qty	\$	
RDT&E																							
PROCUREMENT:																							
Kit Quantity																							
Installation Kits																							
Installation Kits Nonrecurring																							
Equipment	22	6.5	10	2.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	0	0.0	0	34	20.1	66	29.5	
Equipment Nonrecurring																							
IP Backfit																							
Data																							
Training Equipment																							
Production Support																							
Other (DSA)																							
Interim Contractor Support																							
Installation of Hardware*																							
PRIOR YR EQUIP	13	1.6	10	1.5	6	0.9	0	0.0	30	3.0	0	0.0	0	0.0	0	0.0	0	0.0	34	5.1	93	12.1	
FY 02 EQUIP	13	1.6	6	0.9	4	0.6	6	0.9											19	2.5	10	1.5	
FY 03 EQUIP																			0	0.0	0	0.0	
FY 04 EQUIP																			21	2.1	9	0.9	
FY 05 EQUIP																			0	0.0	0	0.0	
FY 06 EQUIP																			0	0.0	0	0.0	
FY 07 EQUIP																			0	0.0	0	0.0	
FY 08 EQUIP																			0	0.0	0	0.0	
FY 09 EQUIP																			0	0.0	0	0.0	
FY TC EQUIP																			34	5.1	34	5.1	
FY TC EQUIP - IP Backfill																			0	0.0	0	0.0	
TOTAL INSTALLATION COST		1.6		1.5		0.9		0.0		3.0		0.0		0.0		0.0		0.0		5.1		12.1	
TOTAL PROCUREMENT		13.8		6.4		3.0		9.1		9.1		0.0		0.0		0.0		0.0		27.5		68.9	
METHOD OF IMPLEMENTATION																							

ADMINISTRATIVE LEAD-TIME: 2 Months PRODUCTION LEAD-TIME: 6 Months

CONTRACT DATES:

FY 2003: Jan-03 FY 2004: Feb-04 FY 2005: Feb-05 FY 2006:

DELIVERY DATES:

FY 2003: Jul-03 FY 2004: Aug-04 FY 2005: Aug-05 FY 2006:

INSTALLATION SCHEDULE:

PY	1	2	FY04	3	4	1	2	FY05	3	4	1	2	FY06	3	4
----	---	---	------	---	---	---	---	------	---	---	---	---	------	---	---

INPUT

29 7 6 10 7

OUTPUT

29 7 6 10 7

INSTALLATION SCHEDULE:

1	2	FY07	3	4	1	2	FY08	3	4	1	2	FY09	3	4	TC	TOTAL
---	---	------	---	---	---	---	------	---	---	---	---	------	---	---	----	-------

INPUT

34 93

OUTPUT

34 93

Notes/Comments

PY - Unit costs vary due to mix of Ship, Submarine and Shore terminal configurations and to quantity discounts afforded by other Services buys per year.

FY01 - (3) sub-surface receive suites (SSRS) to be used as training equipment at SubSchool Groton were installed with shore funds.

FY 02 procurement cost include enclosure fabrication, performance of integration testing and PITCO.

Exhibit P-3a, Individual Modification
Justification
Unclassified
Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE: Satellite Communications Systems
 COST CODE NR117
 MODELS OF SYSTEMS AFFECTED: Global Broadcast Service - Shore
 DESCRIPTION/JUSTIFICATION: Global Broadcast Service, commercial off-the-shelf (COTS) receive only satellite communications terminals with antennas, modems, and ancillary hardware and processing equipment
 Navy portion of joint services program to deliver continuous, high speed, one way information flow of high volume data to ship and shore units and special operations.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES

FINANCIAL PLAN: (\$ in millions)

	PY	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	IC	Total
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	Qty	\$
RDT&E											
PROCUREMENT:											
Kit Quantity											
Installation Kits											
Installation Kits Nonrecurring											
Equipment	15	2.4	0	0.0	0	0.0	0	0.0	0	0	4.7
Equipment Backfit - IP Backfit					12	1.5					1.5
Engineering Change Orders											
Data											
Training Equipment - Backfit kits		0.2									3.0
Production Support		0.3		0.0							0.8
Other (DSA)				0.0							0.4
Interim Contractor Support											
Installation of Hardware*	7	1.2	11	1.9	0	0.0	0	0.0	0	0.2	3.7
PRIOR YR EQUIP	7	1.2	11	1.9							3.1
FY 02 EQUIP										0	0.0
FY 03 EQUIP										0	0.0
FY 04 EQUIP										19	0.4
FY 05 EQUIP										0	0.0
FY 06 EQUIP										0	0.0
FY 07 EQUIP										0	0.0
FY 08 EQUIP										0	0.0
FY 09 EQUIP										0	0.0
FY TC EQUIP										12	0.2
TOTAL INSTALLATION COST		1.2	1.9	0.0	0.0	0.4	0.0	0.0	0.0	0.2	3.7
TOTAL PROCUREMENT		4.1	1.9	0.0	5.3	0.4	0.0	0.0	0.0	2.6	14.2
METHOD OF IMPLEMENTATION											

ADMINISTRATIVE LEAD-TIME: 2 Months PRODUCTION LEAD-TIME: 6 Months backfits, 8 Months trainers

CONTRACT DATES: FY 2003: Mar-03 FY 2004: Feb-04 FY 2005: NA FY 2006: NA

DELIVERY DATES: FY 2003: Sep-03 FY 2004: Oct-04 FY 2005: NA FY 2006: NA

INSTALLATION SCHEDULE:	PY	1	2	FY04	1	2	FY05	3	4	1	2	FY06	3	4
INPUT		18			6	6	4	3						
OUTPUT		18			6	6	4			3				

INSTALLATION SCHEDULE:	1	2	FY07	1	2	FY08	1	2	FY09	TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3
INPUT										12	49
OUTPUT										12	49

Notes/Comments

PY - GBS procurement funds procured (3) sub-surface receive suites (SSRS) to be installed as training equipment at SubSchool Groton.

FY 04 - GBS training equipment includes 3 Sub IP Backfit for TTF, 2 trainers for sub-school (Groton), and 2 Dual antenna systems for FTC San Diego and FTC Norfolk

 Exhibit P-3a, Individual Modification
 Justification
 Unclassified
 Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE:	Satellite Communications Systems	321500
COST CODE	NR118	
MODELS OF SYSTEMS AFFECTED:	JMINI Control System - NMS	
DESCRIPTION/JUSTIFICATION:	The Network Management System (NMS) component of the JMINI Control System provides communications resource planning and management via secure WAN connections between the control stations and remote user. Will provide dynamic centralized control of joint operable 5 KHz and 25 KHz ultra high frequency military satellite communications.	

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES

FINANCIAL PLAN: (\$ in millions)

	PY Qty	\$	FY 02 Qty	\$	FY 03 Qty	\$	FY 04 Qty	\$	FY 05 Qty	\$	FY 06 Qty	\$	FY 07 Qty	\$	FY 08 Qty	\$	FY 09 Qty	\$	TC Qty	\$	Total Qty	\$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	13	32.5	22	12.6	7	4.0	12	7.7	10	6.2	0	0.0	0	0.0	0	0.0	0	0.0	0	64	63.0	
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Production Support																						
Other (DSA)																						
Interim Contractor Support																						
Installation of Hardware*	8	1.4	9	0.5	20	1.2	17	0.7	10	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	64	3.9	
PRIOR YR EQUIP	8	1.4	5	0.3	4	0.2	18	1.1	5	0.2	10	0.2	0	0.0	0	0.0	0	0.0	0	13	1.6	
FY 02 EQUIP																				22	1.3	
FY 03 EQUIP																				7	0.3	
FY 04 EQUIP																				12	0.5	
FY 05 EQUIP																				10	0.2	
FY 06 EQUIP																				0	0.0	
FY 07 EQUIP																				0	0.0	
FY 08 EQUIP																				0	0.0	
FY 09 EQUIP																				0	0.0	
FY TC EQUIP																				0	0.0	
TOTAL INSTALLATION COST		1.4		0.5		1.2		0.7		0.2		0.0		0.0		0.0		0.0		0.0		3.9
TOTAL PROCUREMENT		34.6		15.6		5.4		9.4		7.1		0.0		0.0		0.0		0.0		0.0		72.1
METHOD OF IMPLEMENTATION																						

CONTRACT DATES: FY 2003: Dec-02 FY 2004: Dec-03 FY 2005: Oct-04 FY 2006:

DELIVERY DATES: FY 2003: Jul-03 FY 2004: Jul-04 FY 2005: Jul-05 FY 2006:

INSTALLATION SCHEDULE:	PY	1	2	FY04	3	4	1	2	FY05	3	4	1	2	FY06	3	4
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INPUT 37 5 12 10

OUTPUT 37 5 12 10

INSTALLATION SCHEDULE:	1	2	FY07	3	4	1	2	FY08	3	4	1	2	FY09	3	4	TC	TOTAL
INPUT																0	64
OUTPUT																0	64

Notes/Comments

Exhibit P-3a, Individual Modification
Justification
Unclassified
Classification

UNCLASSIFIED

February, 2004

MODIFICATION TITLE: Satellite Communications Systems
 COST CODE NR118
 MODELS OF SYSTEMS AFFECTED: JMINI Control System - DMR
 DESCRIPTION/JUSTIFICATION: Channel controller hardware (radio/modem/antenna) to meet ORD-mandated satellite channel access requirement. Will provide dynamic centralized control of joint operable 5 KHz and 25 KHz ultra high frequency military satellite communications

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY Qty	\$	FY 02 Qty	\$	FY 03 Qty	\$	FY 04 Qty	\$	FY 05 Qty	\$	FY 06 Qty	\$	FY 07 Qty	\$	FY 08 Qty	\$	FY 09 Qty	\$	TC Qty	\$	Total Qty	\$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment																						
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Production Support																						
Other (DSA)																						
Interim Contractor Support																						
Installation of Hardware*																						
PRIOR YR EQUIP																						
FY 02 EQUIP	248	31.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	248	31.8	
FY 03 EQUIP																						
FY 04 EQUIP																						
FY 05 EQUIP																						
FY 06 EQUIP																						
FY 07 EQUIP																						
FY 08 EQUIP																						
FY 09 EQUIP																						
FY TC EQUIP																						
TOTAL INSTALLATION COST		2.7		0.1		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		2.7
TOTAL PROCUREMENT		37.3		0.1		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		37.3

METHOD OF IMPLEMENTATION:

CONTRACT DATES: FY 2003: NA FY 2004: NA FY 2005: NA FY 2006: NA

DELIVERY DATES: FY 2003: NA FY 2004: NA FY 2005: NA FY 2006: NA

	PY	1	2	FY04	3	4	1	2	FY05	3	4	1	2	FY06	3	4
--	----	---	---	------	---	---	---	---	------	---	---	---	---	------	---	---

INPUT

248

OUTPUT

248

	PY	1	2	FY07	3	4	1	2	FY08	3	4	1	2	FY09	3	4	TC	TOTAL
--	----	---	---	------	---	---	---	---	------	---	---	---	---	------	---	---	----	-------

INPUT

0

248

OUTPUT

0

248

Notes/Comments

Note 1: Based on revised ORD, DMR channels procured in FY00 and prior years meet current JMINI requirements

Exhibit P-3a, Individual Modification

Justification

Unclassified

Classification

UNCLASSIFIED

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE

February 2004

ITEM	Manufacturer's Name and Location	PRODUCTION RATE			PROCUREMENT LEAD-TIMES					Total	Unit of Measure
		MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT			
UHF Modems	Via Sat	1	34	400	30	30	180	N/A	240	Days	
321500 SHF Terminals--AN/WS-6(V)5 Mod kits - Ship	Raytheon, Boston, MA	0	3	36	1 mo.	1 mo.	12 mo.	12 mo.	39		
321500 SHF Terminals--AN/WS-6(V)7 - Ship	Raytheon, Boston, MA	0	3	33	1 mo.	1 mo.	12 mo.	12 mo.	48		
321500 SHF Terminals--AN/WS-6(V)7 - Shore	Raytheon, Boston, MA	0	3	3	1 mo.	1 mo.	12 mo.	12 mo.	3		

SHE Terminals

NAVMAT FORM 7110/4 (REVISED 11/77)

Exhibit P-21, Production Schedule

Justification	Unclassified	Classification
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PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE

February 2004

ITEM	Manufacturer's Name and Location	PRODUCTION RATE			PROCUREMENT LEAD-TIMES				Total	Unit of Measure
		MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT		
321500 SHF Terminals--AN/WSC-6(V)9 - Ship	Harris, Melbourne, FL	3	3	24	1 mo.	1 mo.	10 mo.	10 mo.	47	
321500 SHF Terminal -- SUBHDIR SHF Mod Kit	Raytheon, MA & Harris, FL	0	7	84	1 mo.	1 mo.	15 mo.	15 mo.	190	
321500 SHF Terminals -- AN/V & V/0 Modems	Raytheon, MA & Harris, FL	0	6	72	1 mo.	1 mo.	12 mo.	12 mo.	190	

NAVMAT FORM 7110/4 (REVISED 11/77)

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NAVMAT FORM 7110/4 (REVISED 11/77)

Exhibit P-21, Production Schedule
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CLASSIFICATION

PRODUCTION SCHEDULE																			DATE												
(DOD EXHIBIT P-21A)																			February, 2004												
APPROPRIATION/BUDGET ACTIVITY																			P-1 ITEM NOMENCLATURE												
OP.N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT																			Satellite Communications Systems												
COST CODE	ITEM/MANUFACTURER	S E R V	PROC QTY	ACCEPT PRIOR TO 1-Oct	BAL AS OF 1-Oct	FISCAL YEAR 04									FISCAL YEAR 05																
		FY				O 03	N	D	J	F	M	A	M	J	J	U	S	O 04	N	D	J	F	M	A	M	J	J	A	S		
						C C	O O	E E	A A	E E	A A	P P	A A	U U	U U	G G	P P	C C	O O	E E	A A	E E	A A	P P	A A	U U	L L	A A	S S		
						T T	V V	C C	N N	B B	R R	R R	Y Y	N N	L L	U U	G G	T T	V V	C C	N N	E E	B B	R R	Y Y	N N	L L	A A	E E		
NR112	Comm. Satellite--INMARSAT B (Ship) Eq Upgd - 128 Kb	04	80		80	A			12	12	10	10	10	10	10	6		A			14	14	10	10	9	10	10	9			
NR112	Comm. Satellite--INMARSAT B (Ship) Eq Upgd - 128 Kb	05	86		86																										
NR112	Comm. Satellite--INMARSAT B HSD KITS	04	8		8	A			4	4																					
NR117	Global Broadcast Service - Backfits/Upgrades	04	Var.		132				A									10	10	10	10	10	10	10	12	12	14	14			
NR117	Global Broadcast Service - Backfits	05	15		15																	A					7	8			
NR117	Global Broadcast Service - Shore	04	7		7				A												4	3									
NR118	JMINI Control System - NMS	04	12		12	A											6	6													
NR118	JMINI Control System - NMS	05	10		10													A									5	5			
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		

ITEM	Manufacturer's Name and Location	PRODUCTION RATE			PROCUREMENT LEAD-TIMES			Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
		MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT				
321500 Commercial SATCOM- INMARSAT B	Mackay Communications, Edison, NJ				1 mo.	1 mo.	3 mo.	3 mo.			EA
321500 Commercial SATCOM- INMARSAT B Upgrades - Handover	Mackay Communications, Edison, NJ				1 mo.	1 mo.	3 mo.	3 mo.			EA
321500 Commercial SATCOM- INMARSAT B Upgrades - 128 Kbps	Mackay Communications, Edison, NJ				1 mo.	1 mo.	3 mo.	3 mo.			EA
321500 Commercial SATCOM- INMARSAT B HSD Kits	DNE Technologies, Wallingford, CT				1 mo.	1 mo.	3 mo.	3 mo.			EA
321500 Global Broadcast Service- Single (Receive Suite)	Raytheon, Marlborough, MA & Reston, VA	6	12	96	3 mo.	3 mo.	8 mo.	8 mo.	22		
321500 Global Broadcast Service-Dual (Receive Suite)	Raytheon, Marlborough, MA & Reston, VA	6	12	96	3 mo.	3 mo.	8 mo.	8 mo.	29		
321500 Global Broadcast Service -Subs (Receive Suite)	Raytheon, Reston, VA	1	1	12	3 mo.	3 mo.	6 mo.	6 mo.	70		
321500 Global Broadcast Service - Shore	Raytheon, Reston, VA	1	10	120	3 mo.	3 mo.	8 mo.	8 mo.	54		
JMINI NMS	SAIC	1	10	20	30	30	300	N/A	360	Days	