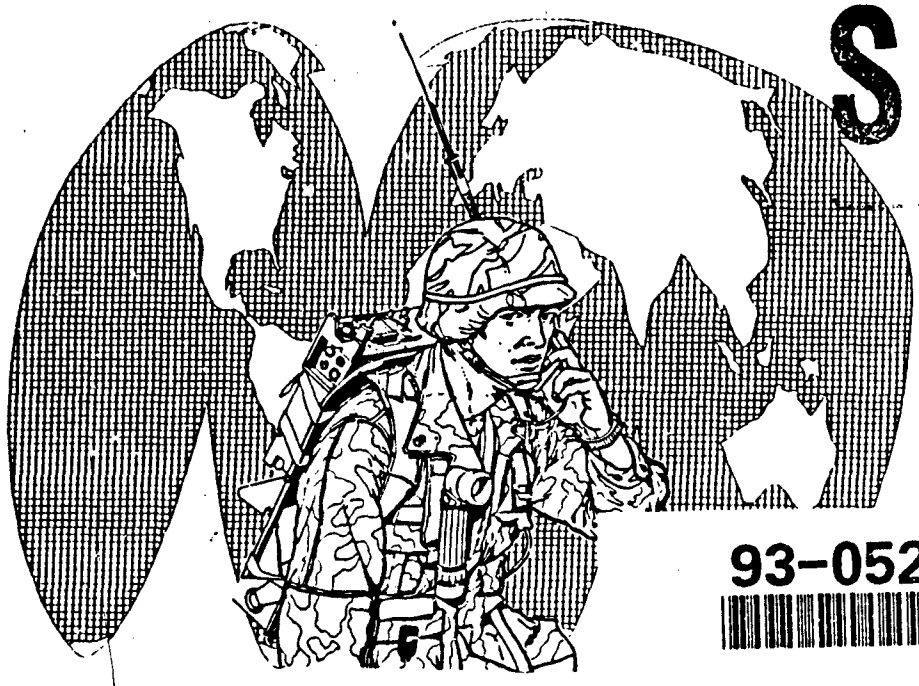
COMMAND, CONTROL, COMMUNICATIONS AND INTELLIGENCE (C3I)

PROJECT BOOK

FISCAL YEAR 1993



HEADQUARTERS, US ARMY COMMUNICATIONS–ELECTRONICS COMMAND
FORT MONMOUTH, NEW JERSEY 07703–5027

US ARMY
COMMUNICATIONS
ELECTRONICS COMMAND

CECOM–BOTTOM LINE: THE SOLDIER

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The C3I Project Book displays a cross section of Command, Control, Communications and Intelligence (C3I) systems/equipment which are currently in development, production, or in the field. This publication is a coordinated effort between the Communications-Electronics Command (CECOM), PEO Command and Control Systems, PEO Communications Systems, and PEO Intelligence and Electronic Warfare. CECOM, along with the PEO's it supports, shares the critical mission of sustaining and modernizing communication, electronics and intelligence systems in order to support the soldier with the best state-of-the-art C3I equipment and service available. This publication serves to keep our wide audience abreast of the latest developments and initiatives relating to our equipment.

14. SUBJECT TERMS C3I Project Book; Command Control Communications; Command and Control Systems; Communication and Radio Systems; Communications-Electronics; Communication Equipment; Communication Satellite Terminals; Communications Intelligence; Electronic Equipment; Electronic Intelligence; Electronic Switching; Electronic Warfare; Intelligence Electronic Warfare

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C3I PROJECT BOOK
FISCAL YEAR 1993

Message from the Commanding General
U.S. Army Communications–Electronics Command (CECOM)
Fort Monmouth, New Jersey

Dear Reader:

I am pleased to present the Fiscal Year 1993 edition of the Command, Control, Communications, and Intelligence (C3I) Project Book. The C3I Project Book displays a cross section of systems and equipment which are currently in development, production, or in the field. This publication reflects a coordinated effort between CECOM, PEO Command and Control Systems, PEO Communications, and PEO Intelligence and Electronic Warfare.

The C3I military community, in partnership with industry, shares the critical mission of equipping, sustaining, and modernizing communications, electronics, and intelligence systems using superior technology in support of worldwide power projection. This mission will support a trained and ready Total Force, with the capabilities required to own the night and dominate the spectrum, key elements to the accomplishment of decisive victory.

We encourage industry to assist with these challenges as we experience vast changes to our global environment and resources. The C3I Project Book provides industry with our latest developments and initiatives toward this objective.

CECOM Bottom Line: THE SOLDIER.

Sincerely,

Otto J. Guenther

Otto J. Guenther
Major General, U.S. Army
Commanding

MAJOR GENERAL OTTO J. GUENTHER

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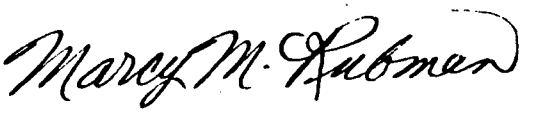

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The information found within is current at the time of publication (30 October 1992) and is subject to change. Comments/suggestions may be addressed as follows:

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PEO CCS

PM ADCCS

PM, ADCCS

FORWARD AREA AIR DEFENSE COMMAND AND CONTROL (FAAD C2)

FORWARD AREA AIR DEFENSE COMMAND, CONTROL AND INTELLIGENCE (FAAD C2I)

PROJECT MANAGER: COL Daniel L. Montgomery, DSN 788-3441
COMM 205/895-3441

PRODUCT MANAGER: LTC Raymond Zegley, DSN 788-4309
COMM 205/895-4309

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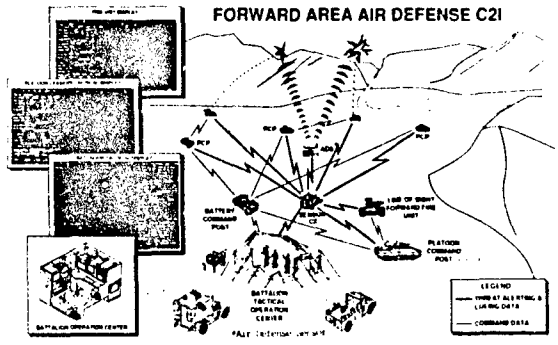


DESCRIPTION: The FAAD C2 system consists of processors and displays, software and communications equipment to meet the Command and Control (C2) and targeting needs of FAADS battalions and separate batteries. This system will also fulfill the functional requirements of the air defense artillery component of the Army Tactical Command and Control System (ATCCS), and will interoperate with joint and allied High-to-Medium Altitude Air Defense (HIMAD) C2 systems.

The FAAD C2I system consists of a C2 component (software) that integrates, processes and distributes aerial target information gathered from Ground-Based (GBS) and other Sensors, Identification Friend-or-Foe (IFF), Positive Hostile Identification (PHID) and Noncooperative Target Recognition (NCTR) devices. FAAD C2I will be used to integrate the division air defense fight to ensure freedom of maneuver by divisional forces and protection of critical C2, fire support, and sustaining elements of the air/land battle. FAAD C2I is an interactive processor-to-processor automated system replacing the man-to-man manual one-way system.

HISTORICAL BACKGROUND:

Mar 85 - Short Range Air Defense Command and Control (SHORAD C2) presented.
Jan 86 - SHORAD C2 became subsystem of FAAD system, redesignated to FAAD C2I.
Jul 86 - Milestone II, full scale development of system software.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
C2I/FU TT *					I																							
FDT&E *						I																						
LIMITED USER TEST (LUT)*						I																						
IPR (LRP) *							I																					
FUE/IOC *								I																				
CONTRACT AWARD **								I																				
C2I TT **											I																	
EARLY USER EVAL **											I																	
IOT&E **												I																
MS III **													I															
FUE/IOC **													I															

* Light Division; ** Heavy Division

REQUIREMENTS DOCUMENT: ROC approved Oct 85; O&O approved May 86.

TYPE CLASSIFICATION: Standard, Jun 93 (Light and Special).

FAAD C2 PROVIDES NEAR REAL TIME TARGETING AND C2 INFORMATION, ACCURATE AND TIMELY IDENTIFICATION OF TARGETS, ALERTING OF FAAD AND FORCE ELEMENTS, CUEING OF FAAD WEAPONS, AND INTEROPERABILITY WITH ALLIED AND JOINT AD C2 SYSTEMS.

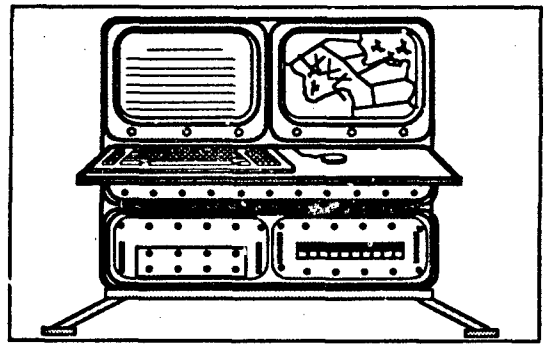
PM, ADCCS

PORTABLE ALL SOURCE ANALYSIS WORK STATION (PAWS)
WITH RAPID AIR DEFENSE EVALUATION SYSTEM (RAIDES)

PROJECT MANAGER: COL Daniel L. Montgomery, DSN 788-3441
COMM 205/895-3441

PRODUCT MANAGER: LTC H. M. Carr, DSN 788-3517
COMM 205/895-3517

PE & LINE #:



DESCRIPTION: The Portable All Source Analysis System (ASAS) with RAIDES operational demonstration software provides the commander with the interim capability to automate tactical planning and Intelligence Preparation of the Battlefield (IPB) in the Air Defense Tactical Operations Center (ADTOC). RAIDES software (sw) is a reverse-engineered product of the Air Force - Force Level Automated Planning System (FLAPS) sw.

By reverse-engineering the FLAPS sw, it became possible for the friendly Air Defense commander to study his own air defense design for weaknesses or gaps in coverage or lethality. PAWS/RAIDES thus allows the Air Defense commander to plan a cohesive and coordinated air defense system in minutes compared to a manual system that once took hours.

PAWS (which hosts the RAIDES software) is a DEC MICROVAXII computer which has been type classified and given the nomenclature AN/TYQ-37. AN/TYQ-37 is a ruggedized system consisting of two high resolution 19" color monitors, a 32 bit CPU, a coprocessor, VMS Operating System, a graphics kernel system, 16 MB RAM/4MB ROM, IEEE 802.3 Interface, a 760 MB Disk Drive, and can accommodate several software systems: Ada Oracle, "C", and Fortran. PM ADCCS plans to add Combat Service Support and Maneuver Control System software to the RAIDES capability and port the combined software to common hardware.

A series of field demonstrations will be conducted for proof-of-principle.

HISTORICAL BACKGROUND:

Nov 88 - CG 32D Army Air Defense Command (AADCOM) and PM Joint Tactical Fusion (JTF) initiate program.
Jan 89 - JTF PAWS HW and RAIDES demo deployed.
Feb 89 - Proof of Principle successful: PAWS/RAIDES; FUE PAWS/RAIDES.
Mar 89 - Demonstration/prototyping activities began in 32D AADCOM; ADCCS Project Office began RAIDES SW deployment.
Oct 89 - V3.4 - Enhanced RAIDES SW deployed.
Jan 90 - V3.5 - PAWS Display Manager (PDM) fielded (pop-up menus).
Aug 90 - PAWS/RAIDES deployed to Operation Desert Shield/Storm.
Feb 91 - V4.0 - Major enhancements to RAIDES deployed.
Feb 92 - V4.3 - Major enhancements to RAIDES deployed.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
RAIDES 4.4 AND BDE FORWARD OBSERVER DEVELOPMENT																												
DEMO/USER TEST 1																												
FAAD FITSS DEMO W/FORWARD OBSERVER																												
FOLLOW-ON BRIGADE FORWARD OBSERVER DEVELOPMENT																												

REQUIREMENTS DOCUMENTS: Air Defense Artillery Command, Control, Communications and Intelligence (ADA C3I) O&O, Jul 90; Draft Air Defense Integrated Tactical Operations Center (ITOC) ROC, Oct 90. User functional description, Dec 91.

TYPE CLASSIFICATION: N/A for software.

PAWS/RAIDES PROVIDES AIR DEFENSE THE CAPABILITY TO PERFORM TACTICAL PLANNING AND ENCOMPASSES THE PLANS ASSOCIATED WITH SENSOR COVERAGE, WEAPONS COVERAGE/LETHALITY, THE EVALUATION OF AIR DEFENSE EFFECTIVENESS, DEVELOPMENT OF LIKELY THREAT INGRESS/EGRESS ROUTES, PERFORM THREAT ANALYSIS, PERFORM COMMUNICATIONS EFFECTIVENESS ANALYSIS, AND PERFORM TERRAIN ANALYSIS (PARTICULARLY MASKING EFFECTS). COMMON SOFTWARE WILL ADD GENERAL STAFF PLANNING CAPABILITY.

PM ASAS

PM, ASAS

ALL SOURCE ANALYSIS SYSTEM (ASAS)

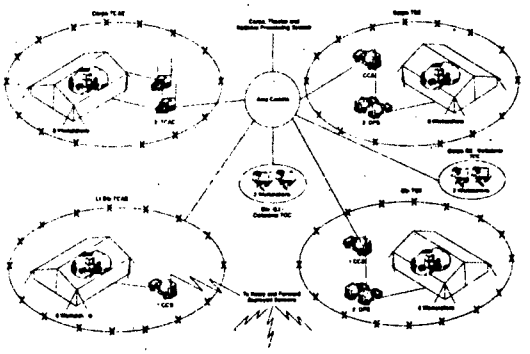
PROJECT MANAGER: COL Richard Johnson, COMM 703/556-3062

PE & LINE #: 64321A (ASAS) D926 - All Source Analysis
Engineering Sys Development
DB19 ASAS Block Improvement.
Procurement Annex Line Item Data 2035A-KA4400
ASAS - TIARA

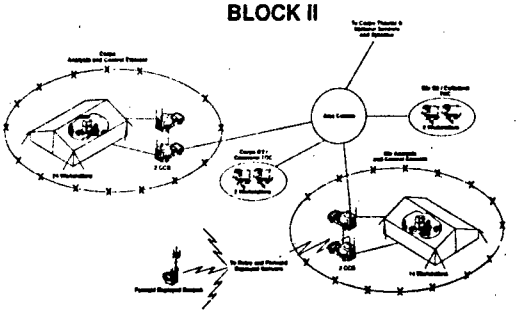
DESCRIPTION: The ASAS is an automated tactical intelligence system to be fielded to units organic to Corps, Division and Echelons Above Corps. The system is grouped into military intelligence processing enclaves at the using units to provide an interactive capability to perform intelligence processing, systems operation, and communications processing and interfacing. ASAS capability is also crucial for information exchange among the Battlefield Functional Areas of the ATCCS, other services, allied forces, and theater and national intelligence resources. ASAS provides an all source intelligence fusion network used to generate timely, accurate, and comprehensive understanding of enemy deployments, capabilities, vulnerabilities and potential courses of action.

The ASAS acquisition program has been divided into three distinct, time-phased blocks, with each succeeding block building upon and expanding the capabilities and functionalities developed and produced in previous blocks. ASAS Project Office will complete procurement and materiel release for Block I systems in FY93, with fielding to priority units. Also in FY93, the ASAS program manager will award the Block II development contract to build upon the Block I system to include conversion to the ATCCS Common Hardware/Software open architecture. ASAS will initiate production of the Block II CHS system in FY98. The Block III software development effort begins in FY97.

ALL SOURCE ANALYSIS SYSTEM BLOCK I



ALL SOURCE ANALYSIS SYSTEM BLOCK II



HISTORICAL BACKGROUND:

Mar 83 - Congress approved Program Plan (prime contract award).
Dec 84-Jan 85 - R&D contracts awarded.
Feb 87 - Limited Production, Urgent contracts awarded.
Nov 87 - Joint Oversight Group Approved Plan "G" Program Baseline.
Nov 89-Dec 89 - FDT&E.
Mar 90 - LCC-Phase II contract award.
May 91 - V2 software delivered to Ft Hood.
Dec 91 - V2 software accredited.
Jan 92 - Block I Log Demo completed; Block II RFP released.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
BLOCK I																												
ASAS IOT&E	I																											
ASARC PROGRAM REVIEW (MATERIEL RELEASE)					I																							
BLOCK II/III																												
DAB PROGRAM REVIEW					I																							
BLOCK II RDTE CONTRACT AWARD					I																							
DT&E																					I							
IOT&E																					I							
MILESTONE III																									I			
PRODUCTION AWARD																										I		

REQUIREMENTS DOCUMENT: ROC was approved Jun 86; Phased ROC validated by JROC 21 Nov 91. An ORD is planned for FY94.

TYPE CLASSIFICATION: Limited Production, Urgent, Feb 87 for the LCC; Standard scheduled for Mar 93 ASARC.

ASAS PROVIDES ALL SOURCE CORRELATED INTELLIGENCE TO COMMANDERS AT DIVISION, CORPS AND ECHELONS ABOVE CORPS.

PM AWIS

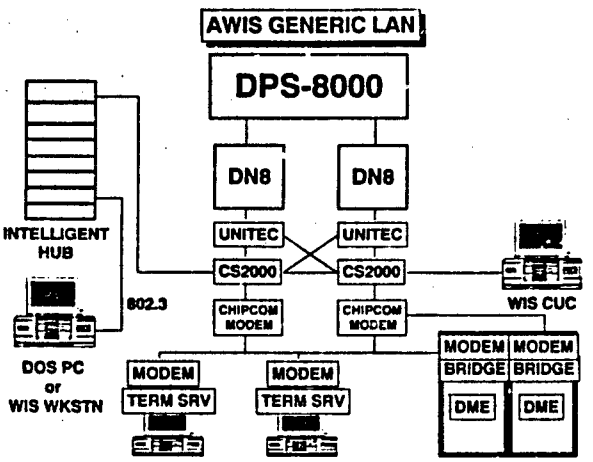
PM, AWIS

ARMY WORLDWIDE INFORMATION SYSTEMS (AWIS)

PROJECT MANAGER: COL Melvin I. Hosaka, DSN 656-6254
COMM 703/803-6254

PE & LINE #: 383152.BE4100

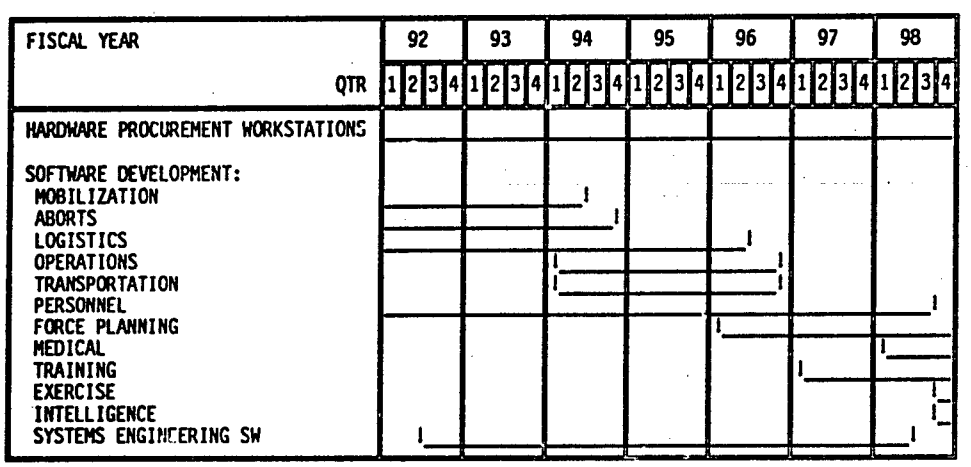
DESCRIPTION: The Worldwide Military Command and Control System (WWMCCS) provides the means for operational and administrative command and control of U.S. military forces. The primary mission of WWMCCS is to support the National Command Authority (NCA), the Joint Chiefs of Staff (JCS), the Unified and Specified Commands and other Department of Defense (DoD) Agencies/Activities. Program objectives include: sustaining the current WWMCCS ADP operational availability, providing compatibility with an open systems architecture environment, efficient and cost effective insertion of mature technology, the implementation of the Joint Operation Planning and Execution System (JOPES) and supporting the Army in its strategic Command and Control arena. As the primary overall national system for Command and Control, WWMCCS currently contains numerous subsystems, terminals, and interfaces. AWIS hardware and communications generally follows the plans for the WWMCCS ADP Modernization (WAM) Program architecture. AWIS software architecture defines a Layered Software Approach using Ada and will focus on the development of approximately 17 software product lines (e.g., mobilization, logistics, operations, etc.).



HISTORICAL BACKGROUND:

83 - Project Manager established - tasked with the coordination of the Worldwide Information system within Army.
Sep 83 - Began documentation for modernization of WWMCCS.
Feb 86 - Milestone II - Definition/Design.
Jan 87 - Software development started.
Sep 87 - MAISRC IPR.
Mar 90 - MAISRC IPR.

EVENT SCHEDULE:



REQUIREMENTS DOCUMENT: JOPES ROC approved Jul 83; WWMCCS ADP Concept of Operations and General Requirements approved Jul 83. AWIS Materiel Needs Statement approved Dec 91.

TYPE CLASSIFICATION:

AWIS SUPPORTS THE INFORMATION COLLECTION, PROCESSING, DISTRIBUTION, DISPLAY SYSTEMS AND SW APPLICATIONS FOR THE WAM.

PM CSSCS

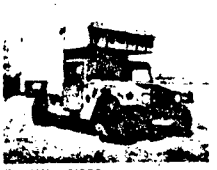
PM, CSSCS

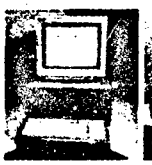
COMBAT SERVICE SUPPORT CONTROL SYSTEM (CSSCS)

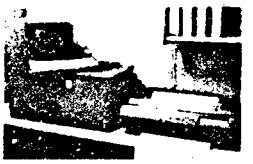
PROJECT MANAGER: COL J. R. Steverson, DSN 656-5312
COMM 703/806-5312

PE & LINE #: 643805.D091

DESCRIPTION: The CSSCS is one of five Battlefield Functional Area (BFA) Control Systems which constitute the integrated Army Tactical Command and Control System (ATCCS). CSSCS provides CSS commanders with automated command and control support to accomplish the CSS mission. This system will provide the critical functional interfaces between ATCCS and the CSS Standard Army Management Information Systems (STAMIS) allowing the state of readiness to be assessed and the ability to deploy to be evaluated in a near real time mode. CSSCS will share selected information with the remaining four BFAs of ATCCS (maneuver control, air defense, fire support and intelligence/electronic warfare). CSSCS will be deployed from echelons above corps, divisions, maneuver brigades/combat brigades to separate/armored cavalry regiments. CSSCS will begin fielding in the FY94 time frame to coincide with the introduction of automation in all five battlefield functional areas.


Rigid Wall SICPS


Special




M577 SICPS


5 Ton SICPS


SICPS Extension Tent

HISTORICAL BACKGROUND:

Jun 82 - MENS approved.
Jun 84 - O&O approved.
Apr 87 - PM CSSCS established.
Nov 87 - Revised O&O plan approved.
Dec 88 - Version 1 SW evaluated.
May 90 - Version 2 SW evaluated.
Jun 90 - Version 3/4 SW solicitation issued.
Oct 90 - "Blocked" ROC approved.
Dec 90 - Milestone I/II ASARC.
Feb 91 - Contract Award Version 3/4 SW; OSD C3I Committe Review.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
EARLY USER TEST & EVALUATION/ FORCE DEVELOPMENT TEST & EXPERIMENTATION			!																									
IOTE					!																							
FUE					!																							
ASARC III						!																						
IOC									!																			

REQUIREMENTS DOCUMENT: O&O approved, Jun 84; ROC approved, Oct 90.

TYPE CLASSIFICATION: Scheduled for Jun 93.

CSSCS WILL PROVIDE TIMELY LOGISTICS, MEDICAL, FINANCIAL AND PERSONNEL PLANNING AND DECISION MAKING CAPABILITY TO THE COMMANDER.

PM CTIS

PM, CTIS

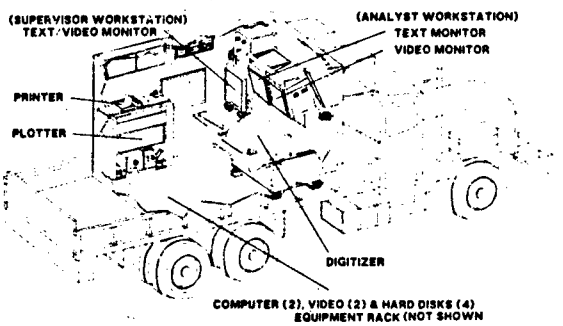
DIGITAL TOPOGRAPHIC SUPPORT SYSTEM (DTSS)

PROJECT MANAGER: Harold G. Britton, Jr., DSN 345-2854
COMM 703/355-2854

PRODUCT MANAGER: David Thacker, DSN 345-2876
COMM 703/355-2876

PE & LINE #: 654716.D579

DESCRIPTION: The DTSS is a tactical, computer-based system which will provide automated assistance to the Army's terrain analysis function. It will have the capability to receive, reformat, create, store, retrieve, update, manipulate, and densify digital terrain data to produce terrain analysis products which contribute to the Intelligence Preparation of the Battlefield and support other tactical systems with digital terrain data and products. The DTSS consists of two terrain analysis workstations, and associated equipment, housed in an S-280 shelter and mounted on an M-927 5-ton truck. The DTSS will interface with the five nodes of the Army Tactical Command and Control System (ATCCS): Intelligence and Electronic Warfare; Maneuver Control; Fire Support; Air Defense; and Combat Service Support.



HISTORICAL BACKGROUND

Jun 87 - Milestone II, IPR.
Jul 87 - Full Scale Engineering Development contract awarded.
Jan 91 - Start Technical Test.
Mar 92 - Finish Technical Test.
Apr 92 - LRIP contract award.
Jun 92 - Initial Operational Test and Evaluation (IOT&E).

EVENT SCHEDULE

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
IOT&E			I																									
MILESTONE III IPR					I																							
FIRST ARTICLE TEST							I																					
FIRST UNIT EQUIPPED								I																				
IOC											I																	
P3I BLOCK I															I													
P3I BLOCK II																								I				

REQUIREMENTS DOCUMENT: DTSS ROC approved Oct 86, US Army TRADOC.

TYPE CLASSIFICATION: Standard, Dec 92.

DTSS IS A TACTICAL, COMPUTER-BASED TERRAIN ANALYSIS SYSTEM WHICH WILL ENABLE THE TERRAIN ANALYST TO SUPPORT THE BATTLEFIELD COMMANDER WITHIN THE COMMANDER'S DECISION CYCLE.

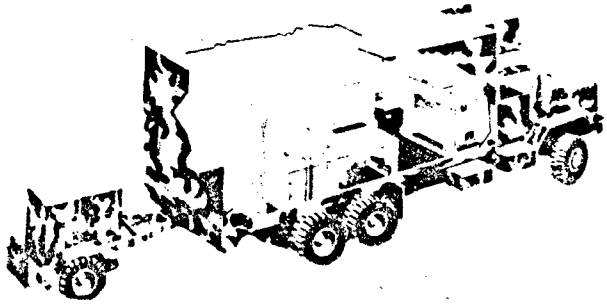
PM, CTIS

QUICK RESPONSE MULTICOLOR PRINTER (QRMP)

PROJECT MANAGER: Harold G. Britton, Jr., DSN 345-2854
COMM 703/355-2854

PRODUCT MANAGER: Stephen P. Hollandsworth, DSN 345-2872
COMM 703/355-2872

PE & LINE #: 654716.D579



DESCRIPTION: The QRMP will provide the capability for rapid, low volume production of large format (24" x 30"), multicolor topographic and terrain products and imagery. QRMP consists of modified commercial-off-the-shelf (COTS) digital printing, scanning, processing and file server equipment. QRMP will be able to print hardcopy output from both digital and hardcopy originals/sources. Hardcopy originals can be scanned into a digital file which can be sent to the front-end workstation for merging with other digital files (Landsat, Arc Digitized Raster Graphics (ADRG), or previously scanned data). Text can also be added and then the entire merged file can be printed. The QRMP will have a digital and voice link with the Digital Topographic Support System (DTSS) for the receiving and printing of digital DTSS files, such as Tactical Decision Aids (TDAs). QRMP will supplement the current off-set printing capabilities of the Topographic Support Systems (TSSs).

HISTORICAL BACKGROUND:

Sep 87 - MS II IPR.
Apr 88 - Full Scale Development contract award.
Dec 90 - FSD contract termination.
Mar 92 - Acquisition Strategy and Plan approved.

EVENT SCHEDULE

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
SE&I CONTRACT AWARD					!																							
BLOCK I:																												
DEVELOPMENT					!				!																			
DESIGN REVIEWS					!	!																						
TAILORED TECHNICAL TEST									!	!																		
OPERATIONAL ASSESSMENT TEST										!	!																	
EARLY FIELD PROTOTYPE DELIVERY											T					!												
BLOCK II:																												
DEVELOPMENT																	!							!				
TESTING																								!		!		
MILESTONE III																												!

REQUIREMENTS DOCUMENT: ROC approved Oct 86; O&O approved Jul 85.

TYPE CLASSIFICATION: Standard, Sep 98.

QRMP WILL PROVIDE RAPID, LOW VOLUME, LARGE FORMAT, FULL COLOR PRODUCTION OF TOPOGRAPHIC AND TERRAIN PRODUCTS AND IMAGERY, FROM BOTH HARDCOPY AND DIGITAL SOURCES/ORIGINALS.

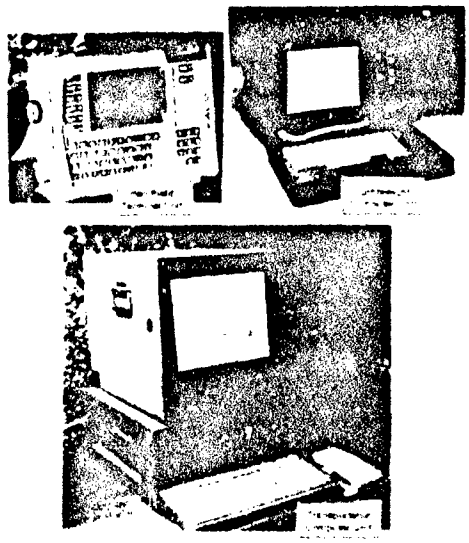
PM CHS

PM, CHS

COMMON HARDWARE/SOFTWARE (CHS)

PROJECT MANAGER: COL Walter L. Olson, DSN 995-4679
COMM 908/544-4679

PE & LINE #: 6.48.18A X8W27P03



DESCRIPTION: The Project Manager, CHS provides common hardware/software for the Army Tactical Command and Control Systems (ATCCS) consisting of the five Battlefield Functional Areas Control Systems (BFACS); Forward Area Air Defense Command and Control System; Combat Service Support Control System; Maneuver Control System; Advanced Field Artillery Tactical Data System; and All Source Analysis System. Each BFACS Project Manager purchases CHS as building blocks and is responsible for fielding their complete system. The ATCCS emphasis is placed on minimizing the number of unique C2 hardware and software systems fielded by the Army. PM CHS is procuring NDI computers to include a Handheld Terminal Unit (HTU), Portable Computer Unit (PCU), Transportable Computer Unit (TCU), and compatible NDI peripheral devices. All but the HTU will be provided as a V1 version similar to commercial models or as a ruggedized V2 version. Procured commercial software includes operating systems, database management systems, word processing, spreadsheets, communications, training and maintenance diagnostic programs. A Programming Support Environment (PSE), will support BFACs application software development.

LIGHTWEIGHT COMPUTER UNIT (LCU) - The LCU is a lightweight computer system for use in applications requiring smaller size, less weight and limited graphic capabilities. The LCU is an NDI procurement similar to CHS 1 and interoperates with existing CHS systems.

COMMON ATCCS SUPPORT SOFTWARE (CASS) - The CASS is a collection of reusable software components which conform to an architectural framework based on state-of-the-art software reuse technology. Common applications will be developed and targeted to the CASS/CHS platform for use by all ATCCS systems which will reduce the overall ATCCS development and maintenance costs and improve interoperability.

STANDARD INTEGRATED COMMAND POST SYSTEMS (SICPS) - SICPS provides the ATCCS nodal PMs with standardized hardware platforms (tent command post (CP), shelter CP, track CP and 5-ton CP) to house their respective CHS hardware. These platforms provide power, environmental control, mounting hardware, lights and grounding kits. When populated with CHS and communications equipment, these systems provide the capability to operate a survivable and mobile command post.

COMMAND AND CONTROL VEHICLE (C2V) - PM CHS has the program to design a C4I mission module for the C2V which will be used by maneuver forces to conduct commander/staff operations in heavy close combat providing command and control from corps through maneuver battalion. The C2V mission module will consist of racks, wiring and harnesses to interface with existing ATCCS equipment and will adopt to future C4I technologies.

HISTORICAL BACKGROUND:

Aug 88 - Awarded CHS contract 1.
Nov 88 - Initial delivery of V1, SW, PSE, and V2 prototypes.
Aug 89 - Initial delivery of V2.
Aug 90 - LCU RFP issued.
May 91 - Awarded LCU contract; Initial delivery of V2 (LCU).
Jul 91 - Initial delivery of V1 (LCU).
Aug 91 - Awarded SICPS Rigid Wall Shelter contract.
Sep 91 - CASS release 1 delivery.
Dec 91 - CASS release 2 delivery.
Mar 92 - CASS release 3 delivery.
Apr 92 - LCU HW Qualification Test complete.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
CHS: CHS I 1-YR CONTRACT EXTENSION ENDS/LAST ORDER PLACED									▼																			
CHS II (V1/V2) RFP RELEASE			▼																									
CHS II (V1/V2) PRE-AWARD DEMO					▼																							
CHS II (V1/V2) CONTRACT AWARD						▼																						
CHS II (V1) PRODUCTION DELIVERY							▼																					
CHS II (V2) PRODUCTION DELIVERY/HARDWARE QUALIFICATION										▼																		
CHS II (V2) USER CHECK TEST													▼															
SICPS: XM 1068 (LPU) CONTRACT AWARD			▼																									

REQUIREMENTS DOCUMENT: Original ROC, Dec 86. ATCCS updated ROC Sep 90 to include LCU.

TYPE CLASSIFICATION: CHS hardware, as class IX repair parts, will not be separately Type Classified.

CHS PROVIDES COMPATIBLE NDI COMPUTERS, SOFTWARE, PERIPHERALS PROGRAMMING SUPPORT ENVIRONMENT, TECHNICAL ASSISTANCE AND LOGISTICS SUPPORT.

PM FATDS

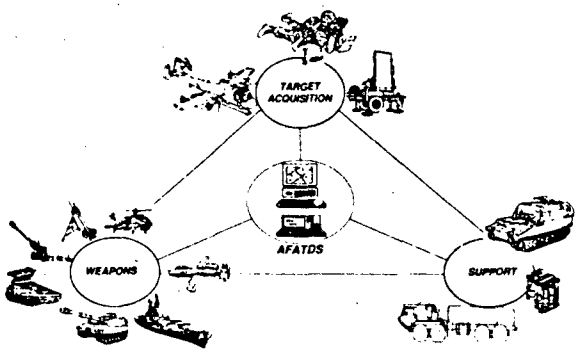
PM, FATDS

ADVANCED FIELD ARTILLERY TACTICAL DATA SYSTEM (AFATDS)

PROJECT OFFICER: LTC Paul J. Dixon, DSN 995-3328
COMM 908/544-3328

PE & LINE #: 1B423.726D322

DESCRIPTION: The Advanced Field Artillery Tactical Data System (AFATDS) will broaden and modernize the US Army Fire Support Command, Control and Coordination (FSC3) System. As a Battle Management System, AFATDS will provide automated fire support in the Army Command and Control System (ACCS) architecture in support of close, rear and deep operations, and fire support assets to complement the commander's scheme of maneuver.



AFATDS is composed of a common suite of hardware and software employed in varying configurations at different operational facilities (or nodes) interconnected by tactical communications. Both hardware and software will be capable of being tailored to perform the fire support command, control and coordination requirements at any level of command.

HISTORICAL BACKGROUND:

Mar 81 - AFATDS MENS approved.
May 82 - CCS advanced development contract awarded to Singer Co., Librascope Div.
May 84 - AFATDS FSS/FST (software) contract awarded to Magnavox Corp.
Jul 85 - Cancel CCS Development contract.
Sep 85 - Modified AFATDS Program Plan submitted to House of Representatives.
Oct 85 - Magnavox contract capped at $46.2M.
Sep 86 - Fire Support Automation Plan submitted to Congress.
Jan 89 - AFATDS ROC approved.
Apr 89 - Complete Concept Evaluation at Ft. Sill.
Jul 89 - ASARC II.
Sep 89 - DAB.
Apr 90 - Full Scale Development - Version 1 contract award.
Jun 90 - System requirement review.
Nov 90 - System design review.
Jan 91 - Revised AFATDS ROC approved.
Apr 91 - Software specification review.
Nov 91 - Preliminary design review.
Jun 92 - Start critical design reviews.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
VERSION 1 FULL SCALE DEVELOPMENT																												
AFATDS/FORCE DEVELOPMENT TEST & EXPERIMENTATION/ INITIAL OPERATION TEST & EVALUATION																												
ASARC-MS III																												
FIELD ON ACCS HARDWARE																												

REQUIREMENTS DOCUMENT: AFATDS LOA, dated 13 Dec 84; AFATDS revised ROC, 28 Jan 91.

TYPE CLASSIFICATION: It is intended to TC AFATDS Standard.

AFATDS WILL BROADEN AND MODERNIZE THE US ARMY FIRE SUPPORT COMMAND, CONTROL AND COORDINATION (FSC3) SYSTEM.

PM, FATDS

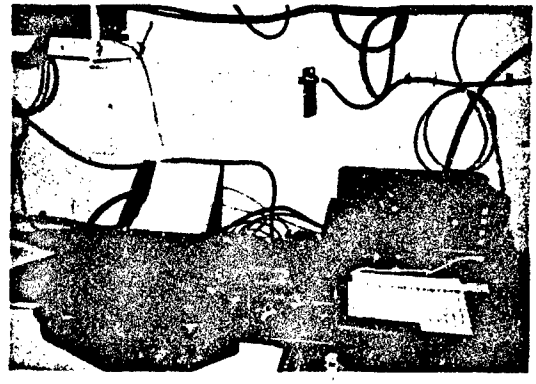
FIRE SUPPORT ADA CONVERSION (FSAC)

PROJECT OFFICER: LTC Stan Leja, DSN 995-3368
COMM 908/544-3368

PE & LINE #: B78400

DESCRIPTION: The FSAC program has been established to provide focal points to manage the following major programs:

Battery Computer System (BCS) - The BCS is a command and control facility employed in all field artillery batteries/ platoons for technical fire direction of the field artillery. The program objective is to replace the BCS, AN/GYK-29, with the Army Tactical Command and Control System (ATCCS) Common Hardware/Software (CHS) Lightweight Computer Unit (LCU) and Ada software. The LCU is a NDI computer that is modern, fast, and less expensive.



Multiple Launch Rocket System (MLRS) Fire Direction System (FDS) - The FDS is a command and control facility used for tactical fire control of MLRS. FDS uses the same computer as the BCS, and operates as a stand-alone unit for platoon, and combines with the Fire Direction Adaptation Equipment (FDAE) to form the Fire Direction Data Manager (FDDM) for battery and battalion fire control. The program objective is to replace this computer and software with the ATCCS CHS LCU and Ada software.

Interim Fire Support Automated System (IFSAS) - The IFSAS is designed to provide limited automation of fire support command and control at battalion nodes and above. The system will give commanders the ability to do automated fire support planning and execution prior to the arrival of the AFATDS. The system will utilize the ATCCS CHS LCU and will be fielded to both active and NG/Reserve units to provide early automation.

HISTORICAL BACKGROUND:	MLRS	BCS	IFSAS
Program Start	Feb 89	Feb 90	Feb 91
System Requirement Review	Aug 89	May 90	Apr 92
System Design Review	Nov 89	Sep 90	
Preliminary Design Review	Mar 90	Mar 91	May 92
Critical Design Review	Aug 90	Jul 91	Jun 92

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
MLRS:																												
FORMAL QUALIFICATION TEST	I																											
TAPE DELIVERY	I																											
IOT&E	I																											
FIRST UNIT EQUIPMENT					I																							
FIELDING COMPLETED																	I											
BCS:																												
FORMAL QUALIFICATION TEST	I																											
TAPE DELIVERY		I																										
IOT&E; PRODUCTION DECISION					I																							
FIRST UNIT EQUIPMENT						I																						
FIELDING COMPLETED																	I											
IFSAS:																												
FORMAL QUALIFICATION TEST	I																											
TAPE DELIVERY		I																										
IOT&E; PRODUCTION DECISION					I																							
FIRST UNIT EQUIPMENT						I																						
FIELDING COMPLETED										I																		

REQUIREMENTS DOCUMENT: ROC approved 12 Oct 90 (as part of Battery Computer Unit (BCU) ADA Conversion.

TYPE CLASSIFICATION: Jul 92.

FSAC WAS ESTABLISHED TO PROVIDE F'AL POINTS FOR THE MANAGEMENT OF BCS AND MLRS FDS.

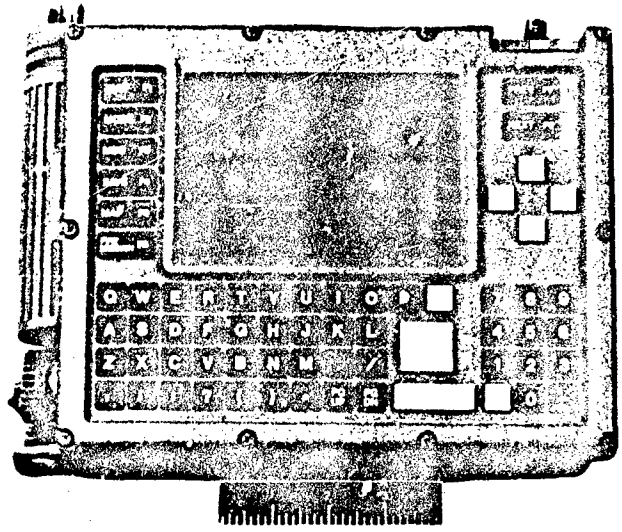
PM, FATDS

FORWARD ENTRY DEVICE (FED)

PROJECT OFFICER: LTC Stan Leja, DSN 995-3368
COMM 908/544-3368

PE & LINE #: 5213

DESCRIPTION: The FED is a device that will be employed by Fire Support and Field Artillery Operational facilities for which the size and environment requirements necessitates a small device with processing capabilities and low power requirements. FED is comprised of a Simplified Handheld Terminal Unit (SHTU), (provided by PM Common Hardware/ Software), and associated software package to compose, edit, transmit, receive, store and display messages used in the execution and planning of Fire Support operations. FED will be used by the Field Artillery Forward Observers (FOs) in Light and Heavy Division. FED will be used by Fire Support Team (FIST) Headquarters; Bn/Bde Fire Support Officers (FSO); Battery Commanders; Meteorological and Survey Sections, in Light Infantry, Airborne, and Air Assault Division. In Heavy Artillery Units, the FED will be used by Forward Observers; Company and Aerial FSOs; Firing Battery Commanders; and Meteorological Survey Sections. FED will replace Digital Communications Terminals which are in two Light Divisions and the Digital Message Devices in the Heavy Divisions.



HISTORICAL BACKGROUND:

Feb 90 - Preliminary Formal Test.
Apr 90 - Final Formal Test.
Jun 90 - Initial Formal Qualification Test (FQT).
Oct 90 - Final FQT.
Nov 90 - Hardware Qualification Test.
Dec 90 - Follow on Test and Evaluation.
Mar 91 - Approval Milestone III; Initial production awarded.
Nov 91 - Began deliveries.
Jan 92 - FY92 buy awarded; M981 Rail Test completed.
Mar 92 - Forward Observer Command and Control (FOCC) FQT; Letter of Authorization issued; Munson Road Test completed.
Apr 92 - Material Release approved - (FO/FIST).

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
SOFTWARE SUPPORT									!																			
PRODUCTION DELIVERY OF SHTU	!												!															
FUE			!																									
IOC			!																									
FIELDING			!																		!							

REQUIREMENTS DOCUMENT: Quantitative Materiel Requirement - TACFIRE, 1966; Army Tactical Command and Control Systems (H/W), 1986; Draft Annex E Fire Support ROC to ATCCS (S/W), 1990.

TYPE CLASSIFICATION: Standard, Mar 91.

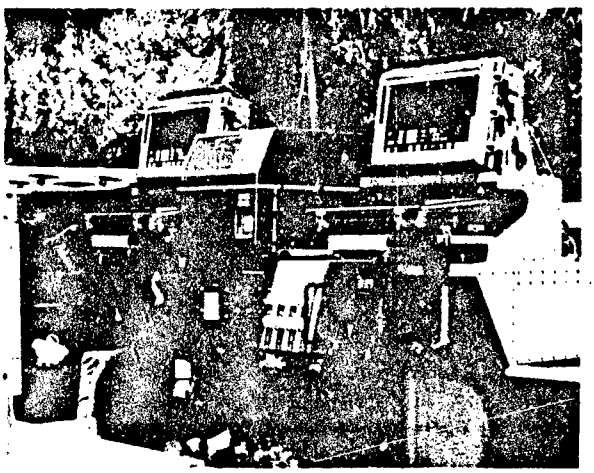
FED WILL BE EMPLOYED TO COMPOSE, EDIT, TRANSMIT, RECEIVE, STORE AND DISPLAY MESSAGES USED IN THE EXECUTION AND PLANNING OF FIRE SUPPORT OPERATIONS AT MANEUVER PLATOON, COMPANY, BATTALION AND BRIGADE LEVELS.

PM, FATDS

LIGHTWEIGHT TACTICAL FIRE DIRECTION SYSTEM (LTACFIRE)

PROJECT OFFICER: LTC Stan Leja, DSN 995-3368
COMM 908/544-3368

PE & LINE #: 5212



DESCRIPTION: The LTACFIRE is designed to provide a lightweight transportable and user friendly automated fire support system, for use within the light infantry divisions (LID). A prototype system was fielded to the 9th Infantry Division at Ft Lewis, WA in 1985 under the experimental test bed concept. Fielding to the seven LIDs began in Sep 90 and was completed Jan 92.

LTACFIRE proviaes the Division Artillery (DIVARTY) of the light division a fully automated means to plan, control and execute fires of field artillery and mortars. Computer terminals are located at artillery battalion, DIVARTY, and Division Fire Support Element and Brigade FSE nodes. Communications between nodes and with a variety of interfacing devices is accomplished via communications means already available to the light infantry division. LTACFIRE functions are designed to automate the current manual techniques used in the light infantry's artillery battalions and DIVARTY. These include non-nuclear fire planning; tactical fire control; ammunition and fire unit data; meteorological data, artillery target intelligence and support/geometry information.

HISTORICAL BACKGROUND:

Oct 82 - Quick Reaction Program, QRP-2-32.
Oct 83 - LTACFIRE contract awarded to Litton Data Systems.
Apr 87 - OT at Fort Lewis, WA.
Aug 87 - HQDA conducted independent reviews of AFATDS and LTACFIRE and recommended to Undersecretary of the Army early fielding of AFATDS to Light Divisions in FY90.
Dec 87 - Congress mandated obligation of FY86 OPA funds for procurement of LTACFIRE for the Light Divisions; Proof of Principle on LTDIVARTY concept conducted at Fort Lewis, WA.
Mar 88 - Letter contract awarded to Litton Data Systems.
Jan 89 - Letter contract definitized.
May 90 - Additional hardware buy awarded.
Jun 90 - Conditional material release.
Sep 90 - FUE.
Nov 90 - Marine Corps contract modification - Desert Storm.
Feb 92 - Last unit equipped.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
PDSS																!												
IOC	!																											
FIELDINGS		!																										
TRANSITION TO CECOM				!																								

REQUIREMENTS DOCUMENT: QRP-2-32, Dec 87, HQDA directed that FY86 funds be used to procure LTACFIRE for seven light divisions.

TYPE CLASSIFICATION: Type classification requirement waived.

LTACFIRE IS DESIGNED TO PROVIDE A LIGHTWEIGHT TRANSPORTABLE AND USER FRIENDLY AUTOMATED FIRE SUPPORT SYSTEM FOR USE WITHIN THE LIGHT INFANTRY DIVISION.

PM OPTADS

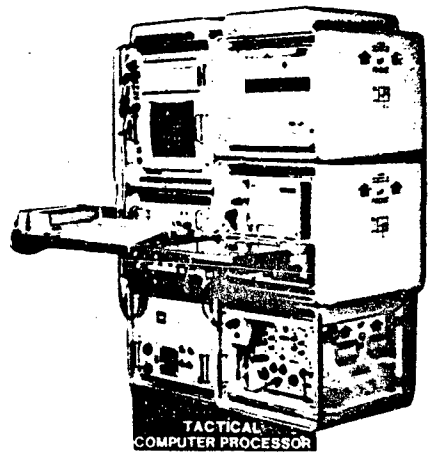
PM, OPTADS

MANEUVER CONTROL SYSTEM (MCS)
AN/UYQ-43(V)1 TACTICAL COMPUTER PROCESSOR (TCP) - NDI
AN/UYQ-43(V)2 ANALYST CONSOLE (AC)
MCS COMMON HARDWARE/SOFTWARE

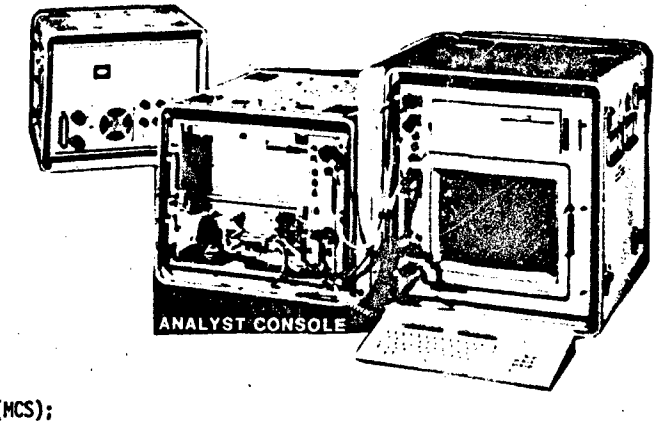
PROJECT OFFICER: Mr. Salvatore LaForgia, DSN 992-2970
COMM 908/532-2970

PE & LINE #: 1B423/40.D484 SSN: BA-9300

DESCRIPTION: The MCS is a collection of computer equipment which supports operations planning and control at one of the five nodal points (Maneuver Control) of the Army Command and Control System (ACCS). It is designed to assist the commander and his staff by providing information on his own forces, enemy forces and the battlefield characteristics. MCS provides this battlefield information by collecting, processing, and displaying data generated within the air/land combat environment. Using the features of this system the commander can improve the timeliness of his decisions and allocation of his resources.



The MCS currently consists of Tactical Computer Processors and Analyst Consoles. The Tactical Computer Processor, AN/UYQ-43(V)1, is a micro-processor based portable system which provides automated assistance to the maneuver commanders. The Analyst Console, AN/UYQ-43(V)2 is a micro-processor based intelligent terminal, connected to the TCP via Local Network, which provides multiple workstations within a nodal configuration. MCS takes advantage of commercial state-of-the-art technology by more readily fielding the commercial hardware NDI.



The MCS will transition to the digital computer system acquired by PM CHS for the Army Tactical Command and Control System (ATCCS) starting in 1994.

HISTORICAL BACKGROUND:

Jun 87 - Awarded NDI contract.
Jul 87 - Awarded system engineering and integration contract (MCS); Full production (TCT).
Oct 87 - Awarded MCS software contract.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
FIELD NDI	I																											
EARLY USER TEST AND EXPERIMENTATION		I																										
AWARD SW/SEI CONTRACT			I																									
IOT&E				I																								
ASARC III/FIRST MCS CHS PRODUCTION BUY					I																							
FIELD CHS									I																			

REQUIREMENTS DOCUMENT: O&O Plan (TCT & NDI) and ROC approved (TCT & NDI) Jul 82; ROC update Jun 88.

TYPE CLASSIFICATION: TCT, AN/UYQ-43(V)1 and AC, AN/UYQ-43(V)2 type classified Standard at ASARC-III, May 83;
TCT, AN/UYQ-30A type classified Standard, VCSA guidance Feb 86;
TCP, AN/UYQ-43(V)1 and AC, AN/UYQ-43(V)2 type classified Standard, at IPR, Jun 86.

MCS IS AN AUTOMATED COMMAND AND CONTROL SYSTEM.

PEO COMM

PM ADDS

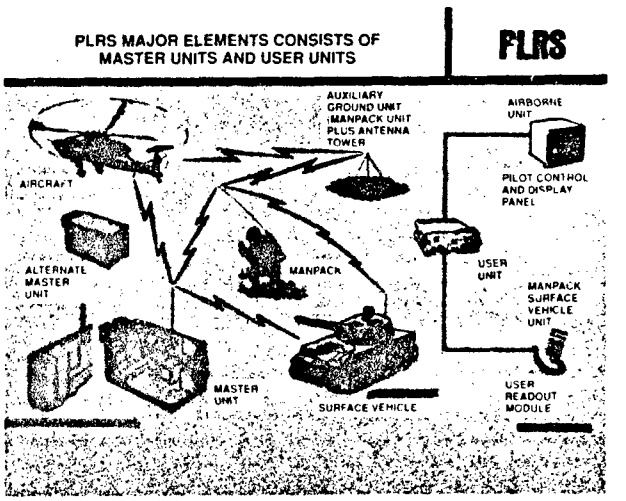
PM, ADDS

AN/TSQ-129, POSITION LOCATION REPORTING SYSTEM (PLRS)

PROJECT OFFICER: Erich Allmer, DSN 995-2852
COMM 908/544-2852

PE & LINE #: 1X464727.DC98 T12C00011G01

DESCRIPTION: The PLRS provides automatic position reporting in a division's area of responsibility. The system employs a Master Station and an Alternate Master Station for 100% backup to insure system survivability and continuity of operations during displacements. The Air Transportable Master Station provides computer controlled network management and continuously updates the position of deployed User Units in manpack, vehicle and airborne configurations. PLRS direct support maintenance will be aided through the use of special TMDE - the PLRS Test Set. PLRS equipped units can obtain their own position, range and bearing relative to other units or locations. PLRS equipped units also can establish aircraft corridor guidance and provide an alarm when entering a pre-designated restricted area such as a minefield, and provides a free format abbreviated data message from other users. The system is crypto-secure and is highly resistant to jamming. The network, under Master Station management automatically utilizes surface airborne User Units as integral relays to achieve over-the-horizon transmission and to overcome close-in terrain obstructions to line-of-site communications.



HISTORICAL BACKGROUND: PLRS IS A USMC PROGRAM MANAGED BY PM, ADDS.

Jun 73-Jun 76 - Advanced Development Contract.
Aug 76-Aug 80 - Full Scale Development Contract.
Jul 82 - ASARC-III, Marine Corps approved PLRS for production.
Jul 83-Jul 86 - Multi-year production contract award to HAC.
Jun 87 - PTS production contract award.
Mar 88 - FOT&E.
Oct 88 - IOC, II MEF, Camp LeJuene, NC.
May 90 - PLRS follow-on buy contract awarded to Hughes Aircraft Company (HAC).
Dec 90 - PLRS production hardware delivery to USMC completed. EPUU common module delivery to Army is continuing.
Feb 91 - Fault Assist Module (FAM) Kit contract awarded to Hughes Aircraft Company (HAC).
Sep 91 - PLRS Communications Enhancement (PCE) contract awarded to HAC.

REQUIREMENTS DOCUMENT: Joint Service Operational Requirement (JSOR) approved 1976; JSOR update May 83.
USMC Required Operational Capability for PLRS improvement program, 11 Jan 91.

TYPE CLASSIFICATION: Standard A a. of 1 Sep 82 ASARC-III. To date 98% of NSNs have been received. All development line items numbers (ZLIN) have been converted to standard line item numbers.

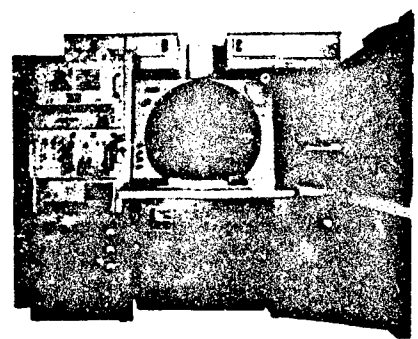
PLRS PROVIDES TIMELY AND ACCURATE THREE DIMENSIONAL POSITIONING, LOCATION, AND REPORTING INFORMATION IN SUPPORT OF TACTICAL COMMANDERS.

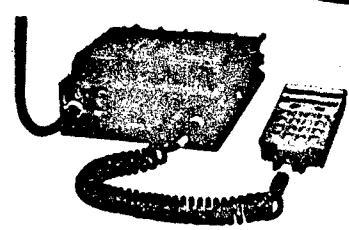
PM, ADDS

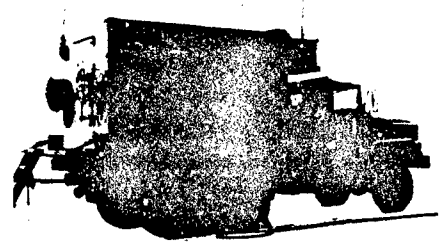
ENHANCED POSITION LOCATION REPORTING SYSTEM (EPLRS)

PRODUCT MANAGER: LTC C.F. Fornecker, DSN 995-3606
COMM 908/544-3606

PE & LINE #: 63713.D370 BU1400







DESCRIPTION: EPLRS provides secure, jam-resistant, near real-time data communications support for the five Battlefield Functional Areas of the Army Tactical Command and Control System (ATCCS). EPLRS is a Time Division Multiple Access System using a frequency hopping, spread spectrum waveform in the UHF band. It incorporates internal COMSEC devices of the Thorton family and has an Over The Air Rekeying (OTAR) capability. EPLRS will use both the Army Data Distribution System version of the X.25 CCITT and MIL-STD-1553B protocols to interface with ATCCS and selected weapons systems like the ABRAMS tank and the UH 60 MEDEVAC helicopter. Additionally, EPLRS provides position location and reporting information to both the user and to their equipped higher headquarter. This information will greatly enhance the command and control of tactical units by providing commanders with the location of friendly units, a dynamic representation of the Forward Line of Troops and abbreviated SITREPs for conditions and identification of adjacent equipped units. The major components of EPLRS are the Net Control Station-EPLRS (NCS-E), EPLRS Radio Set with its user input/output devices, and the EPLRS Grid Reference Unit (EGRU). A typical army division will have four NCS-Es, 325-400 EPLRS Radio Sets, and 12 EGRUs. EPLRS must be employed as a total system where NCS-Es control communities of EPLRS radio sets. EGRUs help with position location function and relaying of messages. EPLRS Radio Sets originate, relay or receive messages.

HISTORICAL BACKGROUND: EPLRS concept was defined to be a Preplanned Product Improvement (P3I) to the USMC PLRS program. Technology insertions would be incorporated as part of the P3I process.

Sep 78 - System definition contract award to HAC.
Mar 82 - Phase 3/4 EPLRS design and integration award to HAC.
Apr 85 - FSD contract award to HAC for three NCS-E and 211 EDM Radio Units.
Feb 88 - P3I Phase A production contract awarded to HAC.
May 88 - Technical Test II (This effort tested the EDM units for system compliance and was completed in Apr 89). Results indicated that additional engineering and testing efforts were required.
Jan 90 - P3I Phase C (LRIP) contract awarded to HAC.
Feb 90 - Intercommunity needline demonstration; First of two Government witnessed field trials to show successful resolution of problems identified in Technical Test II.
May 90 - Production system verification; Second of two Government witnessed field trials to show successful resolution of problems identified in Technical Test II.
Jul 90 - LRIP Option 1 awarded to provide test hardware for TT/OT.
Jan 92 - LRIP Option 2 awarded for corps level ATCCS testing.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
TECHNICAL TEST III						I																						
OPERATIONAL TEST										I																		
FIRST UNIT EQUIPPED - CONDITIONAL													I															
MILESTONE III (DAB)												I																
INITIAL OPERATIONAL CAPABILITY																						I						

REQUIREMENT DOCUMENTS: PLRS/JTIDS Hybrid (EPLRS and JTIDS) Letter of Agreement approved Jun 82; ROC approved Sep 86; O&O revised Oct 86;

TYPE CLASSIFICATION: Standard-A anticipated at Milestone III IPR 4QFY94.

EPLRS PROVIDES POSITION LOCATION AND SECURE, JAM-RESISTANT COMMUNICATIONS SUPPORT FOR THE FIVE BFAs OF ATCCS.

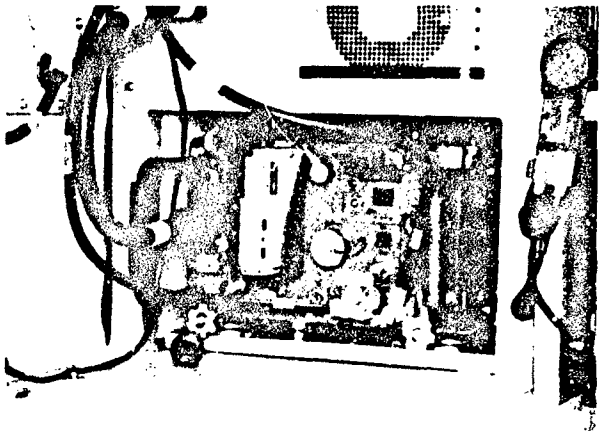
PM, ADDS

JOINT TACTICAL INFORMATION DISTRIBUTION SYSTEM (JTIDS)

PROJECT OFFICER: LTC Edward Siomacco, DPM, DSN 995-4362
COMM 908/544-4362

PE & LINE #: 63713.D370 BU1400

DESCRIPTION: The Army JTIDS Class 2M Terminal will provide jam resistant, secure data communications to high volume users, specifically the Forward Area Air Defense Command and Control System (FAADC2) and HIMAD. The joint nature of JTIDS system ensures interoperability between all services and provides a communications network to rapidly pass air battle information to the commander from multiple service sources. Allied interest in JTIDS will enhance interoperability with NATO Forces. The Class 2M Terminal is an improvement of the Air Force Class 2 Terminal designed for aircraft and ground shelters. The Class 2M Terminal is a smaller, more cost effective terminal designed for FAADC2, is more reliable and has unique Army capabilities such as 28VDC vehicle operation improved portability and soldier interface. In addition to the basic Class 2M Terminal, the Army JTIDS program consists of Dedicated JTIDS Relay Units (DJRUs) and Net Control Station - JTIDS (NCS-J). A typical division area may have 16 Class 2M Terminals. Of the 16 Class 2M Terminals three will serve as NCS-J/DJRUs and five will serve as DJRUs. Technically, the JTIDS is a Time Division Multiple Access system using a frequency hopping, spread spectrum waveform in the UHF band. It incorporates the Thornton family of COMSEC. The JTIDS interface with FAADC2 uses the ADDSI version of X.25 CCITT protocol.



HISTORICAL BACKGROUND: Development of the JTIDS family of terminals is managed by the USAF Joint Project Office at Hanscom AFB. PM ADDS manages the development of the NCS-J/DJRU and the integration of JTIDS terminals into Army hosts.

Feb 85 - Award contract to Singer Kearfott for development of a downsized Class 2 Terminal.
Oct 85 - DT/OT IIA started on Class 2 Terminals at Eglin.
Dec 85 - Award of Phase III contract to Singer Kearfott for development of Class 2M Terminal.
Feb 88 - First Class 2M Terminal delivered.
Apr 88 - Awarded contract for 18 additional Class 2M Terminals.
Jun 89 - Awarded contract to Plessey Electronics System Corporation for Engineering Development Model software for NCS-J/DJRU.
Jul 90 - Technical Test of the Class 2M Terminal successfully completed.
Aug 90 - Complete delivery of 24 Class 2M Terminals.
Sep 90 - Complete delivery of 10 SICP shelters/began integration efforts; Class 2M Terminal check test/TAAF successfully completed.
Mar 91 - Technical test of the Class 2M Terminal completed.
Oct 91 - Started technical test of the NCS-J/DJRU.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
(JTIDS BASELINE SCHEDULE) QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
SYSTEM TT																												
SYSTEM IOT&E																												
MILESTONE III (CLASS 2M)/PRODUCTION																												

REQUIREMENTS DOCUMENT: JTIDS JOR approved 23 Jan 81; JTIDS ROC approved Sep 86.

TYPE CLASSIFICATION: Army type classification IPR for the Class 2M Terminal will be held in Jan 94.

JTIDS PROVIDES (AS A MAJOR COMPONENT OF THE ARMY DATA DISTRIBUTION SYSTEM) HIGH CAPACITY SECURE, JAM-RESISTANT DIGITAL DATA COMMUNICATION.

PM GPS

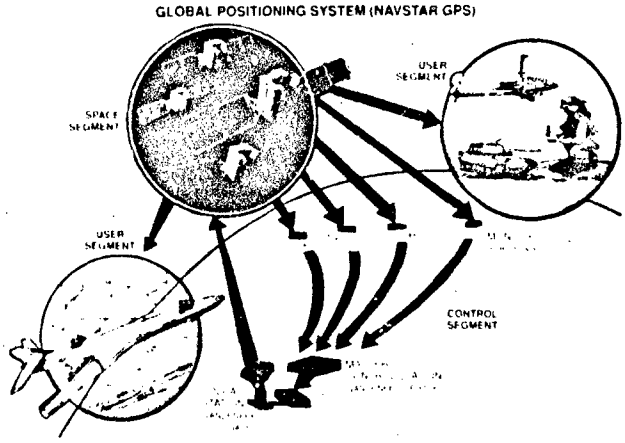
PM, GPS

GLOBAL POSITIONING SYSTEM (GPS)

PROJECT MANAGER: COL Bruce Sweeny, DSN 992-6301
COMM 908/532-6301

PE & LINE #: 1X564778.D168 SSN: K47800

DESCRIPTION: The GPS is a space based radio positioning/navigation (POS/NAV) system that will provide extremely accurate, three dimensional, common grid position, velocity and time of day information to users anywhere on or near the earth. The system consists of space, control, and user equipment segments. The USAF Space Command manages the operational satellites and ground control facilities. The user segment consists of those equipments that receive the satelliite signals and compute position and time of day for the user. The GPS User Equipment (UE) family consists of ten different models meeting needs that range from the foot soldier to high performance military aircraft. The basic UE capability is the determination and display of position and time data; most models do additional navigational calculations such as waypoint/target range and azimuth. Greater host vehicle dynamics and the need for interfaces to other navigation, communication or control systems may require enhanced capabilities. The USAF is the executive service. Army PM GPS provides personnel to man the Joint Program Office; coordinate Army user requirements; perform Army planning, programming and budgeting; and plan and implement Army logistics and deployment for Army UE.



HISTORICAL BACKGROUND:

Apr 73 - Navy and Air Force satellite navigation efforts integrated.
Dec 73 - DSARC-1.
Oct 74 - Advance Development contract award.
Jun 75 - Alternate Manpack contract award to Texas Instruments.
May 79 - ASARC-II/DSARC-II.
Jul 79 - Full scale competitive contract awards to Rockwell/Collins and Magnavox.
Dec 82 - First Manpack set delivered for test.
Dec 84 - Development Test II; Operational Assessment.
Apr 85 - Contract (Service R&D) award.
Jul 86 - Contract award for Low Rate Initial Production of Manpack 2-Channel & 5-Channel Receivers to Rockwell/Collins.
Oct 87 - Second source contract award for 2-Channel & 5-Channel Receivers to SCI and Plessey Corporations.
Jan 88 - Award of contract for NDI procurement of Manpack Receivers to Texas Instruments Corporation.
Mar 89 - Operational assessment of Rockwell/Collins GPS Receivers completed.
Aug 90 - Procurement of NDI Manpack Receivers in support of Operation Desert Shield.
Nov 90 - Award of contract for NDI procurement of the Miniaturized Airborne GPS Receiver (MAGR).
Mar 91 - Option 1 award of 2-Channel & 5-Channel Receivers to SCI.
Dec 91 - Restructure Army UE program to give priority to Ground Users; 1-Channel & 2-Channel Receivers procurement projects cancelled.
Jan 92 - MS III DAB approved Full Rate Production of 5-channel Air and Sea UE.
Feb 92 - USAF PEO approves Precision Lightweight GPS Receiver (PLGR) acquisition strategy; PLGR draft Letter Request for technical proposal and bid samples released.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
OPTION 2 (5-CHANNEL); DAB IIIB	I																											
MILESTONE III FOR MAGR/PRODUCTION OPTION					I																							
PLGR AWARD					I																							
SATELLITE 3D CAPABILITY						I																						
PLGR IOT&E						I	I																					
FIRST UNIT EQUIPED						I																						
MILESTONE III FOR PLGR									I																			

REQUIREMENTS DOCUMENT: NAVSTAR GPS Army UE ROC approved by HQ DA 22 Mar 79; ASARC IIIA approved, baseline. Revised ROC to include PLGR and MAGR approved 15 Apr 91.

TYPE CLASSIFICATION: MILSPEC Limited Production-Urgent/Limited Production-Test (LPU/LPT) approved Feb 87; SLGR Limited Production-Urgent approved Aug 90; PLGR Generic approved Dec 91; Standard approved for 1, 2 & 5 Channel Army UE Dec 91; MAGR Standard approved Jan 92.

GPS PROVIDES EXTREMELY ACCURATE THREE DIMENSIONAL POSITION AND VELOCITY INFORMATION TO COMPATIBLY EQUIPPED USERS ANYWHERE ON OR NEAR THE EARTH.

PM MILSTAR
(ARMY)

PM, MILSTAR (ARMY)

AN/FRC-181(V)1,2,3 AND AN/TRC-194(V)1,2,
MILSTAR GROUND COMMAND POST (GNDCP) TERMINALS

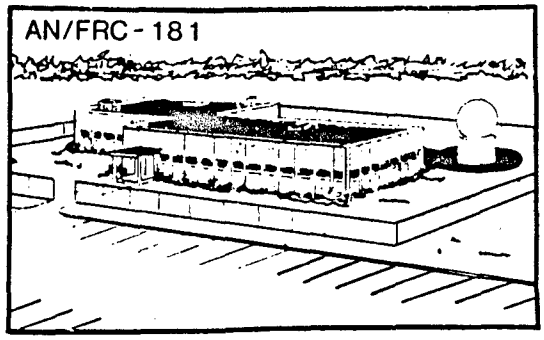
PROJECT MANAGER: COL William Jaissle, DSN 992-5232
COMM 908/532-5232

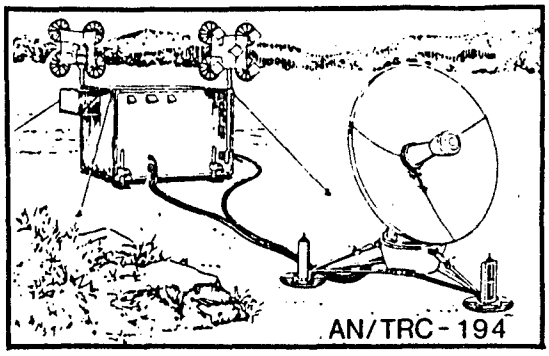
PE & LINE #: 33142.383 SSN: BC4001

DESCRIPTION: The Milstar program is a multi-service satellite communications system (consisting of satellites and terminals) which will operate with Extremely High Frequency/Ultra High Frequency (EHF/UHF) uplinks and Super High Frequency (SHF)/UHF downlinks. The terminal segment will provide: worldwide; two-way; anti-jam; survivable; secure voice; teletype; and data communications enabling the National Command Authority (NCA) to command and control strategic and tactical forces through all levels of conflict and crisis. Milstar system must be operational and serviceable in a severe warfare environment, (e g. nuclear, biological, chemical and electronic).

AN/FRC-181(V)1,2,3 is a GNDCP fixed terminal housed in an operational center and installed at CINC and Special User locations. The terminal replaces the AN/GSC-40.

AN/TRC-194(V)1,2 is a GNDCP transportable terminal housed in a S-280 shelter, transported by two 5-ton vehicles and uses twin 30Kw generators with trailers. PM MILSTAR will integrate the GNDCPs into the Army force structure.





HISTORICAL BACKGROUND:

Feb 89 - Army assigns PM SCOTT as Level I SICA Manager for 16 JCS Validated Terminals.
Jun 89 - DAB (AF).
Dec 89 - AF Low Rate Initial Production (LRIP) award Raytheon/Rockwell.
Jul 90 - Deputy Secretary of Defense Atwood directed adjustment to POM in order to fund integration/support for 16 AF procured GNDCP.
Aug 90 - PM SCOTT hosted initial Army Milstar GNDCP Working Group meeting.
Jan 91 - Milstar Restructuring Plan approved.
May 91 - AF exercised LRIP option with Raytheon/Rockwell.
Jun 92 - Re-evaluation of requirements reduces quantity to seven terminals to be integrated into the Army force structure.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
DAB REVIEW																												
CONFIGURE TRANSPORTABLE TERMINAL																												
ACQUIRE GFE																												
COMPLETE SITE SURVEYS																												
ACQUIRE EHF/UAH SPARES																												
START/COMPLETE DELIVERY TO ARMY																												
FUE																												

REQUIREMENTS DOCUMENT: Draft JORD, Jun 92.

TYPE CLASSIFICATION: USAF to type classify.

MILSTAR EHF-UHF GROUND COMMAND POST TERMINALS PROVIDE FIXED/SEMI-FIXED CAPABILITIES FOR NET CONTROL AND VOICE, TELETYPE AND DATA COMMUNICATIONS IN AN EXTREMELY HOSTILE ENVIRONMENT.

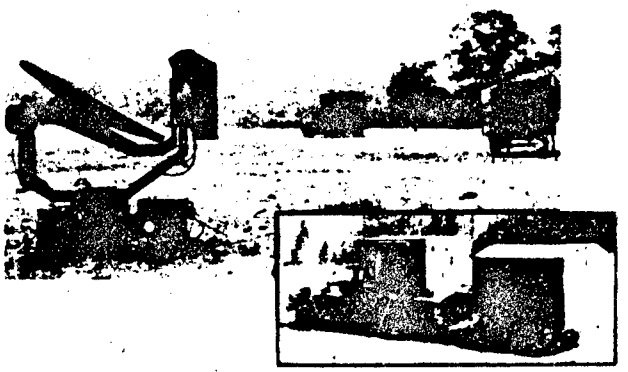
PM, MILSTAR (ARMY)

AN/TSC-124, SINGLE CHANNEL OBJECTIVE TACTICAL TERMINAL (SCOTT)

PROJECT MANAGER: COL William Jaissle, DSN 992-5232
COMM 908/532-5232

PE & LINE #: 33142.455 SSN: K23700

DESCRIPTION: The SCOTT is an EHF satellite terminal which will provide mobile, survivable, anti-jam and low probability of intercept communications. The SCOTT configuration consists of an S-250 shelter mounted on a truck with a trailer and generator. SCOTT is the ground segment terminal of the Milstar system assigned to support the Army. It will provide data or secure voice communications at 75-2400 bps for up to four users. The user can be remoted up to 2500 feet away. Due to the recent reduction in the Non-Strategic Nuclear Forces (NSNF) environment and Army downsizing, the SCOTT production phase has been cancelled.



The Full Scale Engineering Development terminals will be utilized as test assets to support satellite tests and interoperability demonstrations and possible contingency fielding. Thirteen of the fifteen FSED terminals have been accepted. The remaining two terminals will be delivered following a limited First Article Test.

HISTORICAL BACKGROUND:

Jan 79 - Letter of Agreement for a Tactical Single Channel Vehicular Terminal.
May 80 - IPR approves entering Advanced Development (AD) phase with Lincoln Laboratory on an EHF terminal.
Nov 83 - Pre-ASARC determined ASARC would not be necessary, System Acquistion Decision Memorandum (SADM) will suffice for LRIP decision, signed Mar 84.
Dec 84 - Direction received from US of A to restructure the program to enter a FSD Phase.
Mar 85 - US of A approves acquisition strategy.
Dec 85 - FSD contract awarded to Magnavox ($105.9M FFP).
Jul 87 - Final Design Review.
Jun 88 - Began Contractor Technical Testing.
Jul 88 - Successful Multi-Service Interoperability Test, Phase I, II, III.
Mar 89 - Successful completion of Maintenance Demonstration (M-Demo).
May 90 - Successful Joint Milstar Demonstration held at Pentagon.
Oct 90 - FY91 Congressional Language directed SECDEF to restructure Milstar EHF programs.
Nov 90 - Formal Phase I Reliability Development Growth Testing began.
Jan 91 - Milstar Restructuring Plan approved.
Sep 91 - Completed Technical Test and RDGT.
Dec 91 - Government accepted 11 terminals.
Mar 91 - Fourth successful Joint Service Interoperability Demonstration.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
DELIVERY OF FSED TERMINALS					!			!																				
LIMITED FIRST ARTICLE TESTING					!		!																					

REQUIREMENTS DOCUMENT: ROC approved Aug 85.

TYPE CLASSIFICATION:

SCOTT IS AN EHF SATELLITE EARTH TERMINAL THAT PROVIDES MOBILE, ROBUST, SURVIVABLE ANTI-JAM AND LOW PROBABILITY OF INTERCEPT COMMUNICATIONS INSTALLED IN AN S-250 SHELTER MOUNTED ON A DUAL-WHEELED CUCV WITH A TRAILER MOUNTED THREE KILOWATT GENERATOR AND ANTENNA.

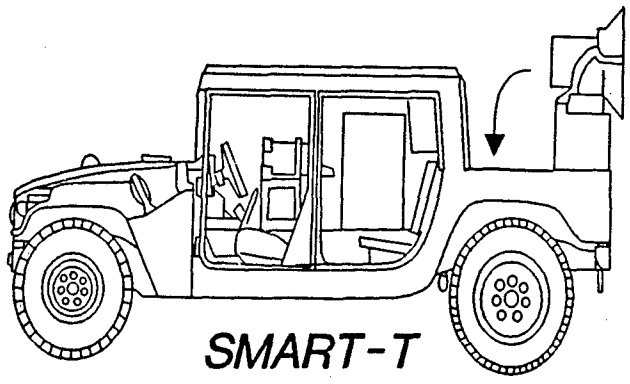
PM, MILSTAR (ARMY)

SECURE MOBILE ANTI-JAM RELIABLE TACTICAL TERMINAL (SMART-T)

PROJECT OFFICER: COL William Jaissle, DSN 992-5232
COMM 908/532-5232

PE & LINE #: FY93 and Prior: 33142.0455
FY94 and Beyond: 33142.384

SSN: BC4003



DESCRIPTION: The SMART-T terminal will provide tactical users with secure, survivable, anti-jam, low probability of intercept and detection satellite communications in a High Mobility Multi-Purpose Wheeled Vehicle (HMMWV) configuration. This equipment will communicate/process data and voice communications at both low and medium EHF data rates. SMART-T will provide a range extension capability to MSE supporting Airland Operations. SMART-T provides a satellite interface to permit uninterrupted communications as our advancing forces move beyond the line-of-sight capability of MSE.

HISTORICAL BACKGROUND:

Oct 90 - Congressional direction to restructure Milstar.
Jan 91 - Deputy Secretary of Defense submitted restructured Milstar plan to Chairman, Armed Services Committee; Milstar restructure plan approved.
Sep 91 - Briefing to industry.
Nov 91 - Library established.
Apr 92 - Release of RFP via Electronic Bulletin Board.
May 92 - ASARC (Milestone II) approved.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
MILSTAR PROGRAM DAB					I																							
DEVELOPMENT CONTRACT AWARD					I												I											
LRIP CONTRACT AWARD													I															
MILESTONE III DECISION REVIEW; FULL SCALE PRODUCTION AWARD																					I							

REQUIREMENTS DOCUMENT: Army Milstar Advanced Satellite Terminals (MAST) Operational Requirements Document, Mar 92.

TYPE CLASSIFICATION:

SMART-T PROVIDES USERS WITH SECURE, SURVIVABLE, ANTI-JAM, LOW PROBABILITY OF INTERCEPT AND DETECTION SATELLITE COMMUNICATIONS IN A HMMWV.

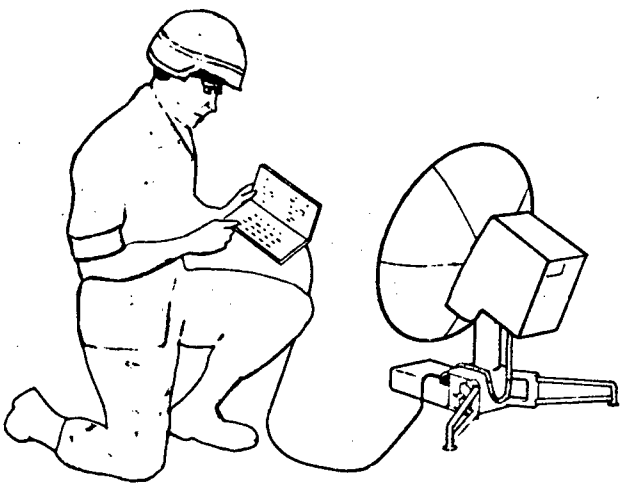
PM, MILSTAR (ARMY)

SINGLE CHANNEL ANTI-JAM MANPORTABLE TERMINAL (SCAMP)

PROJECT OFFICER: COL William Jaissle, DSN 992-5232
COMM 908/532-5232

PE & LINE #: FY93 and Prior: 33142.455
FY94 and Beyond: 33142.386

SSN: BC4003



SCAMP

DESCRIPTION:

BLOCK I: The SCAMP Block I program will provide a manportable, secure, anti-jam, single channel low data rate EHF worldwide voice and data satellite communications terminal. This user owned and operated 30 pound terminal meets a critical need for command and control in an electronic warfare environment. The system will operate in an intense jamming environment, having low probability of detection and interception with interface to the Army Common Users System (ACUS).

BLOCK II: The SCAMP Block II program will provide a manpackable 12-15 pound weight limitation terminal to the tactical soldier. Research and Development has been initiated and continues through the 1990s on battery, Millimeter Microwave Integrated Circuits (MIMIC), composite materials, and antenna technology. Production is planned for FY00.

HISTORICAL BACKGROUND:

Oct 90 - Congressional direction to restructure Milstar.
Jan 91 - Deputy Secretary of Defense submitted restructured Milstar plan to Chairman, Armed Services Committee; Milstar restructure plan approved.
Apr 91 - ROC approval.
Jun 91 - Briefing to industry.
Nov 91 - Library established.
Apr 92 - Release of RFP via Electronic Bulletin Board.
May 92 - ASARC (Milestone II).

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
MILSTAR PROGRAM DAB			I																									
DEVELOPMENT CONTRACT AWARD (BLOCK I)			I																									
MILESTONE III																	I											

REQUIREMENTS DOCUMENT: Army Milstar Advanced Satellite Terminals (MAST) Operational Requirements Document, Mar 92.

TYPE CLASSIFICATION:

SCAMP TERMINAL WILL PROVIDE MANPORTABLE, SECURE, ANTI-JAM SATELLITE COMMUNICATIONS CAPABILITY TO ARMY AND AIR FORCE UNITS WHICH CANNOT BE SERVED BY LARGER LESS MOBILE TERMINALS.

PM MSE

PM, MSE

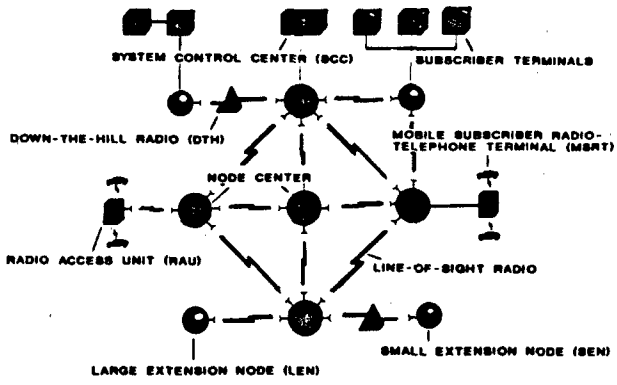
MOBILE SUBSCRIBER EQUIPMENT (MSE)

PROJECT OFFICER: COL David R. Gust, DSN 995-2524
COMM 908/544-2524

PE & LINE #: SSN: BB1610

DESCRIPTION: The MSE system will provide the tactical force with increased mobility and a discrete address capability to user. The functions of switching, radio trunking, communications security and system control will be integrated into one composite system, which will replace the existing command and area communications system in both the division and corps areas of operation. The MSE system will provide users with a means of communicating throughout the battlefield, regardless of location, in either a static or mobile situation. The system will significantly reduce the need to install wire and cable when establishing command posts. It will provide telephone-like, full-duplex operation for massed or dispersed command posts. The MSE system will consist of five major hardware functional elements: subscriber terminals; multiple subscriber access; wire subscriber access; area coverage; and system control.

MSE SYSTEM ARCHITECTURE



HISTORICAL BACKGROUND:

Oct 79 - Joint Operational Requirement approved.
Nov 83 - Under Secretary of the Army directed MSE be procured using a non-developmental acquisition approach.
May 83 - Acquisition Plan approved.
Sep 83 - Battlefield Communications Review determined MSE will be deployed throughout the Corps and Divisions of Army.
Dec 85 - Contract award (basic); Contract award (1st option).
Feb 87 - Contract award (2nd option).
Oct 87 - TEMP approved.
Feb 88 - FUE completed.
Oct 88 - FOTE completed.
Dec 88 - Contract award (3rd option); Corrective Action Plan incorporated on GTE contract (P00059).
Mar 89 - Contract award (4th option).
Nov 89 - TEMP approved.
Mar 90 - Contract awarded (5th option).
May 90 - Option 5 redistribution; CSN and CNS contracts award; CCP contract modification award.
Aug 90 - MSE support of Operation Desert Shield began.
Sep 90 - Mobilize Regional Support Center in Saudi Arabia.
Oct 90 - 1st MSE equipped III Corps deployed to SWA Theater of Operations; Dual LKG contract modification award.
Nov 90 - LCCP and ADI contract modifications award; VECP consolidated fielding contract modification award.
Dec 90 - VCSA, DA MSE Action Plan Review.
Jul 91 - OY4 G.O. Review.
Dec 91 - MSE GOSC Review (Signal Architecture Review).
Jan 92 - Post OY4 Configuration Evaluation Test brief.
Feb 92 - MSE/ZODIAC (Zone Digital Automatic Encrypted Communications System) NATO Interface Test.
Mar 92 - Council of Colonels Review.
Jul 92 - SB-3865/MSE OY5 S/W Interoperability Test.

REQUIREMENTS DOCUMENT: MSE Operational Capability document approved by HQDA, 24 May 84.

TYPE CLASSIFICATION: Standard, Nov 85.

MSE SYSTEM WILL INTEGRATE THE FUNCTIONS OF THE USER TERMINAL EQUIPMENT, SWITCHING, RADIO TRANSMISSION, COMMUNICATIONS SECURITY AND CONTROL INTO ONE COMPOSITE COMMUNICATIONS SYSTEM. WHEN FIELDED, MSE WILL REPLACE THE EXISTING SWITCHING COMMUNICATIONS SYSTEMS IN THE CORPS AND DIVISION AREAS.

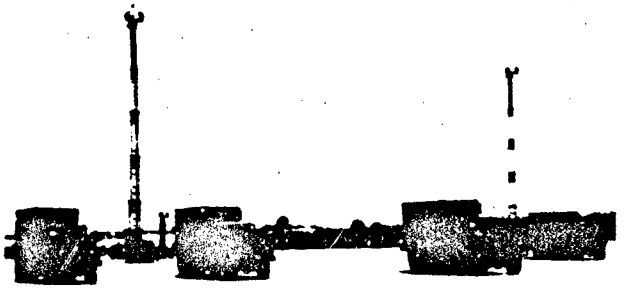
PM MSCS

PM, MSCS

AB-1309/TRC MAST

PROJECT OFFICER: Mr. George Meyer, DSN 992-3525
COMM 908/532-3525

PE & LINE #:



DESCRIPTION: The AB-1309/TRC Mast is a highly mobile, 120 foot collapsible tower which can support up to three AS-1425 antennas. The mast telescopes down to a height of 23 feet and is lowered to the horizontal position for transit. It is mounted on a tandem axle trailer which also carries two MEP-003A ten kilowatt diesel generators. AB-1309/TRC and ancillary hardware are towed by a 5-ton truck that transports a Digital Group Multiplexer (DGM) Shelter Assembly. This mobile configuration unit is eight feet wide, eight feet high and 29 feet long. AB-1309/TRC has aircraft transportability certification.

HISTORICAL BACKGROUND:

Testing (DT/OT) of Digital Transmission Assemblages in 1981 identified the need for: rapid antenna deployment and recovery; a height of 34 meters; C-130 transportability; and Modular Collective Protection Equipment (MCPE). AB-1309 was designed to satisfy these requirements. In 1986, the user community determined that the AB-1309 was not suitable as the primary antenna mast system for DGM assemblages and was replaced by the DAMP. The AB-1309 was then designated as an ancillary antenna system to be deployed with each signal battalion at echelons above corps.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
TRANSITION																		!										

REQUIREMENTS DOCUMENT: MSG, HQDA, SAIS-PPS, 2019172 AUG 87, subject: AB-1309 requirement.

TYPE CLASSIFICATION: Limited Production, Urgent.

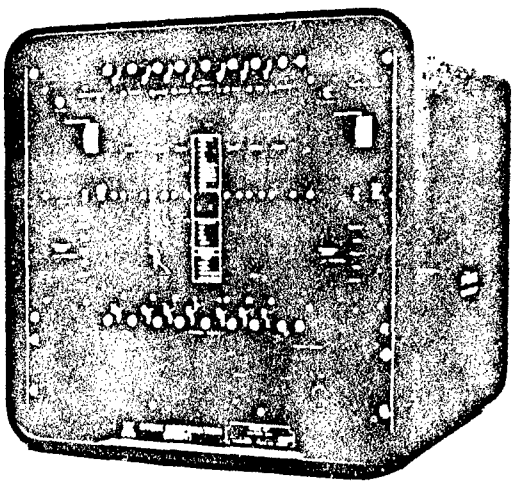
AB-1309/TRC MAST IS A HIGHLY MOBILE, COLLAPSIBLE TOWER WHICH CAN SUPPORT UP TO THREE AS-1425 ANTENNAS AND PROVIDES DGM SYSTEM POWER AND ANCILLARY ITEM TRANSPORT.

PM, MSCS

AN/GRC-222, RADIO TERMINAL

PROJECT OFFICER: Mr. Milan Schwartz, DSN 992-3525
COMM 908/532-3525

PE & LINE #:



DESCRIPTION: The AN/GRC-222, Radio Terminal provides the Army with High Capacity Line-of-Sight (HI-CAP-LOS) and Short Range Wide Band Radio (SRWBR) capabilities while operating in the 4.4 to 5.0 gigahertz frequency range. These radios are deployed in the AN/TRC-175, Radio Terminal Assemblage located in the switching node at the "Bottom-of-the-Hill" and AN/TRC-138A, Repeater Assemblage located in the radio park at the "Top-of-the-Hill". The HI-CAP-LOS radio mode accommodates one group in the ATACS or TRI-TAC hierarchies of up to 144 channels at a group rate of 1024, 1152, 1536, 2048, 2304, 4096, or 4608 kilobits per second. The SRWBR mode of operation accommodates groups in the TRI-TAC hierarchy of up to 576 channels at master group rates of 9.36 or 18.72 megabits per second. The SRWBR is used to provide the link between a multichannel switching node and transmission facilities or "Top-of-the-Hill".

HISTORICAL BACKGROUND:

Mar 85 - Coordinated decision with Signal Center to replace AN/GRC-144(V)3 radio with NDI AN/GRC-222 radio.
Sep 86 - Contract awarded to Aydin Corporation for 733 radios.
Aug 87 - First Article Test (FAT).
Dec 88 - FAT completed.
Mar 90 - Successful Reforger.
Apr 90 - Final Logistics Support Concept (FLSC).
Aug 91 - FLSC non-institutional depot level training contract award.
Jun 92 - Amplitude modulation (AM) order wire field test conducted.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
TRANSITION									I																			

REQUIREMENTS DOCUMENT: HQDA Letter Requirement for DGM Assemblages, 19 Mar 76.

TYPE CLASSIFICATION: IPR, Jul 81, STD A for end items AN/TRC-138A/175.

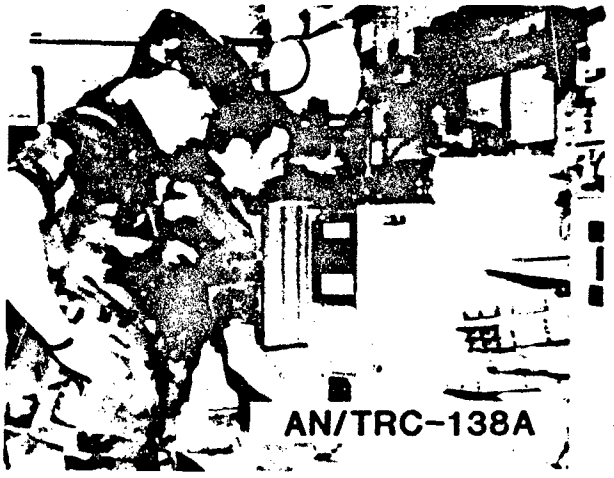
AN/GRC-222, OPERATING IN THE 4.4 TO 5.0 GIGAHERTZ FREQUENCY RANGE PROVIDES THE ARMY WITH HI-CAP-LOS AND SRWBR CAPABILITIES AT ECHELONS ABOVE CORPS (EAC).

PM, MSCS

AN/TRC-138A AND AN/TRC-138B, RADIO REPEATER SETS

PROJECT OFFICER: Mr. Michael Hromoko, DSN 992-3525
COMM 908/532-3525

PE & LINE #:



DESCRIPTION: The AN/TRC-138A (fullsize) and AN/TRC-138B (downsize) Radio Repeater Sets provide facilities terminating multi-channel radio and cable groups. The Radio Repeater Sets utilize three AN/GRC-222 radios, one AN/VRC-46 or AN/VRC-90 radio, and portions of the Digital Group Multiplexer (DGM) family of equipment. The DGM equipment which is being utilized is as follows: TD-1237(P)/H, MD-1026(P), Order Wire Control Unit C-10717/TRC, and MD-1024. The AN/GRC-222 also provides Short Range Wide Band Radio (SRWBR) for transmitting multiplexed groups from the radio park "Top-of-the-Hill" to the switching node "Bottom-of-the-Hill". It has the capability to terminate up to three systems and may be used for radio repeater, terminal, or SRWBR applications. The radio operates in the frequency range of 4.4 to 5.0 gigahertz. In the SRWBR mode it has a data rate of up to 18.72 megabits per second with a range of five miles. In the radio repeater mode it has a data rate of 4.608 megabits with a range of 25 miles. The AN/TRC-138A is mounted in an S-280C shelter and the AN/TRC-138B version is mounted in a S-749 shelter.

HISTORICAL BACKGROUND:

1980 - DT/OT-II.
1982 - Army initiated production effort with TOAD.
Feb 84 - TOAD First Article Tests (mechanical and electrical) completed.
Jul 84 - ILS Support contract awarded.
Jun 86 - TOAD First Article Test (operational) completed.
Sep 86 - New assemblage ILS contract awarded to Laguna Industries.
Mar 87 - First units delivered to USAREUR.
Apr 87 - Units delivered to 67th Signal Battalion for FOT&E.
Oct 87 - FOT&E completed. New production contract awarded to Laguna Industries.
Aug 88 - Fieldings to USAREUR and CONUS Signal Units started.
Jul 89 - Production contract (downsize) award to Laguna Industries.
Jul 90 - First Article Test (downsize) completed.
Sep 90 - USAREUR fieldings completed.
Jul 91 - Materiel Release (downsize) to EUSA.
Jan 92 - Downsize retrofit contract award.
Feb 92 - Fielding to EUSA completed.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
TRANSITIION: FULLSIZE/DOWNSIZE																		!										

REQUIREMENTS DOCUMENT: HQDA Letter Requirement, 19 Mar 76.

TYPE CLASSIFICATION: Standard A approved Jul 81. Updated by Material Status Record change May 90.

AN/TRC-138A AND AN/TRC-138B RADIO REPEATER SETS PROVIDE FACILITIES FOR TERMINATING MULTICHANNEL RADIO/CABLE GROUPS FROM THE RADIO PARK "TOP-OF-THE-HILL" TO THE SWITCHING NODE "BOTTOM-OF-THE-HILL" FOR ECHELONS ABOVE CORPS SIGNAL UNITS.

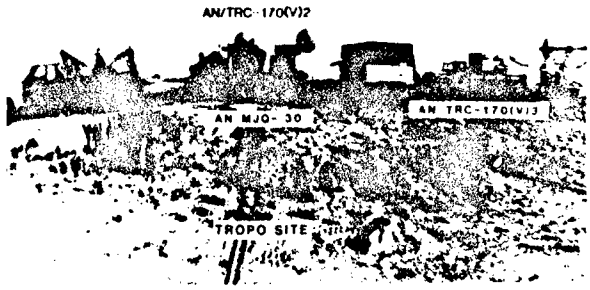
PM, MSCS

AN/TRC-170(V)2 AND AN/TRC-170(V)3, TROPOSCATTER RADIO TERMINAL (TROPO)

PROJECT LEADER: Mr. George Meyer, DSN 992-3474
COMM 908/532-3474

PE & LINE #: 1X428010.D114

DESCRIPTION: The AN/TRC-170(V)2 and AN/TRC-170(V)3 are air and ground transportable troposcatter radio terminals. The terminals provide secure digital long haul radio trunking between major nodes of TRI-TAC/ATACS communication networks and interface with other TRI-TAC/ ATACS systems such as assemblages of Digital Group Multiplexer (DGM) equipment or various switching facilities. The terminals may be used in stand-alone applications as transmission links not associated with switching facilities. The terminals provide for the transmission and reception of digital voice and digital data over a nominal 150 mile path for the (V)2 radio and a nominal 100 mile path for the (V)3 radio by means of troposcatter. Line-of-Sight propagation may also be used in the 4.4 gigahertz to 5.0 gigahertz frequency range. The terminals provide for trunk group communications at switch selectable bit rates from 128 to 4608 kilobits per second in addition to orderwire traffic.



COMPOSED OF:

(V)2 - M923 5-ton truck carries S-280 shelter towing M1061E1 5-ton trailer with two 30 kilowatt power units.
- M35A2 2-1/2-ton truck carries antennas on Low Profile Pallet towing M105A2 1/2-ton trailer with AN/GRC-193A radio.

(V)3 - M35A2 2-1/2-ton truck carries S-250 shelter towing AN/MJQ-18 power plant with two 10KW power units.
- M1028 Commerical Utility/Cargo Vehicle (CUCV) truck carries AN/GRC-193A radio towing M116A2 3/4-ton trailer with Quick Reaction Antenna (QRA).

USED WITH: TRI-TAC/ATACS systems.

REPLACES: AN/TRC-132, 132A, 112, 121 and 80.

HISTORICAL BACKGROUND: AIR FORCE IS THE LEAD SERVICE FOR THIS PROGRAM.

Jun 76 - Air Force Research and Development contract.
Aug 80 - DT&E/IOT&E.
Apr 82 - Air Force Production contract.
Apr 83 - First Army buy.
Jun 85 - Contract deliveries began.
Dec 86 - Completed FOT&E.
May 87 - Competitive contract awarded.
Jul 87 - First Materiel Release.
Sep 87 - First Unit Equipped.
Mar 88 - Second Materiel Release.
Nov 88 - Third Materiel Release.
Dec 89 - Fourth Materiel Release.

REQUIREMENTS DOCUMENT: JOR SM 86-75, 10 Feb 75.

TYPE CLASSIFICATION: Limited production approved Jan 83; Standard approved 27 May 85.

TROPO PROVIDES SECURE TRANSMISSION AND RECEPTION OF TACTICAL MULTI-CHANNEL DIGITAL VOICE AND DATA BY MEANS OF TROPO MODE OF PROPAGATION IN THE 4.4 TO 5.0 GIGAHERTZ FREQUENCY BAND.

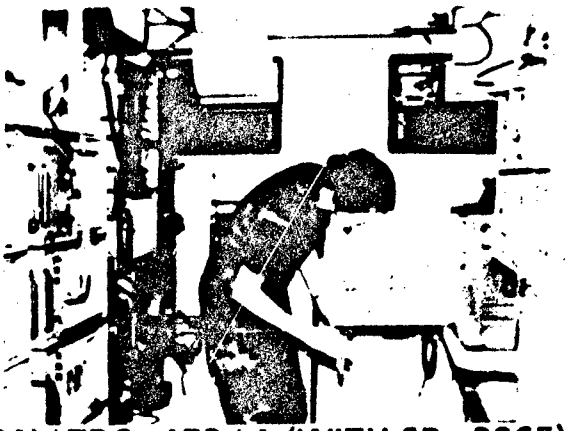
PM, MSCS

AN/TRC-173( )

PROJECT OFFICER: Mr. Michael Hromoko, DSN 992-3525
COMM 908/532-3525

PE & LINE #:

DESCRIPTION: The AN/TRC-173( ) is used as an extension terminal at major nodes to provide up to 36 channels of digital trunk communications. AN/TRC-173( ) contains two complete communication systems housed in a shelter facility S-589( )/AN/TRC-173( ) which is either a modified S-280C or an S-749 (which is a downsized S-280C) shelter. AN/TRC-173( ) is composed of two AN/GRC-103(V)4 radio sets, one AN/VRC-46 or AN/VRC-90, and portions of the Digital Group Multiplexer (DGM) family of equipment. The DGM equipment which is being utilized is as follows: MD-1026(P)/G, MD-1023(P)/G, MD-1065/G, MD-1234(P)/TTC, MD-1025/G, TD-1236/G and Orderwire Control Unit C-10716/TRC. COMSEC equipment which includes the KY-57 VINSON, KG-94 Trunk Encryption Device and KY-68 DSVT is also included as part of the assemblage. Each of the two communication systems in the AN/TRC-173( ) is capable of full duplex operation (simultaneous send and receive). Under normal operating conditions, one system in the AN/TRC-173( ) assemblage remains in standby condition in the event of malfunction. AN/GRC-103(V)4, Radio Set is used for operation in Line-of-Sight applications and has a frequency range of 1350 to 1850 megahertz with a transmission range of approximately 30 miles.



AN / TRC - 173 / A (WITH SB - 3865)

HISTORICAL BACKGROUND:

1980 - DT/OT-II.
1982 - Army initiated production efforts with TOAD.
Feb 84 - TOAD First Article Tests (mechanical, electrical) completed.
Jul 84 - ILS Support contract awarded.
Aug 85 - New Production contract awarded to Laguna Industries Incorporated.
Jun 86 - TOAD First Article Test (operational) completed.
Sep 86 - New assemblage ILS contract awarded to Laguna Industries.
Feb 87 - Laguna Industries First Article Test completed.
Mar 87 - First units delivered to USAREUR.
Apr 87 - Units delivered to 67th Signal Battalion for FOT&E.
Oct 87 - FOT&E completed; Award FY88 Production Option to Laguna Industries.
Aug 88 - Fieldings to USAREUR and CONUS Signal Units started.
Jul 89 - Awarded downsized Production contract to Laguna Industries.
Jul 90 - Downsized First Article Test completed.
Jul 91 - Materiel release (downsize) to EUSA.
Jan 92 - Downsize retrofit contract awarded.
Feb 92 - Fielding to EUSA completed.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
TRANSITION: FULLSIZE DOWNSIZE																			!									

REQUIREMENTS DOCUMENT: HQDA Letter Requirement, 19 Mar 76.

TYPE CLASSIFICATION: Standard A approved Jul 81; Updated by Materiel Status Record change May 90.

AN/TRC-173( ) IS USED AS AN EXTENSION TERMINAL AT MAJOR NODES AND CONTAINS TWO LIGHT-OF-SIGHT TRANSMISSION SYSTEMS FOR ECHELONS ABOVE CORPS SIGNAL UNITS.

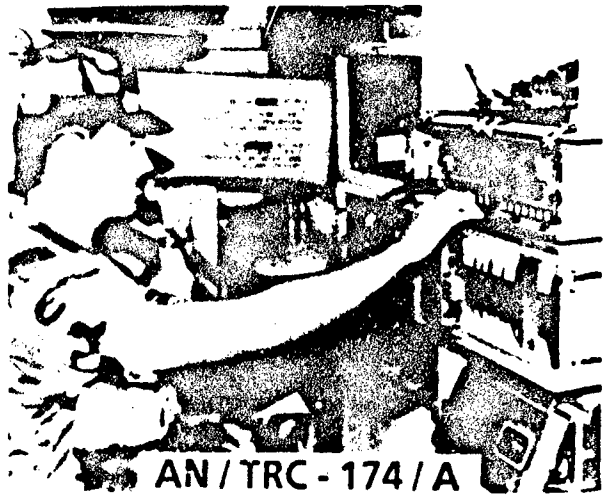
PM, MSCS

AN/TRC-174( ), RADIO REPEATER SET

PROJECT OFFICER: Mr. Michael Hromoko, DSN 992-3525
COMM 908/532-3525

PE & LINE #:

DESCRIPTION: The AN/TRC-174( ) is used as an extension repeater repeater at major nodes to provide up to 36 channels of digital trunk communications. AN/TRC-174( ) contains three complete communications systems housed in Shelter Facility S-590( )/TRC-174( ), which is either a modified S-280C or an S-749 (which is a downsize S-280C) shelter. AN/TRC-174( ) is composed of three AN/GRC-103(V)4 radio sets, one AN/VRC-46 or AN/VRC-90 radio, and portions of the Digital Group Multiplexer (DGM) family of equipment. The DGM equipment which is being utilized is as follows: MD-1026(P)/G, MD-1023(P)/G, MD-1065/G and Orderwire Control Unit C-10716/TRC. COMSEC equipment which includes the KY-57 VINSON and KY-68 DSVT is also included as part of the assemblage. Each of the three communication systems in the AN/TRC-174( ) is capable of full duplex operation (simultaneous send and receive). Under normal operating conditions, one system in the AN/TRC-174( ) assemblage remains in standby condition in the event of malfunction. Radio set AN/GRC-103(V)4 is used for operation in Line-of- Sight applications and has a frequency range of 1350 to 1850 megahertz with a transmission range of approximately 30 miles.



HISTORICAL BACKGROUND:

1980 - DT/OT-II.
1982 - Army initiated production efforts with TOAD.
Feb 84 - TOAD First Article Tests (mechanical, electrical) complete.
Jul 84 - ILS Support contract signed.
Aug 85 - New Production contract award to Laguna Industries Incorporated.
Jun 86 - TOAD First Article Test (operational) completed.
Sep 86 - New Assemblages ILS contract award to Laguna Industries.
Feb 87 - Laguna Industries First Article Test completed.
Mar 87 - First units delivered to USAREUR.
Apr 87 - Units delivered to 67th Signal Battalion for FOT&E.
Oct 87 - FOT&E Completed; FY88 Production option award to Laguna Industries.
Aug 88 - Fieldings to USAREUR and CONUS Siganl Units started.
Aug 89 - Downsized Production contract award to Laguna Industries.
Jul 90 - Downsized First Article Test completed.
Jul 91 - Material Release to EUSA.
Jan 92 - Downsize Retrofit contract award.
Feb 92 - Fielding to EUSA completed.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
TRANSITION: FULLSIZE																												
DOWNSIZE																	!	!	!	!								

REQUIREMENTS DOCUMENT: HQDA Letter Requirement, 19 Mar 76.

TYPE CLASSIFICATION: Standard A approved Jul 81 IPR; Updated by Material Status Record change May 90.

AN/TRC-174( ) IS USED AS AN EXTENSION REPEATER AT MAJOR NODES AND CONTAINS THREE LINE-OF-SIGHT TRANSMISSION SYSTEMS FOR ECHELONS ABOVE CORPS SIGNAL UNITS.

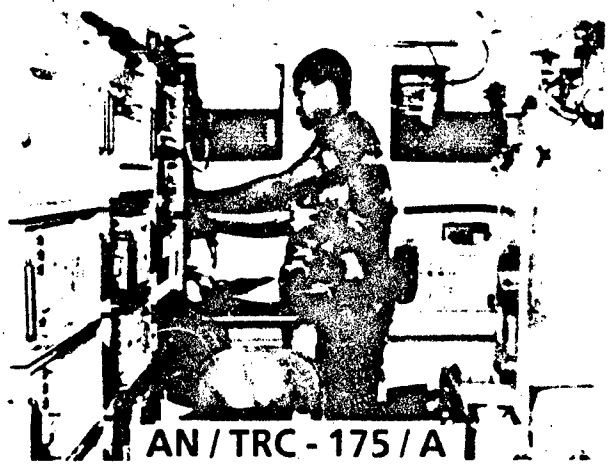
PM, MSCS

AN/TRC-175( )

PROJECT OFFICER: Mr. Michael Hromoko, DSN 992-3525
COMM 908/532-3525

PE & LINE #:

DESCRIPTION: The AN/TRC-175( ) is used at major switching nodes to transmit/receive trunk groups with the associated radio park. AN/TRC-175( ) contains two complete communication systems housed in a shelter facility S-591( )/AN/TRC-175/A, which is either a modified S-280C or an S-749 (which is a downsized S-280C) shelter. AN/TRC-175( ) is composed of two AN/GRC-222 radio sets, one AN/VRC-46 or AN/VRC-90 radio, and portions of the DGM family of equipment. The DGM equipment which is being utilized is as follows: MD-1026(P)/G, MD-1024/G, TD-1237(P)/G and Orderwire Control Unit C-10717/TRC. COMSEC equipment which includes the KY-57 VINSON and KY-68 DSVT is also included as part of the assemblage. Each of the two communication systems in the AN/TRC-175( ) is capable of full duplex operation (simultaneous send and receive). Radio Set AN/GRC-222 is used as a radio link to the AN/TRC-138A/138B located at the radio park and has a frequency range of 4.4 to 5.0 gigahertz with a transmission range of approximately five miles for the 18.72 megabits per second data rate and 25 miles for the 9.36 megabits per second data rate.



HISTORICAL BACKGROUND:

80 - DT/OT-II.
82 - Army initiated production efforts with TOAD.
Feb 84 - TOAD First Article Tests (mechanical, electrical) completed.
Jul 84 - ILS support contract award.
Jun 86 - TOAD First Article Test (operational) completed.
Sep 86 - New assemblage ILS contract award to Laguna Industries.
Mar 87 - First units delivered to USAREUR.
Apr 87 - Units delivered to 67th Signal Battalion for FOT&E.
Aug 87 - New Production contract award to Laguna Industries.
Oct 87 - FOT&E completed; FY88 Production option award to Laguna Industries.
Aug 88 - Fieldings to USAREUR and CONUS Signal Units started.
Jul 89 - Downsized Production contract to Laguna Industries.
Jul 90 - Downsized First Article Test completed.
Oct 90 - First Unit Equipped 151st Signal Battalion.
Jul 91 - Materiel Release (downsize) to EUSA.
Jan 92 - Downsize Retrofit contract award.
Feb 92 - Fielding to EUSA completed.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
TRANSITION: FULLSIZE DOWNSIZE																			!	!								

REQUIREMENTS DOCUMENT: HQDA Letter Requirement, 19 Mar 76.

TYPE CLASSIFICATION: Standard A approved Jul 81; Updated by Material Status Record change May 90.

AN/TRC-175( ) IS A BOTTOM-OF-THE-HILL RADIO TERMINAL UTILIZED AT RADIO PARK TO TRANSMIT/RECEIVE TRUNK GROUPS AND CONTAINS TWO LINE-OF-SIGHT TRANSMISSION SYSTEMS FOR ECHELONS ABOVE CORPS SIGNAL UNITS.

PM, MSCS

AN/TTC-39, AN/TTC-39A, AN/TTC-39D, CIRCUIT SWITCH

PROJECT OFFICER: Mr. Thomas Smith, DSN 992-4226
COMM 908/532-4226

PE & LINE #: 1X428010.D107

DESCRIPTION: The AN/TTC-39 Circuit Switch is a mobile, automatic, modular electronic circuit switch under processor control with integral COMSEC and multiplex equipment. It is compatible with the Defense Communications System and the tactical communications systems of the services. AN/TTC-39 interfaces with the NATO Integrated Communications System and Allied Organic Combat Communications Systems. AN/TTC-39 is configured in a single shelter 300 line version or a dual shelter 600 line configuration. The AN/TTC-39 handles secure and non-secure voice and data traffic and provides precedence, preemption, conference and a variety of other features. AN/TTC-39A adds nodal control to the circuit switch by incorporating the minimum essential control functions from the AN/TSQ-11. This is made possible by the replacement of the current processor with a state-of-the-art emulator. AN/TTC-39D is an all digital configuration providing service for 708 terminations. It provides flood search routing capability using the MSE routing subsystem, interface capability for the MSE Radio Access Unit (RAU), and analog capability using the Digital Line Termination Unit (DLTU).

HISTORICAL BACKGROUND:

Jun 80 - ASARC-IIIA.
Jul 80 - DSARC-IIIA.
Sep 80 - Production contract awarded.
Sep 83 - First Unit Equipped.
Feb 84 - Program IOC achieved (JCSE).
Aug 84 - AN/TTC-39A Development contract and Retrofit Kit contract awarded.
Jun 87 - Acquistion Plan approved for Air Force follow-on by of AN/TTC-39A's.
Sep 87 - AN/TTC-39D Modification awarded (3 switches).
Sep 89 - AN/TTC-39D Production option award (23 kits).
Sep 90 - AN/TTC-39D Production option award (11 kits).
Jun 91 - First three AN/TTC-39D retrofits completed in Germany.
Feb 92 - AN/TTC-39D Production option award (12 kits).

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
PRODUCTION CONTRACT AN/TTC-39D	I																											
TRANSITION											I																	

REQUIREMENTS DOCUMENT:

TYPE CLASSIFICATION: ASARC-III, Jun 80, Standard.

AN/TTC-39 IS A MOBILE, AUTOMATIC, MODULAR ELECTRONIC CIRCUIT SWITCH UNDER PROCESSOR CONTROL WITH INTEGRAL COMSEC AND MULTIPLEX EQUIPMENT. AN/TTC-39A PRODUCTION IMPROVEMENT ADDS NODAL CONTROL CAPABILITY TO THE CIRCUIT SWITCH. AN/TTC-39D PRODUCT IMPROVEMENT ADDS MSE FLOOD SEARCH CAPABILITY TO THE CIRCUIT SWITCH.

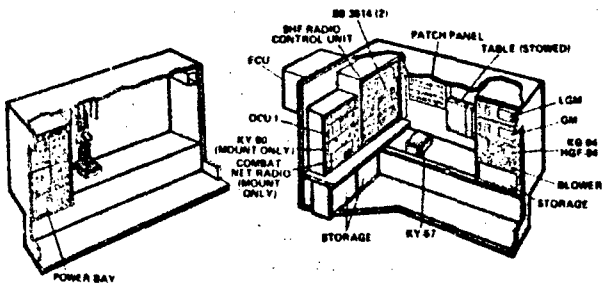
PM, MSCS

AN/TTC-49, TACTICAL HYBRID SWITCH (THS)

PROJECT OFFICER: Mr. Ronald Testa, DSN 992-3658
COMM 908/532-3658

PE & LINE #:

DESCRIPTION: The THS is an NDI that draws upon the SB-3614A(V)/TT and the MSE Small Extension Node Switch (SENS) programs. It provides a 60 line analog switch assembly housed in an extended S-250 shelter that can be transported on an M-1028 Commercial Utility Cargo Vehical and powered by a PU-753 10 kilowatt trailer mounted diesel generator set. The shelter assembly will include the mechanical and electrical facilities required to allow upgrade to SENS configuration by component insertion (DGM, COMSEC, digital cards, etc.). The switchboard used in the THS can be converted to the MSE switchboard configuration by changing the card population. THS uses the Terminal Control Device of the SB-3614A(V)/TT for creating and maintaining the switchboard's data base. THS also includes a dismount kit that will provide remote stand-alone operation of one of the switchboards.



HISTORICAL BACKGROUND:

Feb 86 - Under Secretary of the Army directed procurement of a switch capable of being upgraded to a SENS.
May 86 - J&A for Sole Source procurement submitted to AMC.
Jun 86 - Acquisition Plan approved.
Nov 86 - Production contract award.
Jun 88 - Start of hardware delivery.
Mar 89 - Full Materiel Release.
Mar-Jun 89 - Handoffs to Ft. Drum, Ft. Polk and Ft. Riley.
Jun 89 - Upgrade contract awarded.
Jan 90 - Turn-in at Ft. Polk with arrival of MSE.
Jul 91 - Second turn-in for Ft Drum.
Jan 92 - Acceptance for upgraded AN/TTC-49s to SENS.
May 92 - Fielding at the 151st Signal Battalion.

REQUIREMENTS DOCUMENT: Qualitative Material Requirement for Automatic Electronic Switching Systems, Nov 72.

TYPE CLASSIFICATION: Standard approved Aug 86.

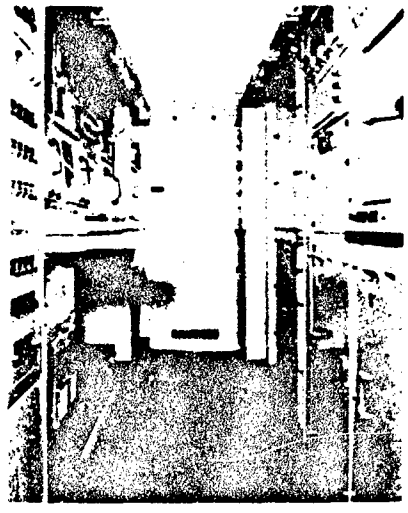
AN/TTC-49, THS PROVIDES A 60 LINE ANALOG SWITCH ASSEMBLY HOUSED IN AN EXTENDED S-250 SHELTER THAT CAN BE TRANSPORTED ON AN M-1028.

PM, MSCS

AN/TYC-39A, MESSAGE SWITCH

PROJECT OFFICER: Mr. James Brigance, DSN 992-2678
COMM 908/532-2678

PE & LINE #: 1X428010.D222



DESCRIPTION: The AN/TYC-39 Message Switch is a mobile, automatic, modular, electronic store and forward switch under processor control with integral COMSEC and multiplex equipment. It is compatible with the Defense Communications System Automatic Digital Network. The Message Switch will operate independently or jointly with the AN/TYC-39A Circuit Switch. The Message Switch accepts, processes, stores, delivers and accounts for message traffic by utilizing the store and forward central processor, appropriate software programs and memory storage. The three prime capabilities of the Message Switch are of security, message accountability and verifying character/bit integrity of all message traffic. Provisions are also made for four day journal storage, control of message orbiting, six levels of precedence and continuous monitoring. AN/TYC-34A provides the field user significant security and reliability enhancements.

HISTORICAL BACKGROUND:

71 - JCS Memorandum 407-71 established requirements.
Apr 74 - Full Scale Engineering Development contract awarded.
Sep 80 - Production contract awarded.
Dec 82 - First system delivery.
Feb 85 - Delivery of last production AN/TYC-39.
Mar 91 - Production contract awarded for Materiel Change (9 kits).
Jan 92 - Production option awarded for Materiel Change (7 kits).

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
PRODUCTION OF RETROFIT KITS	I				I				I																			
MATERIEL RELEASE									I																			

REQUIREMENTS DOCUMENT: JCS Memorandum 407-71 established requirements.

TYPE CLASSIFICATION: Standard approved Apr 80, ASARC III.

AN/TYC-3A IS A MOBILE, AUTOMATIC, MODULAR, ELECTRONIC STORE AND FORWARD MESSAGE SWITCH UNDER PROCESSOR CONTROL WITH INTEGRAL COMSEC AND MULTIPLEX EQUIPMENT.

PM, MSCS

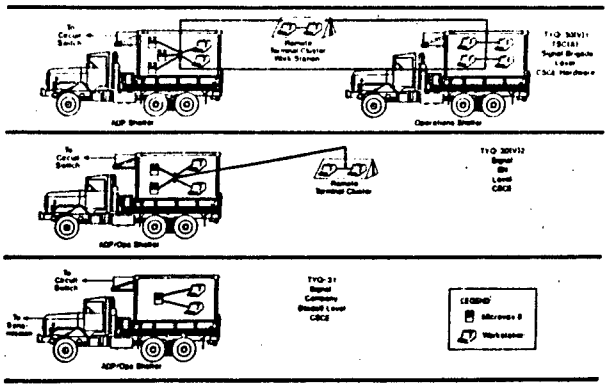
AN/TYQ-30(V)1, AN/TYQ-30(V)2, AN/TYQ-31,
COMMUNICATION SYSTEM CONTROL ELEMENT (CSCE)

PRODUCT MANAGER: LTC G.L. Langbein, DSN 992-3110
COMM 908/532-3110

PE & LINE #: 1X428010.D107

DESCRIPTION: The CSCE is the principal element of the system management and control hierarchy for the tactical switched network in Echelons Above Corps. CSCE is a heirarchial system that includes the following three components: AN/TYQ-30(V)1 used by Signal Battalions; AN/TYQ-30(V)2 used by Signal Battalions; AN/TYQ-31 Nodal Processor used by Signal Companies. It will exercise near real-time control over the allocation and use of resources within its assigned portion of the deployed tactical communications network. CSCE is an evolutionary program. The software is segmented into discrete and demonstrable "phases". The hardware is an NDI procurement. Software incorporates "off-the-shelf" software (e.g., VMS, ORACLE, PASSPORT, GRAPHICS, AFES) and new software written in HOLS (ADA, FORTRAN). Hardware is Microvax based with Government Furnished Equipment (e.g., DSVTs, DSDIs, DGM).

CSCE HARDWARE CONFIGURATION



HISTORICAL BACKGROUND:

Jan/Jun 80 - General Officer In Process Review (IPR).
Feb 83 - Air Force transfers program to Army.
Apr 83 - Software development began.
Sep 84 - Build I hardware delivered.
Feb 87 - Production contract restarted, all protests denied.
Apr 87 - Phase IV software completed/SASC contract terminated.
Sep 87 - Awarded Follow-On Software Development contract to GTE.
May 88 - FAT completed.
Aug 89 - System requirements test completed.
May 90 - Basis of Issue Plan waiver from HQ DA; Hardware Technical Manuals Verification.
Jun 90 - Test Evaluation Master Plan approved.
Aug 90 - User Test conducted.
Sep 90 - Letter of Authorization from HQ DA to field to Germany.
Feb 92 - Germany fielding completed.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
TRANSITION TO CECOM									I																			

REQUIREMENTS DOCUMENT: Joint Service Operational Requirement (JSOR) Jul 1974. (SM 393-74).

TYPE CLASSIFICATION: Standard approved Nov 90, Special IPR.

CSCE IS THE PRINCIPAL ELEMENT OF SYSTEM MANAGEMENT AND CONTROL HIERARCHY FOR ECHELONS ABOVE CORPS COMMUNICATIONS SYSTEMS.

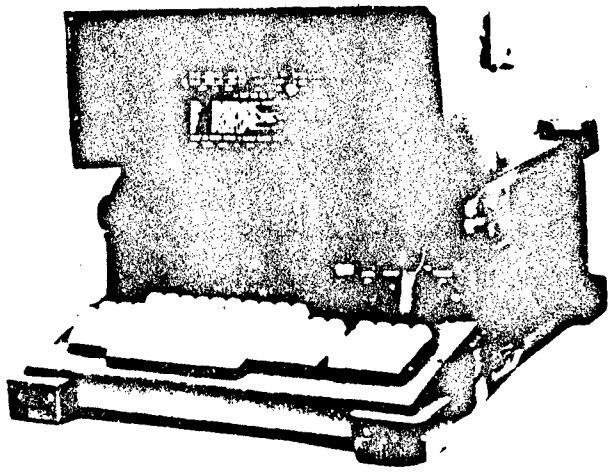
PM, MSCS

AN/UGC-144, COMMUNICATIONS TERMINAL

PROJECT OFFICER: Mr. Jeff Brown, DSN 992-2678
Comm 908/532-2678

PE & LINE #: 1X428010.A1905028

DESCRIPTION: The AN/UGC-144 is a formal record traffic communications terminal capable of storing, editing, displaying, transmitting, receiving and printing record traffic in the R (General Service) and Y (Intelligence) communities at all echelons of a tactical communications system. The equipment is user owned and operated.



HISTORICAL BACKGROUND:

Jan 80 - IPR/ASARC approved/validation.
Sep 80 - Full Scale Development contract awarded:
Program transitioned from PM, ATACS to PM, MSCS.
Jul 85 - AN/UGC-137A(V)2 CDT conducted.
Dec 85 - Market Investigation.
Jan 86 - NDI approach approved.
Feb 86 - AN/UGC-137A(V)2 procurement action terminated.
Sep 86 - HQDA approval of Acquisition Plan.
Apr 87 - Production contract awarded.
Jul 89 - 1st option exercised; First Article Test completed.
Aug 89 - VECP 3-1/2 Floppy Tech approved.
Jun 90 - 1st fielding.
Jul 90 - Materiel Release.
Oct 90 - VECP Auxiliary Storage Cassette approved.
Apr 92 - Final Logistics Support Concept (FLSC) on contract.

REQUIREMENTS DOCUMENT: NDI ROC approved by HQDA Jul 86.

TYPE CLASSIFICATION: Standard approved Oct 86.

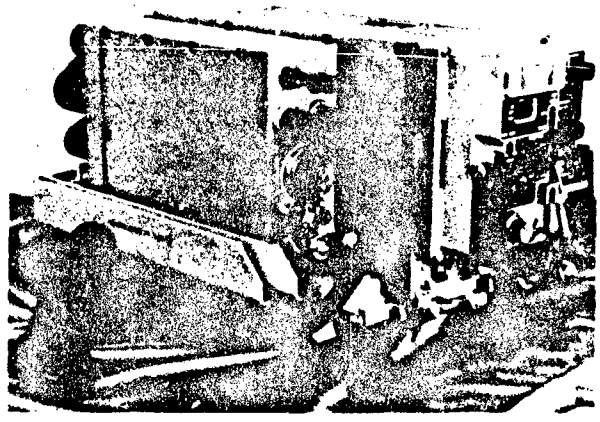
AN/UGC-144 COMMUNICATIONS TERMINAL IS A MODERN COMMUNICATIONS TERMINAL EMPLOYING SOLID STATE ELECTRONICS AND MICROPROCESSOR CONTROL OF FUNCTIONS.

PM, MSCS

AN/USC-43(V)2, ADVANCED NARROWBAND DIGITAL VOICE TERMINAL (ANDVT) TACTICAL TERMINAL

PROJECT OFFICER: Mr. Ronald Testa, DSN 992-3658
COMM 908/532-3658

PE & LINE #: 5211.605042



DESCRIPTION: The ANDVT provides a narrowband, secure voice capability for tactical and strategic echelons. It is used in a variety of locations ranging from fixed plant to vehicles. ANDVT Tactical Terminal (TACTERM) provides fixed and mobile forces with the capability of secure voice or data transmission via High Frequency (HF), Very High Frequency (VHF), Ultra High Frequency (UHF) radio satellite systems, wireline, or Net Radio Interfaces (NRI). ANDVT is a TRI-TAC item of equipment and meets the interoperability requirements of STANAGs 4197, 4198 and 4291. ANDVT TACTERM in its standard configuration consists of two equipments: A Basic Terminal Unit, CV-3591, (P)/U, and a COMSEC Module, KYV-5/TSEC, hereafter referred to as the BTU and CM respectively. A third equipment, the Interface Unit, J-3953 (includes cables and field mount) is used only when the ANDVT TACTERM directly replaces a KY-65 or for wireline applications. In other configurations, the BTU/CM assembly will directly replace a KY-75.

HISTORICAL BACKGROUND:

Sep 76-Oct 78 - Concept definition.
Oct 78-Jun 80 - Feasibility development.
Jun 80-Jun 83 - Full Scale Develc,ment.
Jun 83-Mar 84 - DT/OT II.
Jan 85 - Production RFP released.
Oct 85 - Army Production IPR.
Dec 85 - Letter contract award.
Mar 86 - MIPR to Navy - 1986 funds.
Jun 86 - Ammended MIPR to Navy for additional equipment.
Feb 87 - MIPR to Navy - 1987 funds.
Sep 87 - Award of additional equipment plus CDRL's.
Apr 88 - FAT completed.
Aug 88 - FATR approved by Navy.
Oct 88 - TECOM IAR completed.
Aug 89 - TWIG.
May 90 - Materiel Fielding Plan (MFP).
Aug 90 - Interim conditional/fielding release approved by AMC.
Dec 90 - Fielding complete for Operation Desert Storm.
Jul 92 - HQDA authorization for units to retain units.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
TRANSITION					I																							

REQUIREMENTS DOCUMENT: JOR SM-869-76 validated, Oct 76.

TYPE CLASSIFICATION: Correspondence IPR, 17 Oct 85; Standard.

ANDVT TACTICAL TERMINAL WILL PROVIDE FIXED AND MOBILE FORCES WITH THE CAPABILITY OF SECURE VOICE OR DATA TRANSMISSION VIA HIGH FREQUENCY, VERY HIGH FREQUENCY (VHF) ULTRA HIGH FREQUENCY (UHF) RADIO SATELLITE SYSTEMS, WIRELINE, OR NET RADIO INTERFACES.

PM, MSCS

AUTOMATED COMSEC MANAGEMENT AND ENGINEERING SYSTEM (ACMES)

PROJECT OFFICER: Mr. Kam Lee, DSN 992-5988
COMM 908/532-5988

PE & LINE #: 1T464751.D282.Z16800

DESCRIPTION: The ACMES Phase I is a frequency management system designed to meet the critical requirement for a decentralized and automated process to generate both single channel and frequency hopping Communication Electronic Operation Instruction (CEOI) information. It is intended to be more responsive to rapidly changing and highly mobile battlefield conditions as an integral system used with SINCGARS and other VHF (AM/FM), UHF and HF radio systems. ACMES Phase I is an automated management system that will generate, display, print, store, and electronically transfer CEOI information. It will generate and load frequency hopping information for radios and the Transmission Security (TRANSEC) key for Electronic Counter-Countermeasure (ECCM) protection.

The ACMES Phase I system is composed of a workstation and the Automated Net Control Device (ANCD). The workstation components are the Revised Battlefield Electronic CEOI software hosted on the Lightweight Computer Unit (LCU) with dot matrix printer (managed by PM, CHS) and the Random Data Generator (RDG) managed by NSA. The ANCD is made up of Army unique application software hosted on the Data Transfer Device (DTD) which is managed by NSA. ACMES Phase I will eliminate the use of paper CEOIs and provide greater flexibility to user units. It will be used by all combat, combat support, and combat service support units as a standard replacement for the paper CEOI.

HISTORICAL BACKGROUND:

Jun 87 - ACMES O&O Plan approved.
Sep 87 - NSA awarded DTD Engineering Development contract awarded.
Jul 90 - NSA awarded DTD Low Rate Initial Production (LRIP) contract.
May 91 - ACMES and Battlefield Electronic CEOI System (BECS) programs combined.
Dec 91 - ACMES program transitioned to PM, MSCS.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
LCU USER CHECK TEST	I																											
DTD OPERATIONAL DEMONSTRATION	I																											
LCU/DTD TYPE CLASSIFICATION LRIP		I																										
LCU/DTD OPTION AWARD		I																										
ACMES PHASE I OPERATIONAL TEST					I	I																						
LCU OPTION DELIVERY					I	I																						
LCU/DTD TYPE CLASSIFICATION STANDARD						I																						
DTD OPTION DELIVERY						I																						

REQUIREMENTS DOCUMENT: ROC approved Aug 90; ROC revised Sep 91.

TYPE CLASSIFICATION: ACMES Phase I LRIP approved Mar 92.

ACMES PHASE I IS A FREQUENCY MANAGEMENT SYSTEM DESIGNED TO MEET THE CRITICAL REQUIREMENT FOR A DECENTRALIZED AND AUTOMATED PROCESS TO GENERATE BOTH SINGLE CHANNEL AND FREQUENCY HOPPING CEOI INFORMATION.

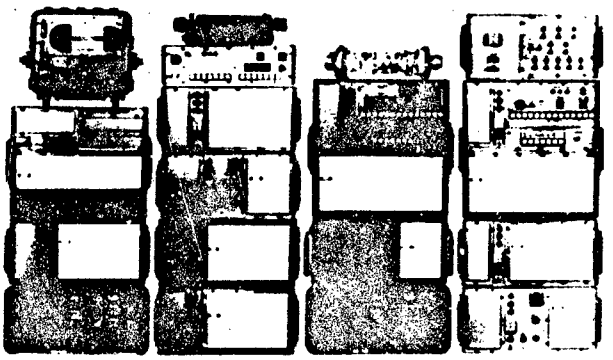
PM, MSCS

DIGITAL GROUP MULTIPLEXER (DGM)

PROJECT OFFICER: Messrs. Frank Coluccio and Jon Vogel
DSN 992-3474, COMM 908/532-3474

PE & LINE #: 1X428010.D107

DESCRIPTION: The DGM equipment is composed of a family of Digital Multiplexers, Cable Driver Modems, Pulse Restorers, and Orderwire Control Units for use as elements of the TRI-TAC system. The DGM family of equipment is deployed in the following DGM assemblages: AN/TRC-173, Radio Terminal Set; AN/TRC-175, Radio Terminal Set; AN/TRC-138A/B, Radio Repeater Set; and AN/TRC-174 Radio Repeater Set. They are also used in the following assemblages: AN/TRC-170, Troposcatter Radio Terminal; AN/TYQ-30/31, Communications System Control Element; AN/TTC-39A/D, Circuit Switch; AN/TSC-85( ), Tactical Satellite Communications Terminal, and AN/TSC-100A Multichannel Super High Frequency Satellite Communications Terminal. DGM is also used in the Air Force unique assemblages AN/TSQ-111, Communications Nodal Control Element and AN/TSQ-146, MUX VAN. In addition, DGM equipment is deployed in stand-alone applications by Army, Air Force, and Marine Corps. DGM equipment is provided as Government Furnished Equipment to a number of Army and Air Force a[illegible] contractors for integration into and delivery with their assemblages.



DIGITAL GROUP MULTIPLEX EQUIPMENT

TD-1218/G (LSPR)
C-10717/TRC (OCU-II)
MD-1025/G (RL6M/CD)
TD-1234(P)/TTC (RMC)

ID 2324(V)* TRC (AS
C-11643 TRC (OCU-II
MD 1065 G (RM
MD-1023(P) G (LSC/D

HISTORICAL BACKGROUND:

Dec 74 - JOR for DGM approved by Joint Chiefs.
May 75 - FSED contract awarded to Raytheon.
Mar 82 - Three-year multi-year Production contract awarded to Raytheon.
Sep 83 - PY2 option award.
Sep 84 - PY3 option award.
Aug 85 - FY85 DGM delivery order placed with Raytheon.
Aug 87 - Initial Army fieldings of DGM.
Aug 88 - FY88 contract award to Raytheon.
Apr 89 - Competitive contract award to Honeywell and subsequently transferred to Group Technology Corporation (GTC) for four High Volume units.
Sep 90 - Options 1 and 2 award to Honeywell and subsequently transferred to GTC; Competitive award to United Telecontrol Electronics (UTE) for TD-1218.
Sep 91 - First Article Test (FAT) approved GTC; Option 3 award to GTC; Production deliveries commence.
Dec 91 - FAT started at UTE.
apr 92 - FAT approved at UTE.
Jun 92 - TD-1218 production deliveries commence.

EVENT SCHEDULE:

FISCAL YEAR		92				93				94				95				96				97				98			
	QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
TRANSITION	TBD																												

REQUIREMENTS DOCUMENT: OSD Memorandum, JSOR, Dec 74.

TYPE CLASSIFICATION: Standard approved Aug 1981, IPR.

DGM IS A FAMILY OF VARIOUS MULTIPLEXERS, MODEMS, ORDERWIRE CONTROL UNITS, AND CABLE SYSTEM COMPONENTS THAT ARE DEPLOYED IN TRI-TAC EQUIPMENT.

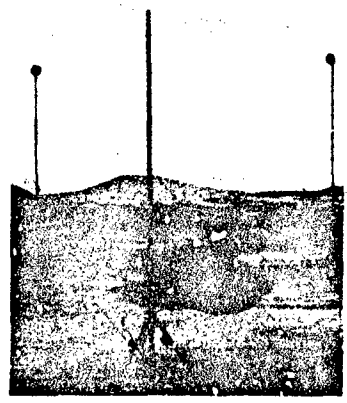
PM, MSCS

DIGITAL GROUP MULTIPLEXER ANTENNA MAST PROGRAM (DAMP)

PROJECT OFFICER: Ms. Noreen Polo, DSN 992-3525
COMM 908/532-3525

PE & LINE #:

DESCRIPTION: The DAMP consists of up to three Quick Erect 30 Meter Manual Antenna Masts stowed in a transit frame and mounted on an M1061A1 trailer or on the bed of a 5-ton cargo truck. The configuration depends on the variant of the Digital Group Multiplexer (DGM) system it supports. These masts will deploy antennas in support of the AN/TRC-173( ), AN/TRC-174( ), AN/TRC-175( ) and AN/TRC-138A/1388. These systems will include two each MEP 003A 10 kilowatt diesel generators for system power.



HISTORICAL BACKGROUND:

Jul 86 - Signal Center General Officer Meeting decided the AB-1309/TRC Antenna Mast would no longer be fielded with DGM assemblages but instead as an auxiliary mast system. The DGM Assemblage Mast Program will provide an objective antenna mast system for DGM assemblages.
Oct 87 - A General Officer Meeting at Fort Monmouth, resulted in a decision to suspend the DAMP program pending further review of requirements by SIG CEN.
Dec 88 - DA direction to proceed with 30M Mast Procurement.
Jul 89 - RFP released.
Oct 89 - Source Selection started.
Feb 90 - Contract (basic) awarded.
Oct 90 - First Article Test (FAT) started.
Jan 91 - First option exercised.
May 91 - FAT completed.
Jan 92 - Second option exercised.
Jun 92 - User Evaluation conducted.
Jul 92 - First Unit Equipped (FUE).

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
FIRST UNIT EQUIPPED		I																										
TRANSITION																		I										

REQUIREMENTS DOCUMENT: DGM JSOR, Dec 74.

TYPE CLASSIFICATION: Standard (DGM) approved Aug 81; Updated by Materiel Status Record Change 1991.

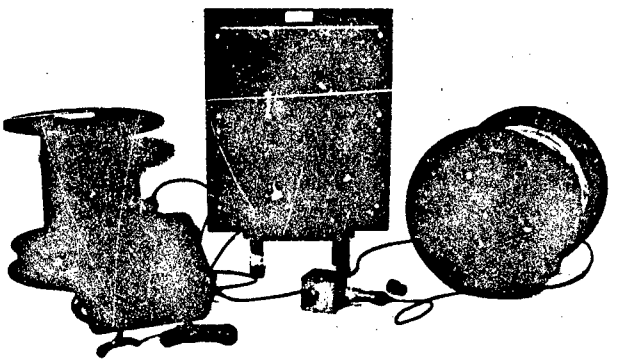
DAMP PROVIDES ANTENNA MASTS, GENERATORS AND ANCILLARY ITEM TRANSPORT IN SUPPORT OF THE DGM ASSEMBLAGES.

PM, MSCS

FIBER OPTICS TRANSMISSION SYSTEM (FOTS)

PROJECT OFFICER: Messrs. Tom Muldowney and Jorge Tersy
DSN 992-3525, COMM 908/532-3525

PE & LINE #: 1E464701.D48736



DESCRIPTION: The FOTS is designed to be a replacement for the CX-11230 Coaxial Cable. FOTS is composed of the following equipments: Fiber Optic Modem (FOM); Field Test Set (FTS); Fiber Optic Cable Assembly (FOCA), and Cable Repair Kit (CRK). The FOM is mounted on the shelter entrance panel and converts the electrical signal to an optical signal for transmission down the FOCA. The FTS is utilized to troubleshoot the cable system. The CRK permits repair and retermination of the FOCA in a sheltered environment. The FOCA is a two fiber cable assembly and is provided in 300 meter and one kilometer lengths. The FOCA is the standard tactical two fiber cable assembly used by all services. The performance requirement for the FOTS is eight kilometers without repeaters.

HISTORICAL BACKGROUND:

Jun 77 - Exploratory Development contract, AN/GAC-1.
Feb 79 - Special In-Process Review for entry into Full Scale Engineering Development.
May 84 - Program management transferred from PM, ATACS to PM, MSCS.
Jan 86 - DT-II/OT-II commenced.
Jul 86 - DT-II/OT-II completed.
Jul 90 - First Article Test (FAT) approved AT&T.
Aug 91 - FAT approved, Fibercom, Incorporated.
Sep 91 - TWIG.
Feb 92 - New Equipment Training and Instructor Key Personnel.
Apr 92 - Interoperability testing with Marine Corps IAW JIC3ATIS9109C.
Jul 92 - Limited User Assessment Test, Ft. Gordon, GA.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
FIRST UNIT EQUIPPED		I																										
INITIAL OPERATIONS CAPABILITY		I																										
TRANSITION														I														

REQUIREMENTS DOCUMENT: ROC approved Nov 81.

TYPE CLASSIFICATION: Standard approved Aug 87.

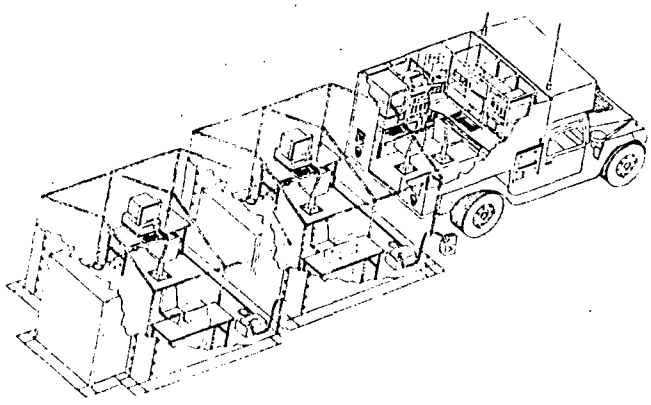
FOTS IS A REPLACEMENT FOR CX-11230 TWIN COAXIAL CABLE AND OFFERS INCREASED BANDWIDTH, DECREASED DIAMETER AND WEIGHT, INCREASED FLEXIBILITY, ELECTROMAGNETIC PULSE/RADIO FREQUENCY INTERFERENCE (EMP/RFI) IMMUNITY AND LOWER COST.

PM, MSCS

INTEGRATED SYSTEMS CONTROL (ISYSCON)

PRODUCT MANAGER: LTC G.L. Langbein, DSN 992-3110
COMM 908/532-3110

PE & LINE #: D107



DESCRIPTION: The ISYSCON facility is used by Signal Commanders at Division through Theater. It provides automated assistance in managing and integrating the various communications systems in the tactical area of operations. It uses Army Command and Control System hardware, software, shelter and extension tents. Software will be developed in three discreet blocks using an Ada environment. ISYSCON supports the following five major functional areas: Battlefield Spectrum Management, COMSEC Management, Network Planning and Engineering, Signal Command and Control, and Wide Area Network (WAN) Management.

HISTORICAL BACKGROUND:

Nov 91 - Acquisition Plan approved: Milestone I/II IPR.
Dec 91 - RFP released.
Feb 92 - Proposals received; Source Selection began.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
CONTRACT AWARD/ENGINEERING MANUFACTURING DEVELOPMENT					*				**																			
IOT&E TESTING (BLOCK I)																												
MILESTONE III IPR																												

* Basic Block I; ** Block II Option.

REQUIREMENTS DOCUMENT: O&O Plan approved Nov 89; ROC approved Oct 90.

TYPE CLASSIFICATION:

ISYSCON PROVIDES A SYSTEM TO TWO SIGNAL UNITS ENABLING THEM TO COORDINATE THE PLANNING AND EMPLOYMENT OF COMMUNICATIONS RESOURCES IN SUPPORT OF THE COMMANDER'S WARFIGHTING PLAN.

PM, MSCS

UNIT LEVEL DIGITAL SWITCH PROGRAM (ULDS)

PROJECT OFFICER: Mr. George Fitzpatrick, DSN 992-3658
COMM 908/532-3658

PE & LINE #:

DESCRIPTION: The ULDS is to be deployed at Echelons Above Corps (EAC) units. The ULDS is composed of an MSE Small Extension Node Switch (SENS), AN/TTC-48 and MSE Large Extension Node Switch (LENS), AN/TTC-46. The SENS will provide the primary means of telephone subscriber access into the EAC area system utilizing a 41-line automatic switchboard. The MSE SENS is housed in an extended S-250E shelter. It also provides a direct link between local subscribers as well as a manual interface to commercial telephone systems. The LENS will provide access for up to 176 subscribers into the EAC area system. It can also provide the flood search and automatic affiliation/disaffiliation capabilities. The EAC LENS will be housed in two assemblages, an S-250 Switching Group and an S-250E Operations Group.

HISTORICAL BACKGROUND:

Jun 87 - HQDA confirmed Under Secretary of the Army's intent to procure the MSE SENS using the MSE contract.
Jul 87 - SDS Program cancelled.
Oct 87 - Independent Report issued affirming Under Secretary of the Army's decision to procure SEN using MSE control.
Feb 87 - Acquisition Plan approved by HQDA for TRI-TAC Block III.
Mar 89 - Four LENS and 202 SENS awarded on contract options.
Feb 90 - USAREUR fielding/training award.
Dec 90 - SENS fielded to 7th Signal Brigade.
Dec 91 - SENS fielded to 304th Signal Battalion and 67th Signal Battalion.
Feb 92 - Fielding to 307th Signal Battalion.
Apr 92 - Materiel Release for LENS fielding.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
MSE LENS: DELIVERY				!																								
FIELDING				!																								

REQUIREMENTS DOCUMENT: DA Message 091129ZJUN87, TRI-TAC Block III Architecture.

TYPE CLASSIFICATION: Standard.

ULDS PROVIDES PRIMARY MEANS OF TELEPHONE SUBSCRIBER ACCESS INTO THE EAC AREA SYSTEM UTILIZING A 41-LINE AUTOMATIC SWITCHBOARD.

PM SATCOM

PM, SATCOM

AN/FGQ-13, SMART MULTI-CIRCUIT TERMINAL (SMCT)

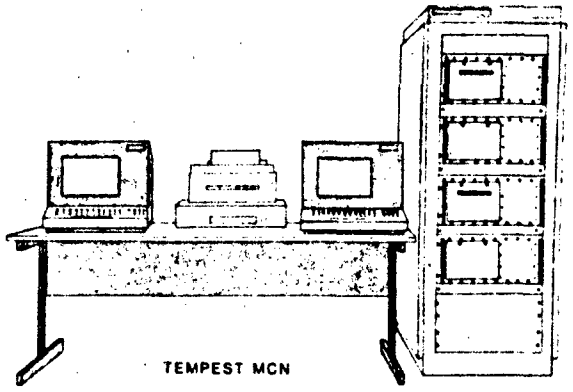
PRODUCT MANAGER: Mr. Ronald Johnson, DSN 992-5293
COMM 908/532-5293

PROJECT LEADER: Ms. Lita Murphy, DSN 992-0338
COMM 908/532-0338

TECHNICAL LEADER: Mr. Robert Perle, DSN 992-3169
COMM 908/532-3169

PE & LINE #: BB8509

DESCRIPTION: The SMCT is an automated system which provides consolidation of the numerous control/coordination teletype requirements of the Terrestrial Critical Control Circuit (TCCC) through termination of each circuit on a display keyboard terminal and printer. It provides reliable time tagged communications with message routing capabilities in a clear or encrypted environment. SMCT is composed of two Central Processing Units, two Mass Memory (Disks), two Keyboards, four Video Display Units, and Printer.



HISTORICAL BACKGROUND:

Sep 82 - Stanford Telecommunications, Inc. (STI) proposal to DCA for lease of initial version of SMCTs called MCNs.
Apr 83 - Control program reoriented after briefing to MG Rockwell at DCSOPS (DA). Army to procure SMCT based on specifications.
Jul 84 - SATCOMA requested User Test held at Ft. Detrick. SMCT Team Members witness tests.
Feb 85 - DCA exercised option on MCN II lease to buy out equipment.
May 85 - Implementation strategy of SMCT. Members were DA, AMC and SATCOM. Recommendation was for DA to direct SATCOMA to MIPR $6.3M to DCA with AMC concurrence.
Jun 85 - AMC Msg 261900ZJUN85 directed SATCOM to MIPR $6.3M to DCA for procurement of SMCT.
Jul 85 - ED contract awarded by DCA.
Feb 86 - ED contract awarded by DCA for additional models.
Sep 87 - Production contract awarded by DCA for four SMCT.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
CONTRACT AWARD																												
PRODUCTION DELIVERY	▼																											

REQUIREMENTS DOCUMENT: DSCS Program Plan FY86-90.

TYPE CLASSIFICATION: Waived, DA directed procurement.

SMCT IS A MICROPROCESSOR BASED SYSTEM USED TO PROVIDE FULL DUPLEX SECURE RESERVED COMMUNICATIONS BETWEEN ALL DEFENSE SATELLITE COMMUNICATIONS SYSTEM (DSCS) CONTROL FACILITIES.

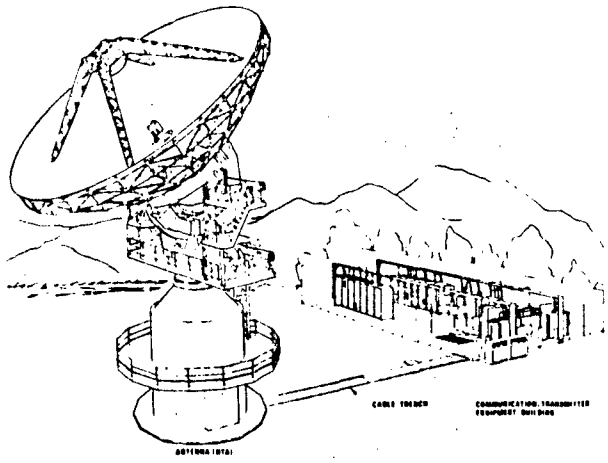
SATCOM

AN/FSC-78/79, HEAVY TERMINAL MODERNIZATION PROGRAM

PRODUCT MANAGER: Mr. William Anderson, DSN 992-0995
COMM 908/532-0995

PE & LINE #: SSN: BB8416

DESCRIPTION: The AN/FSC-78 and AN/FSC-79 Heavy Terminals (HTs) have operated as part of the Defense Satellite Communications Systems (DSCS) satellite network since the mid- 1970s and have surpassed their design life of 15 years. The modernization effort will provide for the upgrade of aging electronics in the HTs so that all DSCS Super High Frequency (SHF) strategic earth terminals will use common electronics and logistics support. It encompasses the equipment from the antenna interface to the communications and control subsystem interfaces. The result will extend the life of the terminals for another 15 years, increase readiness, reduce training and logistics support, conserve energy and improve maintainability.



HISTORICAL BACKGROUND:

Jun 89 - DSCS Program Plan FY91-95 established requirement for the HT Modernization DOD Tri-Service Program.
Jan 91 - Milestone III IPR approval to proceed with procurement and application of the materiel change.
Jun 91 - Competitive Request For Proposal released.
Mar 92 - Production contract award.

REQUIREMENTS DOCUMENT: DSCS Program Plan FY91-95.

TYPE CLASSIFICATION: Deferred per HQOA until final support package is available at 5th installation site.

AN/FSC-78/79 WILL PROVIDE FOR THE UPGRADE OF AGING ELECTRONICS IN THE HEAVY TERMINALS SO THAT ALL DSCS SHF STRATEGIC EARTH TERMINALS WILL USE COMMON ELECTRONICS AND LOGISTICS SUPPORT.

PM, SATCOM

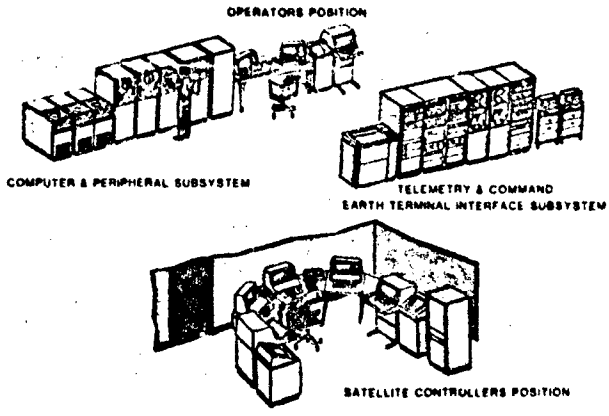
AN/FSC-91, SATELLITE CONFIGURATION CONTROL ELEMENT (SCCE)

PRODUCT MANAGER: Mr. Ronald Johnson, DSN 992-5293
COMM 908/532-5293

PROJECT LEADER: Mr. Fred Schaefer, DSN 992-0338
COMM 908/532-0338

PE & LINE #: 888509

DESCRIPTION: The primary function of SCCE is to provide operational command and control of the Defense Satellite Communications System III (DSCS III) satellites to satisfy real-time user requirements. It is capable of jammer detection, location and nulling. Using the telemetry tracking and command channel, the SCCEs generate commands and command sequences which reconfigures DSCS III satellite channels and antenna beam allocations, and control COMSEC equipment. SCCEs will be linked with the DSCS III satellites by existing satellite earth terminals via an "SCCE - Earth Terminal interface."



HISTORICAL BACKGROUND:

Sep 82 - First Production contract awarded for Serial Number (SN) 4 and 5.
Sep 83 - Production contract awarded for SN 6 and 7.
Dec 83 - Option exercised for SN 8 and 9.
Dec 84 - SN 4 fielded at Camp Roberts.
Feb 85 - SN 5 fielded at Landstuhl.
Jul 85 - SN 6 fielded at Fort Detrick.
Jun 87 - SN 8 fielded at Fort Meade.
May 91 - SN 7 fielded at Fort Detrick.
May 92 - SN 9 fielded at Fort Buckner.

REQUIREMENTS DOCUMENT: Defense Satellite Communications System Program Plan as approved by Assistant Secretary of Defense (C3I).

TYPE CLASSIFICATION: Limited production, Mar 82.

NOTE: As last SCCE was recently fielded, contract is in the process of being closed out.

SCCE PROVIDES OPERATIONAL COMMAND AND CONTROL OF DSCS III SATELLITES TO SATISFY REAL-TIME USER REQUIREMENTS.

PM, SATCOM

AN/FSC-96 AND AN/GSC-51, DEFENSE SATELLITE COMMUNICATIONS SYSTEM FREQUENCY DIVISION MULTIPLE ACCESS CONTROL SUBSYSTEM (DFCS)

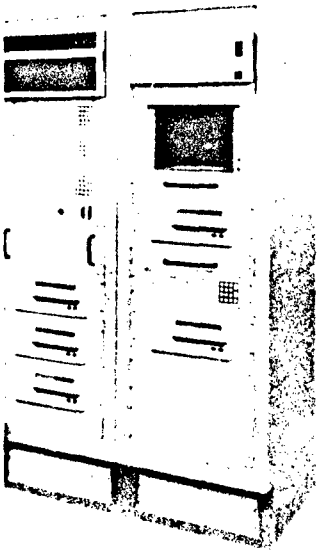
PRODUCT MANAGER: Mr. Ronald Johnson, DSN 992-5293
COMM 908/532-5293

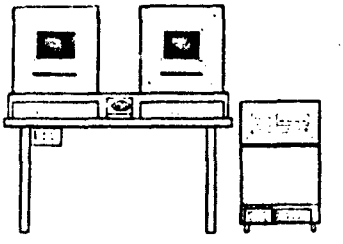
PROJECT LEADER: Mr. John Wilder, DSN 992-4547
COMM 908/532-4547

TECHNICAL LEADER: Mr. Robert Perle, DSN 992-3169
COMM 908-532-3169

PE & LINE #: E7086

DESCRIPTION: The DFCS controls transmit power of Defense Satellite Communications System (DSCS) carriers and monitors earth terminal and satellite network status and performance. The Network Terminal, AN/GSC-51 is installed in strategic satellite communications terminals. The satellite network data collected from these stations is transmitted via a Satellite Control Circuit to one of the two Network Control Terminals (AN/FSC-96 or NCTs). Power Control Commands are calculated and transmitted to the Network Terminals for adjustment of Carrier Transmit Power. The Satellite Links within the DSCS are normally operated with a link margin of at least six decibel to accommodate uncontrollable signal transmission fades. The DFCS automatically detects and compensates for these transmission fades allowing the link margins to be reduced. This reduction in link margin allows channel capacity of the spacecraft to be significantly increased.





HISTORICAL BACKGROUND:

Aug 85 - Production contract award.
Jul 87 - DFCS deliveries began.
May 88 - DFCS installations at strategic locations began.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
IOC			I																									
TRANSITION TBD																												

REQUIREMENTS DOCUMENT: DSCS FY85-89 Program Plan, Mar 83.

TYPE CLASSIFICATION: Standard approved Feb 84.

DFCS IS A GROUND BASED SUBSYSTEM USED WITH EARTH TERMINAL EQUIPMENT FOR CONTROLLIN. TRANSMIT POWER OF DSCS CARRIERS AND FOR MONITORING EARTH STATION AND SATELLITE NETWORK STATUS AND PERFORMANCE.

PM, SATCOM

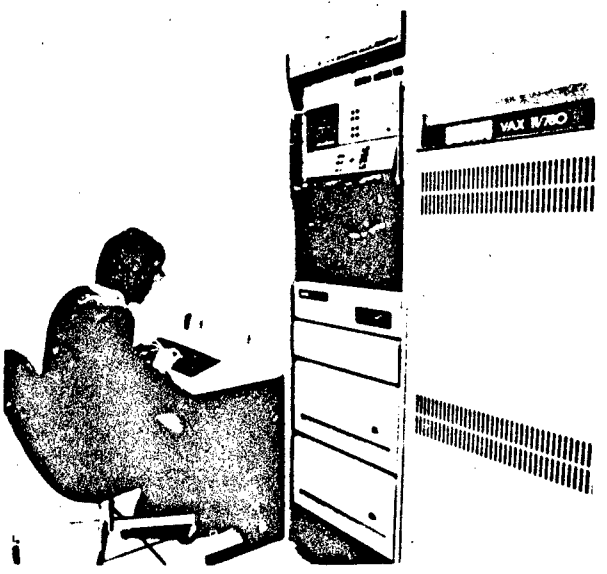
AN/FYQ-110 AND AN/FSQ-142 COMPUTER, OPERATION SUPPORT SYSTEM
DOSS/SPECTRUM ANALYZER DASA (DOSS/DASA)

PRODUCT MANAGER: Mr. Ronald Johnson, DSN 992-5293
COMM 908/532-5293

TECHNICAL LEADER: Mr. David Morrissey, DSN 992-3169
COMM 908/532-3169

PE & LINE #: BB509

DESCRIPTION: The DOSS provides computational support for the SATCOM Network Controller (and up to seven remote operators) to calculate Defense Satellite Communications System (DSCS) reconfiguration parameters in response to changing user requirements, changing network status, or changing environmental conditions. Contained within the DOSS is the Resource Allocation Software (RAS) consisting of the computer software which provides algorithms to support DOSS reconfiguration capabilities. The DASA is designed for operation connected directly to the DOSS or in a stand-alone mode, should this be required. The DASA provides control and data processing for an automatic spectrum analysis capability. DASA software accepts signal monitoring data from the Hewlett-Packard 8566B Spectrum Analyzer, computes various signal parameters based upon the current operational traffic configuration in the DOSS data base, and compares the measured values with the expected values generated by the DOSS Computer.



HISTORICAL BACKGROUND:

Feb 79 - Award for DOSS/DASA 1 and 2.
May 84 - Award for DOSS/DASA 3 and 4.
Aug 84 - Award for upgrade to existing DOSS/DASA systems.
Jul 86 - Award for partial requirements ($4.5M).
Dec 86 - Award for Operation and Maintenance (O&M) support services.
Mar 87 - DOSS/DASA 5 and 6 definitized ($9M).
Dec 87 - Awarded contract option for O&M services.
Sep 88 - Awarded contract for DOSS/DASA 7 through 12.
Oct 89 - Awarded contract for O&M services.
Oct 90 - Awarded contract (follow-on) for O&M services.
Feb 92 - Awarded contract to retrofit DOSS/DASA VAX 8250 computer.

REQUIREMENTS DOCUMENT: DSCS Program Plan FY86-90 approved Mar 84.

TYPE CLASSIFICATION: Standard approved Oct 87.

DOSS PROVIDES COMPUTATIONAL SUPPORT FOR THE SATCOM NETWORK CONTROLLER TO CALCULATE DSCS RECONFIGURATION PARAMETERS.
DASA PROVIDES CONTROL AND DATA PROCESSING FOR AN AUTOMATIC SPECTRUM ANALYSIS CAPABILITY INTEGRATED WITHIN THE DOSS.

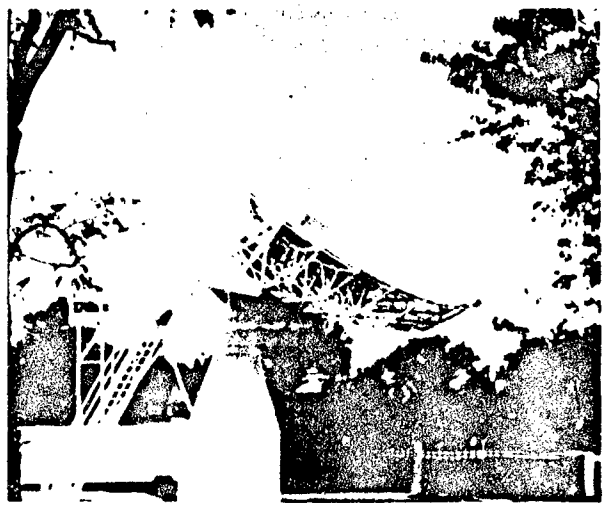
PM, SATCOM

AN/GSC-39(V)1 AND AN/GSC-39(V)2, MEDIUM SATELLITE COMMUNICATIONS TERMINALS

PRODUCT MANAGER: Mr. William Anderson, DSN 992-0995
COMM 908/532-0995

PE & LINE #: SSN: BB8507

DESCRIPTION: The AN/GSC-39(V)1 and AN/GSC-39(V)2 are medium Super High Frequency (SHF) satellite communications terminals which operate as part of the Defense Satellite Communications System (DSCS) under Defense Information Systems Agency (DISA) operational control using Army, Navy and Air Force personnel as operators. AN/GSC-39(V)1 is a fixed terminal installed in buildings. AN/GSC-39(V)2 is a transportable terminal installed in a van, with one electronics van and and one transmitter van per terminal. In addition, each transportable terminal has separate maintenance and supply vans. These terminals are capable of communicating with Frequency Division Multiple Access, Spread Spectrum Multiple Access (SSMA), and Time Division Multiple Access (TDMA) Modulation Techniques.



HISTORICAL BACKGROUND:

70 - Deputy Secretary of Defense memo initiated development; Engineering Development contract awarded.
72 - Engineering Development contract completed.
74 - DSCS Program Plan FY74-78.
Mar 78 - Production contract awarded.
Nov 80 - First Unit Equipped.
Dec 80 - Initial Operational Capability.
Jan 91 - Preliminary Transition Plan (to CECOM) approved. Final transition TBD.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
TERMINAL MODIFICATION KITS (Delivery)*																												

* Projection based on availability of funds for FY-94/95.

REQUIREMENTS DOCUMENT: DSCS Program Plan FY81-85.

TYPE CLASSIFICATION: Mar 77, Standard.

AN/GSC-39(V)1 AND AN/GSC-39(V)2 ARE HIGH QUALITY MEDIUM SHF SATELLITE COMMUNICATION TERMINALS WHICH ARE PART OF THE DSCS.

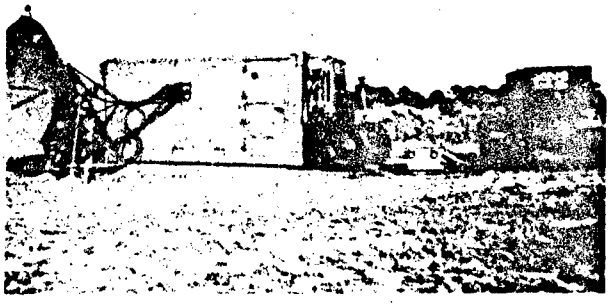
PM, SATCOM

AN/GSC-49(V)1, AN/GSC-49(V)2, AND AN/GSC-49(V)3
JAM RESISTANT SECURE COMMUNICATIONS (JRSC) TERMINALS

PRODUCT MANAGER: Mr. William Anderson, DSN 992-0995
COMM 908/532-0995

PROJECT LEADER: Mr. Daniel Domogala, DSN 992-3430
COMM 908/532-3430

PE & LINE #: BA8300



DESCRIPTION: JRSC is an add-on to the Defense Satellite Communications System (DSCS) resulting from the Secretary of Defense requirement to improve Worldwide Military Communication Command and Control Systems (WWMCCS) capability of jam resistant secure communications via satellite. JRSC consists of Super High Frequency (SHF) Satellite Terminals packaged to satisfy JRSC peculiar requirements.

HISTORICAL BACKGROUND:

Sep 80 - Production contract award.
Mar 84 - First Unit Equipped.
Jun 84 - Initial Operational Capability.
Dec 86 - Last two terminals delivered.

REQUIREMENTS DOCUMENT: DCSC FY80-84 Program Plan.

TYPE CLASSIFICATION: Standard approved Aug 80.

JRSC PROVIDES JAM RESISTANT, SECURE COMMUNICATIONS ADD-ON FOR WWMCCS.

PM, SATCOM

AN/GSC-52(V), STATE-OF-THE-ART MEDIUM TERMINAL (SAMT)

PRODUCT MANAGER: Mr. Wm. Anderson, DSN 992-0995
COMM 908/532-0995

TECHNICAL LEADER: Mr. Burton Stein, DSN 992-0321
COMM 908/532-0321

PE & LINE #: BB8507

DESCRIPTION: SAMT is a high-capacity, medium sized Super High Frequency (SHF) Satellite Communications Terminal designed to operate in the DSCS satellite network. The terminals will be operated by the various services under the operational control of Defense Satellite Communications System (DISA). This new system is characterized by computer aided fault isolation, hierarchial control (remote console and external control possible) and automatic equipment switch-over to redundant equipment with High-Altitude Electromagnetic Pulse (HEMP) protection in vans or fixed site buildings. SAMT includes a 38 foot OE-371/G antenna.

HISTORICAL BACKGROUND:

Nov 80 - DSCS FY83-87 Program Plan establishes requirements for SAMT.
Jan 81 - Program Plan approved by an Assistant Secretary of Defense (ASD) memorandum.
May 81 - Industry symposium held to incorporate latest technology in system concept.
Sep 82 - Production contract awarded.
Jul 85 - First Article Test passed.
Dec 85 - First Unit Equipped.
Jul 86 - MOA signed by USAISEC and USASATCOMA for installation of system numbers 10 - 39.
Sep 86 - Follow-on Evaluation.
Dec 86 - Initial Operational Capability.
Nov 88 - Production phase completed; Thirty-six terminals are installed and operational, three terminals remain in storage to be deloyed at a future date.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
FIELDINGS						I				I				I														

REQUIREMENTS DOCUMENT: Defense Satellite Communications System (DSCS) FY83-87 Program Plan.

TYPE CLASSIFICATION: Standard approved Aug 82.

SAMT IS A HIGH-CAPACITY MEDIUM SIZED SHF SATCOM TERMINAL TO OPERATE IN THE DSCS NETWORK.

PM, SATCOM

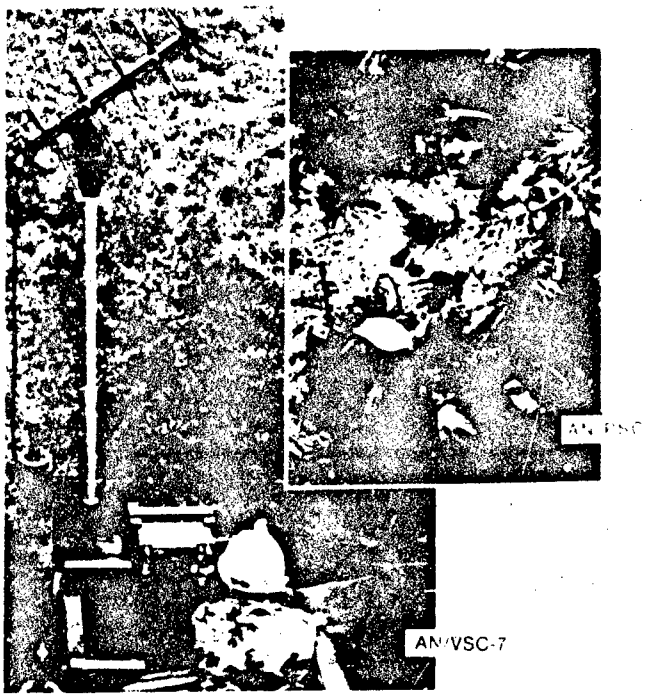
AN/PSC-3 AND AN/VSC-7, SINGLE CHANNEL ULTRA HIGH FREQUENCY (UHF) SATELLITE COMMUNICATIONS TACTICAL TERMINALS

PRODUCT MANAGER: LTC Michael Mazzucchi DSN 992-0994
COMM 908/532-0994

PROJECT LEADER: Mr. William Duda, DSN 992-6108
COMM 908/532-6108

PE & LINE #: SSN: K77200

DESCRIPTION: The AN/PSC-3 is a man-portable Satellite Communications Tactical Terminal. The AN/VSC-7 is a vehicular mounted version of the AN/PSC-3 with the following additional hardware: Applique, Shock Mount/Rack Mount Trays, High Gain Antenna, Antenna Mast, and Hand Set. These terminals will provide a satellite communications capability primarily for Special Operations Forces and Army Ranger Units for use in forward areas or behind enemy lines. AN/PSC-3 is a rugged, lightweight portable device capable of being paged while in motion, providing positive visual and audible indications to the operator. It weighs less than 35 pounds including the RT-1402A/G, the medium gain antenna, low gain (whip) antenna, the handset H-250/U, and battery box with batteries. AN/VSC-7 will serve as the Net Control Station for up to 15 AN/PSC-3 Terminals. The procurement strategy for DOD requirements of AN/PSC-3 and AN/VSC-7 involves three production efforts. PM, SATCOM initiated a Materiel Change in order to enhance the basic terminals' satellite communications capability by adding Embedded COMSEC Demand Assigned Multiple Access (DAMA) and Over-The-Air-Rekey (OTAR). The Materiel Change is named the EMUT Phase II program.



HISTORICAL BACKGROUND:

May 79 - DEVA IPR.
Sep 81 - First Production contract award.
Aug 84 - Follow-on evaluation completed.
Jan 85 - Second Production contract award.
May 85 - First Unit Equipped/Initial Operational Capability; Moritorium imposed by Secretary Latham.
Jun 86 - ASD (C3I) moritorium restricting further procurement of manpack radios rescinded.
Aug 86 - Final Production contract award.
Dec 86 - Total Package/Unit Materiel Fielding (TP/UMF) complete to WESTCOM.
May 87 - A Sole Source contract for the medium and high gain antennas was awarded to Dorne Margolin Corp.
Jun 87 - Exercise contract option to procure additional quantities; Retrofit basic configuration for enhancements to the A model.
Aug 87 - Exercise additional 12 month option on Requirements contract.
Oct 90 - First Article Test for new replacement amplifier.
Dec 90 - New power amplifier approved by PM, SATCOM; All fieldings halted due to Operation Desert Sheild.
Apr 91 - Last unit AN/PSC-3 delivered.

REQUIREMENTS DOCUMENT: TACSATCOM QMR approved Nov 71.

TYPE CLASSIFICATION: Standard approved Aug 86.

AN/PSC-3 AND AN/VSC-7 ARE SINGLE CHANNEL UHF SATELLITE COMMUNICATIONS TACTICAL TERMINALS.

PM, SATCOM

AN/TSC-85B AND AN/TSC-93B, TACTICAL SATELLITE COMMUNICATIONS TERMINALS

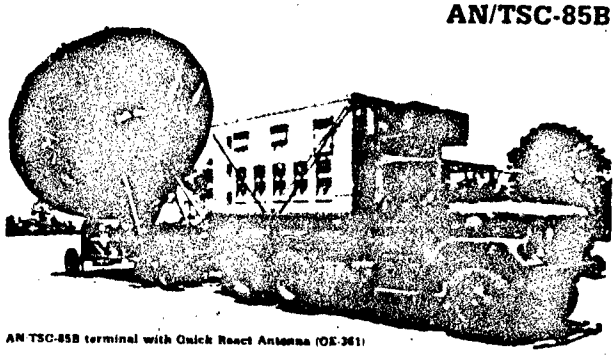
PROJECT LEADER: Mr. Edwardo Velez, DSN 992-3011
COMM 908/532-3011

PRODUCT MANAGER: LTC Michael Mazzucchi, DSN 992-6105
COMM 908/532-6105

PE & LINE #: SSN: BB8417

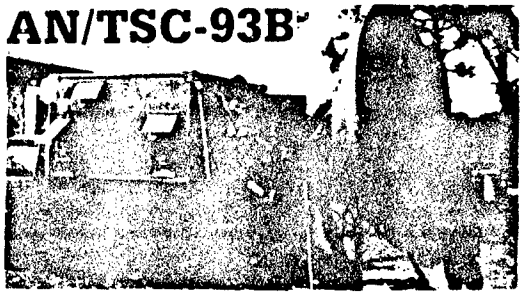
DESCRIPTION: The AN/TRC-85B and AN/TSC-93B are Super High Frequency (SHF) systems which provides reliable multichannel capacity satellite communications with an anti-jam capability. Both terminals operate with an eight foot diameter antenna through the Defense Satellite Communications System (DSCS) satellite network. AN/TSC-93B provides a capacity of 24 channels that can operate in a point to point mode or as a non-nodal terminal in a nodal network. AN/TSC-85B provides a capacity of 48 channels that can also operate in a point to point mode or as a nodal terminal in a nodal network. The Baseband Improvement Modification (BIM) is a directed program change by Joint Chiefs of Staff (JCS) to the Army Ground Mobile Forces (GMF) SHF program. This change increases and improves satellite efficiency and interoperability modes between Army (AN/TSC-85B, AN/TSC-93B) and Air Force (AN/TSC-100A, AN/TSC-94A) terminals. The terminals use spacecraft resources more efficiently while improving network management and control.

AN/TSC-85B



AN/TSC-85B terminal with Quick React Antenna (OE-361)

AN/TSC-93B



HISTORICAL BACKGROUND:

Jun 76 - LRIP contract awarded to RCA Corporation (AN/TSC-85, AN/TSC-93).
Mar 78 - IPR defined configuration for Full Scale Production (AN/TSC-85A, AN/TSC-93A).
Feb 79 - Full Scale Production approved.
Sep 79 - Production contract awarded to Harris Corporation.
Apr 85-Nov 85 - First production unit delivered; First Article Test; First Unit Equipped; Initial Operational Capability.
Sep 86 - BIM awarded (AN/TSC-85B, AN/TSC-93B).
Apr 89 - BIM First Article Test approved.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
PRODUCTION OF MODIFICATION																												
FIELDING OF MODIFICATION								*																				
TRANSITION TBD																												

* Fielding to 1st Cavalry tentatively scheduled for 4QFY93 contingent upon receipt of funds from DA.

REQUIREMENTS DOCUMENT: TACSATCOM Qualitative Materiel Requirement approved 12 Nov 71.

TYPE CLASSIFICATION: LRIP terminals approved Apr 77; Standard approved Jul 85.

AN/TSC-85B AND AN/TSC-93B ARE SHF SYSTEM WHICH PROVIDES MULTICHANNEL CAPACITY SATELLITE COMMUNICATION WITH AN ANTI-JAM CAPABILITY.

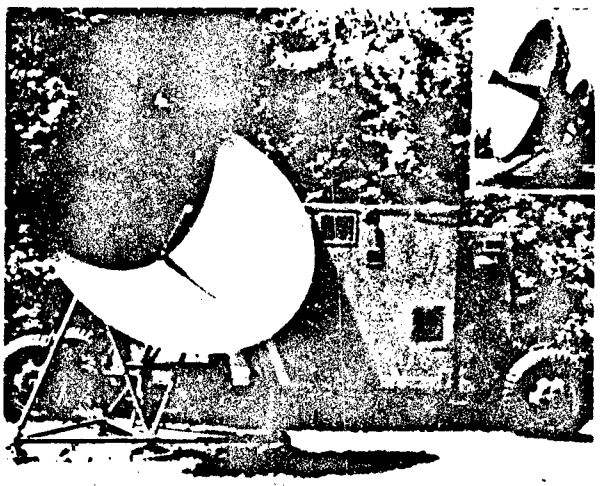
PM, SATCOM

AN/TSC-94A AND AN/TSC-100A, MULTICHANNEL SUPER HIGH FREQUENCY SATELLITE COMMUNICATIONS TERMINALS

PROJECT LEADER: Mr. Peter Johnson, DSN 992-4291
COMM 908/532-4291

PRODUCT MANAGER: LTC Michael Mazzucchi, DSN 992-0994
COMM 908/532-0994

PE & LINE #: 739017Q2 (Air Force Equipment)



DESCRIPTION: The AN/TSC-94A and AN/TSC-100A, Ground Mobile Forces (GMF) multichannel Super High Frequency (SHF) Satellite Communications Terminals are shelter mounted. The terminals are full duplex trunking, and are utilized by the Air Force to provide subscriber voice channels or TRI-TAC groups. Both terminals provide a high order of component commonality, redundancy, and Built-In-Test-Equipment (BITE). In a stressed environment, both have the capability to operate with an Anti-Jam Control Modem (AJCM). AN/TSC-100A is capable of operating simultaneously with up to four AN/TSC-94A nodal terminals in a mesh or hub spoke mode. Both terminals use an 8 foot antenna or a 20 foot Quick Reaction Satellite Antenna (QRSA). Both terminals interoperate with the GMF AN/TSC-85B and AN/TSC-93B terminals.

HISTORICAL BACKGROUND:

Apr 82 - Production contract award.
Feb 86 - First Article Test completed; First production deliveries.
May 86 - Air Force Follow-on Operational Test and Evaluation (FOT&E) completed; Deliveries stopped due to FOT&E findings.
Oct 86 - Deliveries resumed, problem corrected.
Dec 89 - Last terminal delivered.
Sep 91 - Engineering Change Proposal (ECP) awarded to General Electric Corporation (GE) to fabricate AJCM installation kits.

REQUIREMENTS DOCUMENT:

TYPE CLASSIFICATION: Not applicable as the Air Force is the only user.

AN/TSC-94A AND AN/TSC-100A ARE MULTICHANNEL SHF SATELLITE TERMINALS USED BY THE AIR FORCE TO PROVIDE SUBSCRIBER VOICE CHANNELS OR TRI-TAC GROUPS.

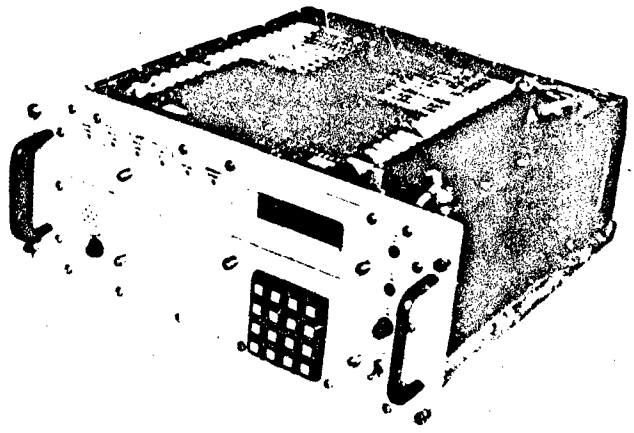
PM, SATCOM

TD-1389(V), LOW RATE MULTIPLEXER (LRM)

PROJECT LEADER: Mr. Peter Johnson, DSN 992-6108
COMM 908/532-6108

PRODUCT MANAGER: LTC Michael Mazzucchi, DSN 992-6105
COMM 908/532-6105

PE & LINE #: SSN: BB8417



DESCRIPTION: The Ground Mobile Forces Satellite Communications (GMFSC) SHF multichannel initial system terminals require an anti-jam capability which will be provided by the Anti-Jam Control Modem (AJCM). AJCM requires an all-variable data input rate which will be provided by the LRM. LRM provides the multiplexing/demultiplexing of digital subscribers for multichannel operation of the AJCM. LRM allows for a composite output rate which is adaptive, permitting graceful degradation of service under stressed conditions. Thus, LRM allows maximum utilization of satellite capacity in a hostile environment. LRM is deployed as a replacement for the TD-660 as part of the BIM program to permit interoperability with the GMF community on a subscriber level under unstressed conditions.

HISTORICAL BACKGROUND:

Apr 82 - Production contract award.
May 83 - Type Classification.
Feb 86 - FAT completed.
Apr 86 - First production deliveries began.
May 86 - Deliveries halted due to spares shortage; IOC.
Nov 86 - Deliveries resumed.
Dec 88 - Deliveries halted due to proponent shortages.
Apr 89 - Deliveries resumed.
Sep 89 - Production contract award.
Mar 91 - Deliveries started.
Oct 91 - Deliveries completed.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
PRODUCTION CONTRACT TRANSITION TBD																												

REQUIREMENTS DOCUMENT: ROC approved, Jul 83.

TYPE CLASSIFICATION: May 83, Standard.

TD-1339(V) PROVIDES MULTIPLEXING/DEMULTIPLEXING OF DIGITAL SUBSCRIBERS FOR MULTICHANNEL OPERATION FOR BOTH STRESSED AND UNSTRESSED CONDITIONS.

PM, SATCOM

ADVANCED MANPACK ULTRA HIGH FREQUENCY TERMINAL (AMUT)

PRODUCT MANAGER: LTC Michael Mazzucchi, DSN 992-0994
COMM 908/532-0994

PROJECT LEADER: (Phase I): Mr. Robert Wilson, DSN 992-6108
(Phase II): Mr. William Duda, DSN 992-6108
COMM 908/532-6108

PE & LINE #: SSN: K77200

DESCRIPTION: AMUT will provide elements of the Special Operations Forces (SOF), and other designated units of the Army, Air Force, Navy, and Marine Corps with small, lightweight terminals for half-duplex, secure, data and digital voice communications through ultra high frequency (UHF) satellites. In addition to the satellite relay communications mode, the AMUT will be capable of communicating line-of-sight (LOS). AMUT will employ burst transmission to provide shared use of 5 and 25 kiloherts (kHz) channels on existing and planned satellite transponders. In addition, it will have the capability to access the satellite channels using Demand Assigned Multiple Access (DAMA) techniques. Specifically, AMUT will use the Fleet Satellite (FLTSAT), commercial Leased Satellite (LEASAT) and UHF Follow-On satellite systems. LFTSAT capabilities that the AMUT will use consist of the unprocessed 25 kHz Fleet Satellite Communications (AFSATCOM) segment. AMUT major components consist of R/T with embedded COMSEC and DAMA, battery box, satellite antenna, LOS antenna and Handset. In the DAMA mode, the terminal will operate in conjunction with the Network Control Stations (NCSs) of the Air Force UHF Satellite Terminal System (USTS) and the TD1271 B/U DAMA unit controlled by Navy's AN/USC-42(V)2 NCS. The Enhanced Manpack UHF Terminal (EMUT) Program will modify the existing inventory of radios to add Communications Security (COMSEC) and Demand Assigned Multiple Access (DAMA) to support SOF and all other users.

HISTORICAL BACKGROUND:

Nov 81 - Project initiated.
Dec 82 - CPFF contract awarded to Motorola.
Mar 83 - Draft LOA for the Satellite Reconnaissance Radio (SRR) was signed between PM, SATCOM and Tactical Satellite Communications, Fort Gordon, GA at a Joint Working Group Review. SRR as described in the draft LR was approximately 1/2 the size and 1/3 the weight of the AN/PSC-3 and appeared to require R&D to meet the requirements. AMC/SATCOMA worked with the SOF community to analyze the stated requirement versus the capabilities in the commercial market. This effort eventually resulted in renaming the SRR project to the AMUT with subsequent submission of a new O&O Plan.
May 85 - Draft O&O Plan for SSR.
Jun 85 - Draft LR for SSR.
Aug 88 - AMUT O&O Plan approved by TRADOC.
Apr 89 - Funding transferred to Enhanced Manpack UHF Terminal (EMUT) Program.
Apr 91 - DA directed procurement signed for EMUT program.

VENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
PHASE II (R&D)						I																						
CONTRACT AWARD PHASE I									I																			
TESTING													I															
FIRST UNIT EQUIPPED PHASE I/II														I									I					
TYPE CLASSIFICATION FOR PHASE I																I												
INITIAL OPERATIONAL CAPABILITY PHASE I/II																I							I					
TRANSITION TBD																												

REQUIREMENTS DOCUMENT:

TYPE CLASSIFICATION:

EMUT WILL PROVIDE ELEMENTS OF SOF, AND OTHER DESIGNATED UNITS OF THE ARMY, AF, NAVY, AND MARINE CORPS WITH SMALL, LIGHTWEIGHT TERMINALS FOR HALF-DUPLEX, SECURE, DATA AND DIGITAL VOICE COMMUNICATIONS THROUGH UHF SATELLITES.

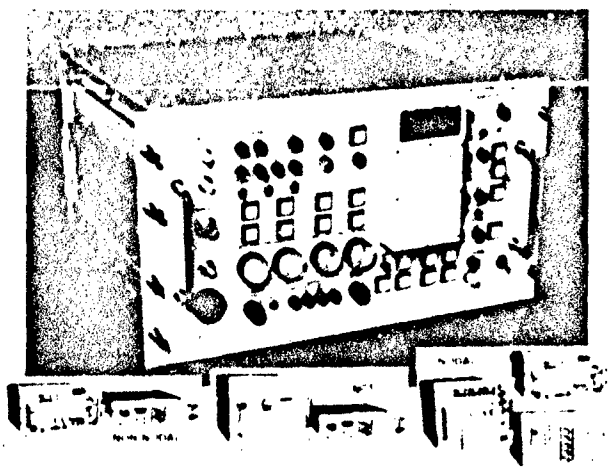
PM, SATCOM

ANTI-JAM CONTROL MODEM (AJCM)

PROJECT LEADER: Mr. Italo Villacis, DSN 992-3011
COMM 908/532-3011

PRODUCT MANAGER: LTC M. Mazzucchi, DSN 992-6108
COMM 908/532-6108

PE & LINE #: 1X533142.D456/BB8417



DESCRIPTION: The AJCM provides Electronic Counter Counter Measures (ECCM) protection for TACSATCOM Multichannel Initial System (MCIS) terminals being procured for use by the Ground Mobile Forces (GMF) of the three services. ECCM is achieved by utilizing spread spectrum techniques. The modems consist of a family of three devices which include a nodal unit, a non-nodal unit and a network control unit. The modems will become integral components of the host terminals (AN/TSC-85B, AN/TSC-93B, and AN/FSQ-124A). AJCM will also be used with Air Force Super High Frequency MCIS terminals AN/TSC-94A and AN/TSC-100A, and in the Defense Satellite Communications System (DSCS) GMF Control Link (DGCL) and Gateway Racks of the DSCS.

HISTORICAL BACKGROUND:

Sep 78 - Full Scale Development contract awarded to Harris Corporation.
Jun 82 - DT-II (POI-C) initiated.
Sep 82 - Additional contract award to Harris Corporation for Added Capabilities Efforts (ACE).
Feb 84 - DT-II completed.
Apr 84 - OT-II completed.
Aug 84 - IPR approved for Full Scale Production.
Aug 85 - Production contract award for 221 units.
Mar 86 - Preliminary Design Review.
Dec 86 - Critical Design Review.
Nov 88 - First Article Test completed.
Mar 89 - Deliveries began (ship in place).
Jul 90 - Follow-On Operational Test and Evaluation (FOT&E) completed.
Nov 90 - Deliveries completed (in place).
Dec 90 - FOT&E final report.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
PRODUCTION CONTRACT																												
FIRST UNIT EQUIPPED									◆																			
TRANSITION TBD																												

REQUIREMENTS DOCUMENT: QMR for TACSATCOM approved 12 Nov 71 and amended Apr 80.

TYPE CLASSIFICATION: Type Classified with the host terminals (AN/TSC-85B, AN/TSC-93B and AN/TSQ-124).

AJCM UTILIZES SPREAD SPECTRUM TECHNIQUES TO ACHIEVE ECCM PROTECTION FOR TACSATCOM TERMINALS.

PM, SATCOM

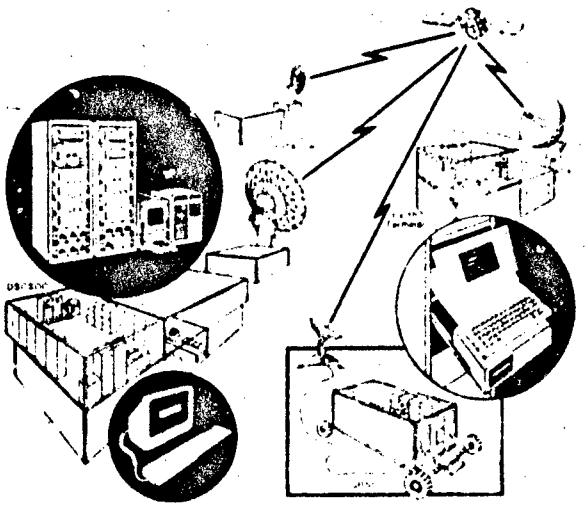
DEFENSE SATELLITE COMMUNICATIONS SYSTEM ELECTRONIC COUNTER COUNTER MEASURES CONTROL SUBSYSTEM (DECS)

PRODUCT MANAGER: Mr. Ronald Johnson, DSN 992-5293
COMM 908/532-5293

PROJECT LEADER: Ms. Lita Murphy, DSN 992-0338
COMM 908/532-0338

TECHNICAL LEADER: Mr. Thomas Brutofsky, DSN 992-2538
COMM 908/532-2538

PE & LINE #: BB8509



DESCRIPTION: The Defense Satellite Communications System (DSCS) Electronic Counter Counter Measure (ECCM) Control Subsystem (DECS) will provide automated control of the AN/USC-28 ECCM network to allow the most effective and efficient communications. This will ease the workload of the already overburdened network controllers and network terminal operators by performing line power monitoring and automated polling responses at the NTs. In addition, DECS will allow the ECCM network to operate in a stressed environment by alerting the network controller to the presence of a jammer or violator, analyzing the stress, and executing the proper network reconfiguration needed to null the effects of the stress.

HISTORICAL BACKGROUND:

Mar 80 - Real-Time Automated Control System (RTACS) initiated, included ECCM control.
Apr 82 - RTACS program cancelled due to cost.
May 83 - Approval of revised Network Control System by MG Rockwell.
Apr 86 - Modified NDI acquisition approved (Milestone III)
Jun 87 - DCA directed specification change.
Sep 87 - DECS production award.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
FIRST UNIT EQUIPPED			I																									
PRODUCTION CONTRACT			I																									
INITIAL OPERATIONAL CAPABILITY			I																									
TRANSITION TBD																												

REQUIREMENTS DOCUMENT: DCA DSCS Program Plan.

TYPE CLASSIFICATION: Standard approved Apr 86.

DECS PROVIDES AUTOMATED CONTROL OF THE ECCM NETWORK IN THE DSCS.

PM SINCGARS

PM, SINCGARS

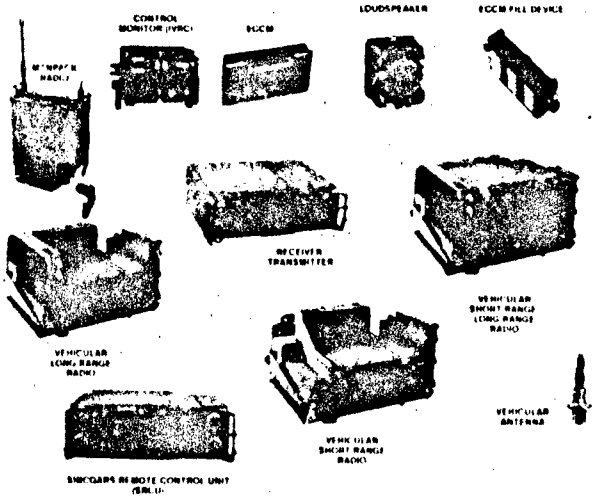
SINGLE CHANNEL GROUND AND AIRBORNE RADIO SYSTEM (SINCGARS)

PROJECT OFFICER: GROUND: Mr. Dominic Satili, DSN 992-2521
COMM 908/532-2521

AIRBORNE: Mr. Jim Goon, DSN 995-3054
COMM 908/544-3054

PE & LINE #: 1T463746.D555; 1T464751.D282
SSN: B00500; J30500; BA9102

DESCRIPTION: SINCGARS is a new family of VHF-FM combat net radios which provides the primary means of command and control for Infantry, Armor and Artillery Units. SINCGARS is designed on a modular basis to achieve maximum commonality among the various ground and airborne system configurations. A common Receiver Transmitter (RT) is used in the manpack and all vehicular configurations. SINCGARS family of radios has the capability to transmit and receive voice, tactical data and record traffic messages and is consistent with NATO interoperability requirements. The system will operate on any of the 2320 channels between 30-88 megahertz and is designed to survive in a nuclear environment. COMSEC for the basic radio is provided by use of the VINSON device. An Integrated COMSEC (ICOM) version of the SINCGARS is currently in production. SINCGARS will be operable in a hostile environment through use of Electronic Counter Countermeasure (ECCM). SINCGARS will replace the current standard manpack and vehicular radios, AN/PRC-77 and AN/VRC-12 family, respectively. An airborne version of the SINCGARS radio is now in production and will replace the currently standard aircraft radios, AN/ARC-114 and AN/ARC-131.



HISTORICAL BACKGROUND:

Feb 76 - DSARC I.
Aug 81 - ILS efforts added to contract to by-pass ED phase.
Dec 81 - VCSA decision made to terminate FFH development and to further accelerate the SFH development.
Dec 83 - Production contract award (650 units) Ground Radios.
Oct 84 - ASARC/DSARC (Milestone IIIA).
Nov 87 - Rebaselining contract mod signed by Government & ITT.
Jan 88 - Awarded 1st Production option; First Article; Approval granted Ground Radio; Production delivery began.
Apr 88 - Airborne option 1 award.
Jul 88 - Initial Ground contract awarded to General Dynamics.
Nov 88 - Airborne First Article Test complete.
Apr 89 - Milestone IIIB (ITT); Airborne option 2 award.
Jun 89 - Ground (ITT) option 3 award.
Dec 90 - Milestone IIIB ITT full rate (ICOM)/General Dynamics low rate; Ground ITT option 4 award; IOC (1st Division Equipped).
Jan 91 - Airborne option 3 award.
Mar 91 - Ground General Dynamics option 1 award.
Jan 92 - ICOM IOT&E General Dynamics; Airborne option 3 delivery began.
Mar 92 - Ground and Airborne ITT award (PY-6/7).
Jun 92 - First Article Test-General Dynamics.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
GROUND RADIO:																												
GENERAL DYNAMICS PRODUCTION DELIVERY BEGINS	I																											
MILESTONE IIIB - GENERAL DYNAMICS		I																										
GENERAL DYNAMICS OPTION II AWARD		I																										
AIRBORNE RADIO:																												
G004 BASIC AWARD	I																											
OPTION 3 DELIVERY BEGINS		I																										
G004 DELIVERY BEGINS					I																							

REQUIREMENTS DOCUMENT: ROC approved 19 Dec 74, updated 10 Jan 75; Joint Operational Requirement approved 26 Mar 76.

TYPE CLASSIFICATION: Non-ICOM, Standard A, 21 Sep 83; Airborne full rate production, 14 Dec 90; ITT ICOM Ground full rate production, 14 Dec 90.

SINCGARS PROVIDES VHF-FM (30-88 MEGAHERTZ) COMBAT NET RADIO COMMUNICATION WITH ECCM CAPABILITY (FREQUENCY HOPPING) AND DIGITAL DATA CAPABILITY (DATA RATE ADAPTER).

PEO IEW

PM EW/RSTA

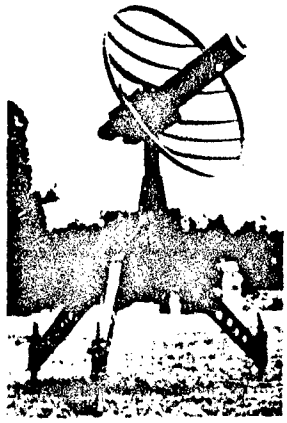
PM, EW/RSTA

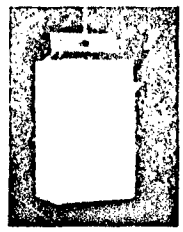
AN/TMQ-38, METEOROLOGICAL MEASURING SET (MMS)

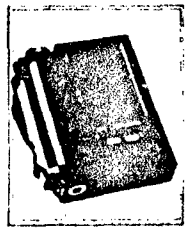
PROJECT LEADER: Mr. ken Chin, DSN 996-5882
COMM 908/544-5882

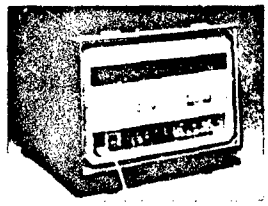
PE & LINE #: SSN: K27800

DESCRIPTION: The MMS is an upper air meteorological data collection, processing and dissemination system. The system consists of a radiosonde carried aloft by a balloon and a ground terminal. One MMS is deployed with each light division. MMS will provide the meteorological data to field artillery, target acquisition and air weather service units. The system will provide pressure, relative humidity, temperature, wind speed and direction measurements to an altitude of 30 kilometers above the earth's surface. The ground terminal automatically acquires and tracks the radiosonde using NAVAID and Radio Direction Finding (RDF) techniques. In the NAVAID mode, the system will be capable of using LORAN, or any combination of VLF/OMEGA transmissions, to determine the radiosonde's position. The ground system will receive telemetered temperature, pressure, humidity, and NAVAID data from the radiosonde and azimuth and elevation angular data from the RDF antenna assembly. It reports in standard formats for computer processing at the using units. The follow-on procurement of 40 systems will be a replacement for the Meteorological Data System (AN/TMQ-31) fielded to heavy divisions.









HISTORICAL BACKGROUND:

Feb 90 - Contract award for seven systems.
Mar 92 - Field to U.S. Army Field Artillery School.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
PRODUCTION (7)																												
SYSTEM DELIVERY	I																											
FIELDINGS (4)		I			I																							
FOLLOW-ON PRODUCTION AWARD (40)					I								I															
FIELDING														I														

REQUIREMENTS DOCUMENT: ROC approved Aug 88.

TYPE CLASSIFICATION: Generic approved Sep 88. Standard scheduled for 1QFY93.

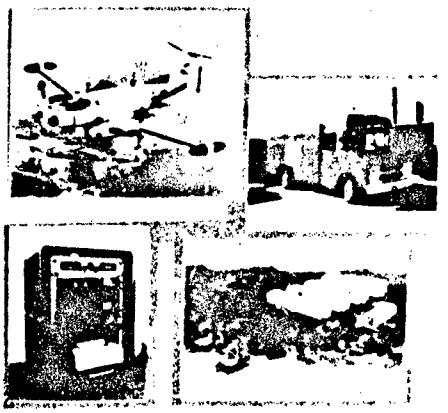
MMS IS AN UPPER AIR METEOROLICAL DATA COLLECTION, PROCESSING AND DISSEMINATION SYSTEM.

PM, EW/RSTA

AN/USD-9A, IMPROVED GUARDRAIL V (IGR V)

PRODUCT MANAGER: LTC Michael Lustig, DSN 996-5680
COMM 908/544-5680

PE & LINE #: SSN: AZ2100



DESCRIPTION: The IGR V is an airborne Communications Intelligence (COMINT) collection/location system. AN/USD-9A consists of airborne collection platforms (RC-12D), AN/TSQ-105(V)4 Information Processing Facility (IPF), AN/TSC-116 Improved Commanders Tactical Terminal (ICTT), AN/ARW-83(V)5 Airborne Relay Facility (ARF), AN/AMR-163(V)4 Auxiliary Ground Equipment (AGE) and an Interoperable Data Link (IDL). Current major upgrade is to provide satellite remote capability for both IGRV and insertion into GUARDRAIL/Common Sensor.

HISTORICAL BACKGROUND:

Sep 81 - Contract award.
Dec 84 - Materiel Release; System 1 fielded to V Corps.
Dec 85 - System 2 fielded to VII Corps.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
IROAN SYSTEM I	I	———			I																							
IROAN SYSTEM II	I	———			I																							
SYSTEM I FIELD (FORSCOM)					I																							
SYSTEM II FIELD (INSCOM)																	I											

REQUIREMENTS DOCUMENT: Materiel change to GUARDRAIL; ROC approved, 1979.

TYPE CLASSIFICATION:

IGR V IS AN AIRBORNE COMINT COLLECTION/LOCATION SYSTEM.

PM, EW/RSTA

AN/USD-9B, GUARDRAIL/COMMON SENSOR (GR/CS)

PRODUCT MANAGER: Mr. Charles Christianson, DSN 996-5763
COMM 908/544-5763

PE & LINE #: 3.58.85G SSN: A02005 & AZ2000

DESCRIPTION: The GR/CS is a Corps Level Airborne Signal Intelligence (SIGINT) collection/location system. GR/CS integrates the Improved GUARDRAIL V (IGR V), Communications High Accuracy Airborne Location System (CHAALS), and the Advanced QUICKLOOK (AQL) into the same SIGINT platforms. One GR/CS system is authorized per Aerial Exploitation Battalion (AEB) in the MI Brigade at each Corps. Each system consists nominally of twelve aircraft which normally fly operational missions in sets of three. However, budget limitations presently permit procurement of only nine aircraft per system. GRCS provides near real-time SIGINT and targeting information to Tactical Commanders throughout the corps area with emphasis on Deep Battle and Follow-on Forces Attack support. The airborne elements are integrated into the RC-12K/N aircraft. Ground processing is conducted in the Information Processing Facility (IPF). Interoperable Data Links (IDL) provide microwave connectivity between the airborne elements and the IPF. Reporting is accomplished via Commanders Tactical Terminals (CTT). Key features include integrated COMINT and ELINT reporting, enhanced signal classification and recognition, fast Direction Finding (DF) and precision emitter location. Preplanned product improvements include frequency extension, computer assisted on-line sensor management, upgraded data links and the capability to exploit a wider range of signals.

HISTORICAL BACKGROUND:

Jan 79 - TRADOC Statement of Need.
Oct 80 - JSOR.
Jun 84 - Contract award for GR/CS Systems 3 and 4.
Mar 86 - Critical Design Review.
Feb 88 - Awarded Maintenance Trainer Contract (competitive); released AQL RFP (competitive).
Sep 88 - AQL Production contract award (competitive)
Dec 88 - GRCS (minus) fielded to Korea.
Jun 89 - RC-12K Production award (System 1).
Sep 89 - CHAALS Production award.
Dec 89 - RC-12K option added.
Aug 90 - GR/CS Systems 1 and 2 Airborne Relay Facility (ARF) Production contract awarded.
Sep 90 - GR/CS Systems 1 and 2 IPF Production contract awarded.
Aug 91 - GR/CS System 4 fielded to USAREUR.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
SYSTEM INTEGRATION CONTRACT (INCLUDES IPF & PAYLOADS)																▼								▼				
RC-12K PRODUCTION CONTRACT				▼																								
FIELDINGS												▼								▼								

NOTE: Lines indicate need for follow-on contracts.

REQUIREMENTS DOCUMENT: ROC, 1 Oct 84, updated Nov 85.

TYPE CLASSIFICATION:

GR/CS IS A CORPS LEVEL AIRBORNE SIGINT COLLECTION/LOCATION SYSTEM.

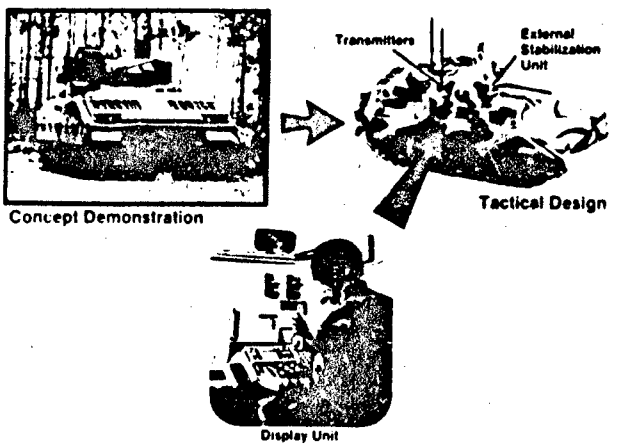
PM, EW/RSTA

AN/VLQ-( ), STINGRAY COMBAT PROTECTION SYSTEM

PROJECT OFFICER: LTC Joseph Kitchell, DSN 996-5838
COMM 908/544-5838

PE & LINE #: 63270.D540

DESCRIPTION: The STINGRAY Combat Protection System (CPS), is an electro-optical countermeasures system for the area protection of ground combat vehicles. STINGRAY will be developed as an adjunct to the Bradley Fighting Vehicle Systems (BFVS) and has potential application to a variety of other current and future platforms (e.g., other tracked vehicles, wheeled vehicles, light armored vehicles). Additional details concerning the STINGRAY program are classified. The present acquisition strategy is to develop six technology demonstators as adjuncts to the Bradley Fighting Vehicle. These systems will be placed in operational usage to support operational testing and training/doctrine evaluation. STINGRAY's principal operational use is as a countermeasures system and it is functionally categorized as an electronic warfare system.



HISTORICAL BACKGROUND:

Sep 82 - Awarded Competitive Advanced Development contract to Martin Marietta Corporation.
Jan 85-Apr 87 - Completed 27 months of Developmental Testing.
Mar 88 - AMSAA Independant Evaluation Report.
Sep 88 - AMSAA completed One-on-One Analysis.
Aug 89 - TRADOC completed Phase I Cost and Economic Analysis.
Jul 92 - Revised Acquisition Decision Memorandum (ADM) signed.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
ADVANCED TECHNOLOGY DEMONSTRATION (ATD)					I											I												

REQUIREMENTS DOCUMENT: ROC, Apr 90.

TYPE CLASSIFICATION:

STINGRAY CPS IS AN ELECTRO-OPTIC PROTECTION OF GROUND COMBAT VEHICLES.

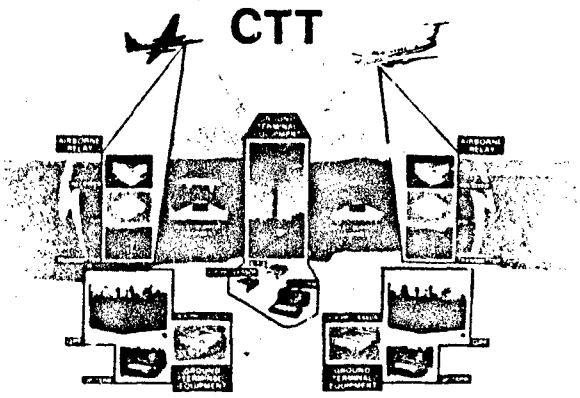
PM, EW/RSTA

COMMANDERS TACTICAL TERMINAL (CTT)

PRODUCT MANAGER: Mr. Hank Wollman, DSN 996-5214
COMM 908/544-5214

PE & LINE #: SSN: V29600

DESCRIPTION: The CTT is a secure intelligence reporting device. The system includes airborne relay equipment installed in the GUARDRAIL/Common Sensor (GR/CS) and U2-R platforms, ground terminals, and a security data system. CTT is deployed at the Corps, Division, Brigade and EAC level. It is a component of the GR/CS system and will replace the obsolete reporting devices used on the earlier variants of GUARDRAIL. CTT sends perishable intelligence reports from GRCS and the Air Force's U2-R to remote ground locations. It allows field users to receive and request information from GRCS and the U2-R. CTT has anti-jam and automatic retransmission capabilities and is a key link in the air/land battle future. To prevent proliferation of multiple nonstandard dissemination devices in the force structure, CTT is being upgraded to incorporate the capability to operate in the Tactical Receive Equipment and Related Applications (TRAP), and the Tactical Data Information Exchange System-B (TADIXS-B) Networks. A receive only version of the upgrade will be fielded to support those users with operational, weight, and/or power limitations. In addition, a three-channel program upgrade is underway with multi-service commonality and interoperability.



HISTORICAL BACKGROUND:

Jun 83 - JSOR approved.
Jul 84 - Engineering Development contract awarded (USAF lead).
Feb 88 - Completion of Multi-Service Test and Evaluation.
May 88 - LRIP Decision Approval.
Aug 89 - LRIP contract award.
Sep 89 - Contract management transfer from USAF to Army.
Nov 90 - "System High" (NSA accreditation requirements) completed.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
HARDWARE BUILD																												
DELIVER																												
LOGISTICS: ILS DATABASE DEMO																												
VERIFICATION & VALIDATION																												
UPDATE																												
TEST EFFORT: FIRST ARTICLE TEST																												
TECHNICAL TEST																												
LIMITED USER TESTUT																												
MILESTONE III/TYPE CLASSIFICATION																												
PRODUCTION AWARD																												
FIELDING (LRIP AND PRODUCTION)																												
FULL SCALE PRODUCTION																												

REQUIREMENTS DOCUMENT: JSOR approved Jun 83 and revised 24 Apr 92 to include the CTT/H and CTT/H-R.

TYPE CLASSIFICATION:

CTT IS A SECURE INTELLIGENCE REPORTING DEVICE.

PM, EW/RSTA

INPROVED-REMOTELY MONITORED BATTLEFIELD SENSOR SYSTEM
(I-REMBASS)

PROJECT LEADER: Mr. Ken Chin DSN 996-5882
COMM 908/544-5882

PE & LINE #: 23751.D475 SSN: BP1002

DESCRIPTION: The I-REMBASS is an all weather, day/night, passive, ground-based unattended sensor system. It is a downsized derivative of the fielded REMBASS system. I-REMBASS will use three types of sensors (passive IR, magnetic, and seismic-acoustic). It will also contain the AN/PSQ-7 Monitor Programmer and a small, lightweight radio repeater, RT-1175A/GSQ. I-REMBASS will be fielded to the Special Operations Forces (SOF) for ground surveillance in deep penetration/denied area operations, in Low Intensity Conflict (LIC), and for surveillance of hostile activity behind enemy lines. It detects moving targets and classifies them as personnel, wheeled vehicles or tracked vehicles. The system transmits real-time reports on activity within the sensor's detection radius.

HISTORICAL BACKGROUND:

Dec 87 - Army wide agreement to develop downsized REMBASS for SOF.
Jun 87 - Twelve sets of mini sensors acquired and field tested in parallel with REMBASS DT-III. System is "transparent" in that all sensors performed to same baseline requirements.
Jan 88 - Operational evaluation of I-REMBASS mini sensors and selected REMBASS assets by 5th SFG, Ft. Bragg, NC.
Feb 89 - Initial ILSP available.
Feb 90 - Mini Repeater, Monitor Programmer Development awarded.
Jun 92 - Production contract award.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
DEVELOPMENT TESTING	I																											
MILESTONE III	I																											
TYPE CLASSIFICATION	I																											
PRODUCTION AWARD (SOF)	I				I																							
FIRST ARTICLE TESTING					I	I																						
FULL RELEASE APPROVED						I																						
FUE AND IOC									I																			

REQUIREMENTS DOCUMENT: ROC approved Nov 86.

TYPE CLASSIFICATION: Standard approved 3QFY92.

I-REMBASS IS AN ALL WEATHER, DAY/NIGH, PASSIVE, GROUND-BASED UNATTENDED SENSOR SYSTEM.

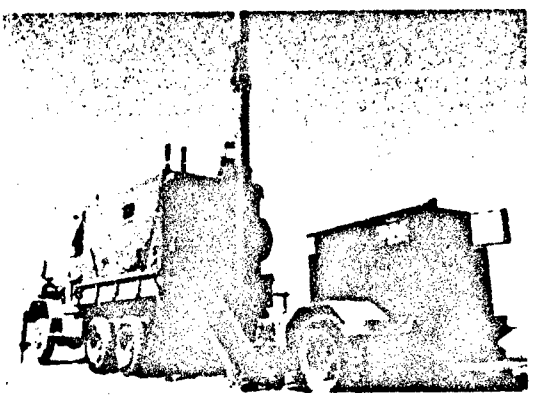
PM JSTARS

PM, JSTARS

AN/TSQ-132, JOINT STARS RADAR GROUND STATION MODULE

PROJECT MANAGER: COL JAMES MITCHELL, DSN 996-5165
COMM 908/544-5165

PE & LINE #: 64770.D202; SSN: BA1080

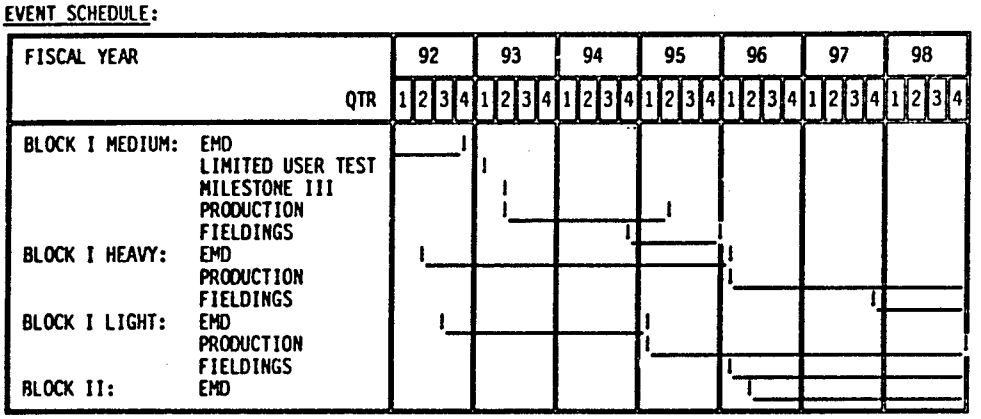


DESCRIPTION: The Joint Star (JS) Radar Ground Station Module (GSM) is a Mobile Multisensor Imagery Intelligence (IMINT) Tactical Data Processing and Evaluation Center. GSM is a subcomponent of a joint Army/Air Force program whose other major component is the E-8 airborne platform. JS system is designed to detect, locate and track moving and stationary equipment ground targets located beyond the FLOT. GSM disseminates intelligence and target data to Army C3I nodes via wire or radio enabling integrated battle management, surveillance, targeting and interdiction plans to be developed/executed using near real-time data. Currently, there are three GSM configurations, all mounted on Army standard five-ton trucks. Variations among the three configurations are the result of user requirements and state-of-the-art technology at the time of fielding. The configurations are: 1) Interim JS GSM (IGSM) (currently in FSD); 2) Limited Procurement Urgent (LPU) GSM designed for service with the Army's AN/UPD-7, Side Looking Radar Surveillance System; and 3) NATO GSM (NUNN initiative) procured for interoperability demonstrations with the U.K. and France. In FY88, GSM program was restructured to capture all user requirements, to synchronize GSM and E-8 fieldings, and field GSMs in time to support other programs. In order to achieve these objectives, the existing IGSM will be enhanced in a phased effort (Block I Medium, Heavy and Light).. Block I improvements entail open systems architecture using standard industry computer modules, increased operational capabilities and enhanced modularity of line replaceable units for commonality/standardization for subsequent export to other Intelligence and Electronic Warfare systems. Extensive Manpower and Personnel Integration (MANPRINT) design objectives (for example the use of new and user friendly Man-Machine Interface (MMI)) are being incorporated. Block I Heavy improvements involve integrating the Block I Medium mission equipment and functions into the Command and Control Vehicle (a Bradley Fighting Vehicle variant) to meet Nuclear, Biological, Chemical. Block I Light improvements integrate Block I Medium mission equipment and functions into a High Mobility Multipurpose Wheeled Vehicle (HMMWV) for light forces operational capability. There is a Block II Ground Station Module (GSM), also known as the Common Ground Station (CGS) which is a next generation IEW system. Leveraging off the Block I's open architecture and common module approach, the Block II will incorporate other sensor data providing Tactical Commanders a comprehensive and common view of the battlefield.

HISTORICAL BACKGROUND:

May 82 - USDRE directed joint program combining AF PAVE MOVER and Army's SOTAS programs.
Sep 87 - LPU contract awarded for nine GSMs.
Sep 88 - GSM O&O approved.
Jan 89 - Revised GSM ROC released.
Mar 89 - Revised Joint STARS JSORD released.
Aug 89 - 1st combined E-8 Aircraft/Radar/GSM operation.
Sep 89 - FSD contract award for four Block I GSMs.
Jul-Oct 90 - Nine LPU GSMs fielded.
Oct 90 - Operational Field Demonstration 1 (OFD-1).
Nov 90 - GSMs fielded to Operation Desert Shield.
Dec 90 - One LPU GSM fielded to US Army Intel Ctr School.
Apr 91 - FSD systems returned from Operation Desert Storm.
May 92 - Block I Light Engineering Manufacturing Development (EMD) contract award.

EVENT SCHEDULE:



REQUIREMENTS DOCUMENT: ROC approved Apr 86; JSOR approved Jun 86; Revised ROC approved Jan 89.

TYPE CLASSIFICATION: LPU approved Dec 86; IGSM-LPU scheduled 4QFY92; GSM Block I Medium scheduled 2QFY93; GSM Block I Heavy scheduled FY96; GSM Block I Light scheduled 1QFY95.

JS RADAR GSM IS A MOBILE MULTISENSOR IMINT TACTICAL DATA PROCESSING AND EVALUATION CENTER.

PM NVEO

PM, NVEO

AN/AVS-6, AVIATION NIGHT VISION IMAGING SYSTEM (ANVIS)

PROJECT LEADER: Ms. Jennifer McCormick, DSN 656-3277
COMM 703/806-3277

PE & LINE #: SSN: K35601

DESCRIPTION: The ANVIS is a lightweight, high performance passive third generation image intensifier system designed specifically for use by helicopter pilots during night flights including Nap-of-the-Earth (NOE) missions. ANVIS is designed to recognize terrain obstacles at an altitude of 200 feet and below, at a maximum speed of 150 knots and at light levels down to overcast starlight. The system mounts on an SPH-4 helmet using a mount assembly that replaces the normal visor. When not in use, the binocular assembly can be flipped up and/or easily removed from the helmet if necessary. ANVIS consists of a binocular system with each monocular unit composed of an objective lens assembly, an 18mm (MX10160) third generation image intensifier tube assembly, and an eyepiece assembly. Fielding is two per attack helicopter (AH-1 only), three per utility helicopter, four per cargo helicopter (CH-47) and two per scout helicopter.

HISTORICAL BACKGROUND:

1982 - First Production contracts (two) were awarded to Varian and ITT (totaling 2210 units).
1985-89 - Five-year multi-year contract awarded to ITT/Varo for 6037 units. All delivered units issued to aviators.
1986 - First Unit Equipped.
May 88 - Government won protests on the Dec 87 ITT contract award that were made by Varian and Litton.
May 89 - Awarded emergency MX10160 Spare Tube buy to Varian (1680 tubes).
Aug 89 - Awarded additional MX10160 Spare Tube contract to ITT (3500 tubes).
3QFY89 - Accelerated production authorized, funding increased $7M in FY90 and FY91.
1989 - San Francisco earthquake caused slight production delays at Varian.
Dec 89 - Completed corrections for humidity problem.
Feb 90 - 100% phase-in of improved fiber optics to correct distortion problem.
Mar 90 - OMNIBUS II contracts awarded to ITT (6022 units) and EOS (formerly Varian, 4019 units).

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
PRODUCTION (OMNIBUS II)																												
OMNIBUS III: RFP			▲																									
AWARD							▲																					
DELIVERIES											▲				▲													

REQUIREMENTS DOCUMENT: MIL-A-49425, MIL-A-49426, MIL-A-49427, MIL-A-49428 and MIL-A-49429.

TYPE CLASSIFICATION: Standard approved Sep 82.

ANVIS IS A LIGHTWEIGHT, HIGH PERFORMANCE PASSIVE THIRD GENERATION IMAGE INTENSIFIER SYSTEM DESIGNED SPECIFICALLY FOR HELICOPTER PILOTS DURING NIGHT FLIGHTS INCLUDING NOE MISSIONS.

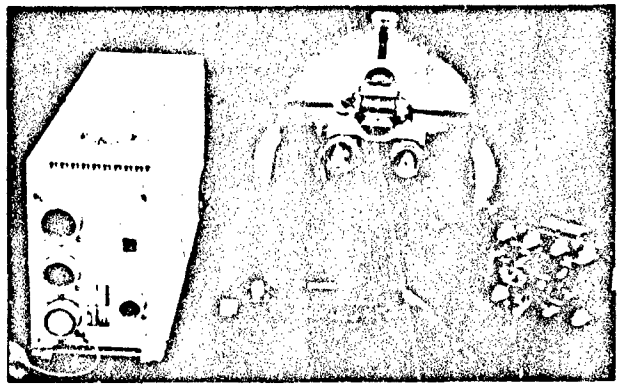
PM, NVEO

AN/AVS-7, AVIATION NIGHT VISION IMAGING SYSTEM/ HEADS UP DISPLAY (ANVIS/HUD)

PROJECT LEADER: Mr. David Troxel, DSN 656-3277
COMM 703/806-3277

PE & LINE #: SSN:

DESCRIPTION: The Heads Up Display is a modification to the AN/AVS-6, Aviators Night Vision Imaging System. It will collect and display critical flight infomation from aircraft sensors and convert this information into visual imagery. This system will allow continous heads up flight by the pilot while effectively elimating his need to look inward at the flight instrument panel.



HISTORICAL BACKGROUND:

4QFY91 - NDI Integration contract award.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
NDI INTEGRATION																												
UH-60 MODIFICATION CRITICAL DESIGN REVIEW																												
UH-60 MODIFICATION INITIAL PRODUCTION TEST																												
UH-60 MODIFICATION FOT&E																												
UH-60 WITH AN/VAS-7 FUE																												
UH-60 MODIFICATION PRODUCTION																												
OTHER AIRCRAFT MODIFICATION PRODUCTIONS:																												
CH-47D																												
UH-1H/V																												
AH-1F																												
OH-58A																												
OH-58C																												

REQUIREMENTS DOCUMENT:

TYPE CLASSIFICATION:

ANVIS/HUD IS A MODIFICATION TO THE AVIATORS NIGHT VISION IMAGING SYSTEM AN/AVS-6 WHICH PROVIDES CONTINUOUS HEADS UP FLIGHT BY THE PILOT.

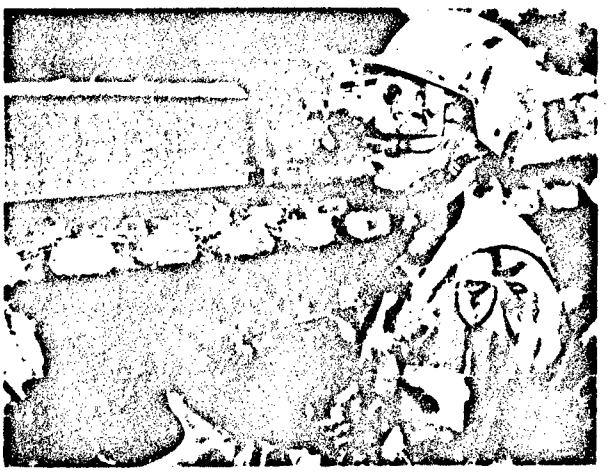
PM, NVEO

AN/PAQ-4B, INFRARED AIMING LIGHT

PROJECT LEADER: Mr. Tim McCaffery, DSN 656-3277
COMM 703/806-3277

PE & LINE #: SSN: K35000

DESCRIPTION: The AN/PAQ-4B is an infrared aiming light which is attached to the M16 (A1, A2) Rifle, M60 Machine Gun, M67 Recoilless Rifle, and the M72 Rocket Launcher. AN/PAQ-4B sends out an invisible pulsing light beam along the Line-of-Sight. The light beam can be seen only with night vision equipment, such as the AN/PVS-7 Night Vision Goggles. Visible only with night vision goggles, the projected spot of light appears at the exact point where the weapon is aimed. The fired round impacts in the center of the spot of light on the target when properly bore-sighted. Fielding is two per infantry squad.



HISTORICAL BACKGROUND:

1979 - First Production contract award awarded to Hi-Tech for 1156 units ($625 each).
1982 - First Unit Equipped; Units sent to SOF.
Feb 89 - SOUTHCOM requested units for mission requirements; Production contract awarded to Insight Technology for 7215 units.
Mar 92 - Production awarded to Insight Technology (multi-year buy out).

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
FOLLOW-ON PRODUCTION																												

REQUIREMENTS DOCUMENT:

TYPE CLASSIFICATION: Standard approved FY80.

AN/PAQ-4A IS AN INFRARED AIMING LIGHT WHICH IS ATTACHED TO THE M16 (A1, A2) RIFLE, M60 MACHINE GUN, M67 RECOILLESS RIFLE AND THE M72 ROCKET LAUNCHER.

PM, NVEO

AN/PAS-13, THERMAL WEAPON SIGHT (TWS)

PROJECT OFFICER: Mr. Paul Laster, DSN 656-3277
COMM 703/806-3277

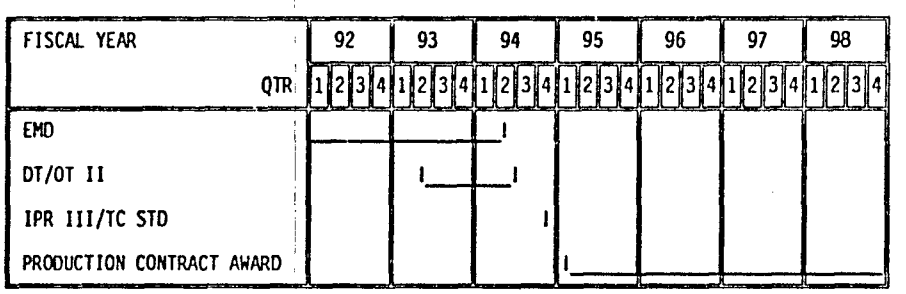
PE & LINE #: 64710.DL70 SSN: K22900

DESCRIPTION: The TWS is a class of low cost, light-weight, manportable infrared imaging devices of medium to high resolution to be used for surveillance fire control of individual and crew served weapons during both daylight and darkness. TWS will operate in adverse weather and battlefield scenarios containing light foliage, smoke, dust and camouflage. TWS will provide early warning, enhance the security of defensive positions, and facilitate offensive operations. The TWS System will be deployed world-wide. TWS replaces AN/PVS-4 and AN/TVS-5 weapon sights. Fielding is three per infantry squad, infantry and other select units.

HISTORICAL BACKGROUND:

1980 - Advanced Focal Plan Technology for TWS successfully demonstrated with Bench Top Imagery.
1981 - Advanced Development contracts were awarded to Hughes Aircraft Company (HA) and Rockwell International (RI).
1983 - Night Imaging Thermal Equipment (NITE) Letter of Agreement for TWS.
1986 - Contract awarded to HA; RI terminated.
1987 - Four Advanced Development units delivered; DT/OT I initiated and completed.
1989 - Aquisition Plan approved; O&O Plan encompassing TWS and Short Range Thermal Sight (SRTS) capabilities approved; SRTS/TWS thermal technologies successfully demonstrated in Panama under full jungle canopy per SOUTHCOM request.
1990 - Engineering and Manufacturing Development (EMD) contract awarded to Hughes Aircraft Company.

EVENT SCHEDULE:



REQUIREMENTS DOCUMENT: ROC, 1990.

TYPE CLASSIFICATION: Standard approved 4QFY92.

TWS IS A CLASS OF LOW COST, LIGHTWEIGHT, INFRARED IMAGING DEVICES OF MEDIUM TO HIGH RESOLUTION TO BE USED FOR FIRE CONTROL OF INDIVIDUAL AND CREW SERVED WEAPONS DURING BOTH DAYLIGHT AND DARKNESS.

PM, NVEO

AN/PVS-7A AND AN/PVS-7B, NIGHT VISION GOGGLES

PROJECT OFFICER: Mr. John Spadafore, DSN 656-4276
COMM 703/806-4276

PE & LINE #: SSN: K36400

DESCRIPTION: The AN/PVS-7A and AN/PVS-7B are lightweight, high performance passive third generation image intensifier system. The goggle assembly is a headmounted self contained night vision system containing one monocular unit consisting of an objective lens assembly, an image intensifier tube and a binocular eyepiece assembly. The frame is mounted to a face mask assembly which is held by head straps to the user's head. The assembly incorporates an infrared (IR) light source which provides illumination, to permit close-in-viewing. Fielding is five per infantry squad/battalion and 298 to combat support/combat service support units. AN/PVS-7A and AN/PVS-7B are single tube Image Intensifier system which replaces the earlier AN/PVS-5 binocular second generation image intensifier goggle. All AN/PVS-7A and AN/PVS-7B systems are presently being delivered with third generation tubes (MS-10130).

HISTORICAL BACKGROUND:

Sep 85 - NDI Procurement contract for AN/PVS-7.
Feb 88 - Initial fielding to 7th ID Ft. Hood.
Dec 89 - Delivered 43846 units (Army).
Feb 89 - Life Cycle Cost Study indicated no preference for AN/PVS-7A over the AN/PVS-7B.
Oct 89 - ITT/Varo and Litton delivered Level III Tecnical Data Packages to Government at no cost.
Mar 90 - Three-year Production contract awarded to ITT and EOS.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
OMNIBUS II PRODUCTION									I																			
OMNIBUS III: RFP			I																									
AWARD					I																							
DELIVERIES									I																			

REQUIREMENTS DOCUMENT: TRADOC ACN 36829, 21 Jan 82.

TYPE CLASSIFICATION: Standard approved Feb 88.

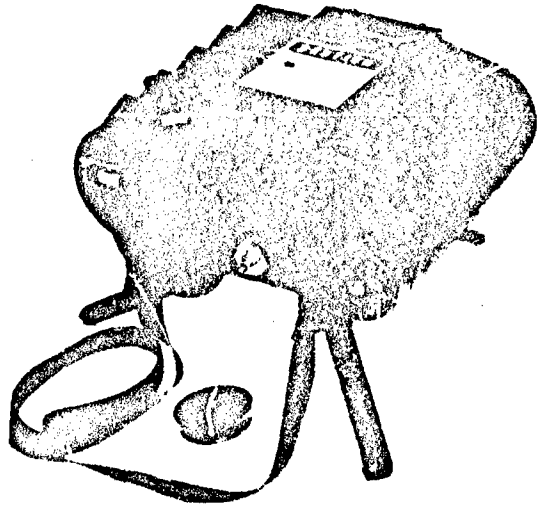
AN/PVS-7 IS A HEADMOUNTED SELF CONTAINED NIGHT VISION GOGGLE FOR CLOSE-UP VIEWING BY THE INDIVIDUAL SOLDIER TO PERFORM TASKS AT NIGHT.

PM, NVEO

MINI EYESAFE LASER INFRARED OBSERVATION SET (MELIOS)

PROJECT OFFICER: Mr. Neal Graber, DSN 656-3277
COMM 703/806-3277

PE & LINE #: 464710.DL70 SSN: B53800



DESCRIPTION: The MELIOS will provide the individual soldier with accurate range and vertical angle determination to provide target acquisition data for direct and indirect weapons systems in eyesafe mode. MELIOS will replace the AN/GVS-5 Laser Infrared Observation Set. AN/GVS-5 is not eyesafe. MELIOS is designed for ranges out to ten kilometers with plus or minus five meter accuracy. It operates in the eyesafe wavelength region allowing maximum use by units in training and tactical exercises. It will increase first round hit probabilities during battlefield engagements, expedite target acquisition and provide accurate ranges for Ground-to-Air Defense. It will enhance the effective conduct of reconnaissance, surveillance and terrain navigation. It will be carried in a small, water resistant padded pouch that is attachable to the soldier's web gear. Fielding is one per infantry squad, other distribution to combat, SOF and combat support units to be determined.

HISTORICAL BACKGROUND:

Jul 81 - Letter of Agreement approved.
Mar 82 - Decision to pursue Eyesafe System in response to user's strong desire for eye safety.
Sep 83 - Two Cost Plus Fixed Fee contracts awarded.
Jul 85 - DT-I successfully completed.
Dec 85 - OT-I successfully completed.
Sep 88 - Development Production Prove-Out contract award.
Jul 91 - OT-II successfully completed; Efforts to insert compass/vertical angle measurement restarted.
Dec 92 - Milestone III approval.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
PRODUCTION AWARD	I																I											
FAT					I																							
FUE									I																			

REQUIREMENTS DOCUMENT: ROC, Feb 87.

TYPE CLASSIFICATION: Standard approved 2QFY92.

MELIOS IS DESIGNED TO MEET ALL RANGING REQUIREMENTS OF THE INFANTRY AND SELECTED REQUIREMENTS OF OTHER BRANCHES AND SERVICES OUT TO RANGES OF 10KM WITH PLUS OR MINUS 5M ACCURACY.

PM RADAR/COMBAT ID

PM, RADAR/COMBAT ID

FIREFINDER SYSTEMS/PROGRAMS

PRODUCT MANAGER: LTC Anthony DiRienzo, DSN 996-5018
COMM 908/544-5018

PE & SSN: BZ7325 - AN/TPQ-36
BZ7325 - AN/TPQ-37
64823.DL83 - BA5100, BA5120 - ADVANCED FIREFINDER SYSTEM
BZ7325 - FIREFINDER HMMWV and ELECTRONICS UPGRADE PROGRAM

DESCRIPTION: The current FIREFINDER System is comprised of the AN/TPQ-36 Radar Set (Mortar Locating Radar) and the AN/TPQ-37 Radar Set (Artillery Locating Radar). These Radars are organic to separate infantry and armored brigades, to the Target Acquisition Battery of Division Artilleries (Div Arty), and/or Corps Target Acquisition Detachments. The FIREFINDER Radars are operational and were used to support Operation Desert Shield/Storm.

HISTORICAL BACKGROUND: Fielding and deployment of the AN/TPQ-36 and AN/TPQ-37 Radars is complete. Operational use and sustainment of fielded FIREFINDER continue.

A Block approach was used for Improvements to the FIREFINDER systems. Four Product Improvements, collectively identified as Block I are in process. They include: TACFIRE Upgrade MC; Water Entry Resolution MC; FIREFINDER Training Device Upgrade MC; and Backplane Wiring MC. A brief description and status of each MC follows:

TACFIRE Upgrade MC: TACFIRE Upgrade MC provides for the procurement in FY92 of 202 updated Circuit Card Assemblies (CCAs) which will make the FIREFINDER radars (AN/TPQ-36s and AN/TPQ-37s) compatible with the TACFIRE Version 10 Software and thereby enhance communications between FIREFINDER and other segments of the fire support/control community. The cost of this MC is $4.3M in FY92. CCAs will be distributed to the field concurrent with release of Version 10 and installed by crew members.

Water Entry Resolution (WER) MC: WER MC provides for design and production of modification kits to resolve AN/TPQ-37 water entry deficiencies which create a safety problem for crew personnel and cause equipment degradation because of leakage. The design of the WER modification kit has been completed and tested. SAAD was awarded the Production contract in FY92 ($3.3M is programmed for fabrication) with application scheduled for 3QFY93.

FIREFINDER Training Device Upgrade MC: FIREFINDER Training Device Upgrade MC provides for upgrading the existing FIREFINDER training devices located at Ft. Sill, OK. This MC will upgrade training software so that it is consistent with the latest radar configurations. Also, obsolete Training Device hardware which is causing maintainability problems will be replaced. Computer software/hardware has been procured and delivery was completed in early FY92. Total cost of this MC is $5.M.

Backplane Wiring MC: Backplane Wiring MC provides for changing the backplane wiring thereby modifying the control logic of the signal processor. This will correct fault indication problems which are being exhibited by the AN/TPQ-36 and AN/TPQ-37 radars. This MC was funded ($464K) in FY90. Application of wiring changes will be accomplished by SAAD starting in 3QFY91 and completed in FY93.

Originally grouped as Block II, were two Product Improvement projects. The project identified as Block IIA Single Vehicle (5-ton) AN/TPQ-36 has been cancelled. The second Block II project has been restructured into two MC Programs. The MC for the AN/TPQ-36 HMMWV Configuration Program has already been approved by the PEO, IEW. The first MC downsizes 59 of the 130 AN/TRQ-36(V)5 radars from a 2 1/2-ton truck to a High Mobility, Multipurpose Wheeled Vehicle (HMMWV) AN/TPQ-36(V)7 configuration. Production of the modification kits is currently on-going at SAAD with application to start in FY93. The second MC applies to the (V)7 configuration. It will upgrade the existing Operations Control Group through the installation of state-of-the-art electronics and common hardware/software (CHS) in a lightweight multipurpose shelter (LMS). Award of a competitive LRIP contract is scheduled for Dec 92.

The two existing radar systems (AN/TPQ-36 and AN/TPQ-37), the AN/TPQ-36 HMMWV Configuration Program and AN/TPQ-36 Electronics Upgrade Program, as well as the Enhanced FIREFINDER System are discussed on the following pages.

PM, RADAR/COMBAT ID

AN/TPQ-36, FIREFINDER MORTAR LOCATING RADAR

PRODUCT MANAGER: LTC Anthony DiRienzo DSN 996-5018
COMM 908/544-5018

PE & LINE #: SSN:

DESCRIPTION: AN/TPQ-36 locates both enemy mortar and artillery weapons systems. It is composed of: Operations Control Group (OCG) mounted on an M-35 2-1/2 ton Truck; Antenna Transceiver Group mounted on an M-103 series Trailer; and, the AN/MJQ-23 power unit (two MEP-112s, 10 kilowatt, 400 hertz, diesel generators) mounted on an M-103 1-1/2 ton Trailer. Three AN/TPQ-36 radars are assigned to a division Target Acquisition Battery and are normally complemented by two AN/TPQ-37 Artillery Locating Radars. AN/TPQ-36 is a highly mobile phased-array radar which automatically and accurately locates mortars, artillery and short range rocket launchers. Materiel changes to increase mobility, decrease emplacement/displacement time, increase mobility, and incorporate electronics upgrades are in progress.

HISTORICAL BACKGROUND:

Nov 71 - Materiel Need Statement for Mortar Locating Radars approved by HQ DA.
Oct 73 - Contract to Hughes Aircraft Company for five Engineering Development Models (EDMs).
Jun 77 - DT/OT-II.
Dec 77 - Full Scale Production (FSP) approved at ASARC-III; Materiel Need Statement approved/revalidated by HQ DA.
Aug 78 - Contract award (ten systems - Army).
Oct 78 - Early deployment (two EDMs to Germany).
Jan 80 - First Article Test.
Dec 80 - First delivery; conditional acceptance.
Dec 81 - Follow-on Test and Evaluation accomplished at Ft. Hood.
Feb 83 - Initial Operational Capability (IOC), Europe.
Jul 83 - IOC, Korea; return of two EDMs from Germany.
Feb 84 - IOC, FORSCOM.
Feb 85 - IOC, Marine Corps.
Jul 86 - Production complete (for U.S. forces).
Nov 90 - Last U.S. Radar fielded.
4QFY90 - AN/TPQ-36 used to support Operation Desert Shield/Storm.

REQUIREMENTS DOCUMENT: Materiel Needs Statement with changes, 25 Oct 77.

TYPE CLASSIFICATION: Standard approved Oct 79.

FIREFINDER BLOCK II PHASE II SHELTERLESS-CONFIGURED AN/TPQ-36 IS A MORTAR AND ARTILLERY LOCATING RADAR.

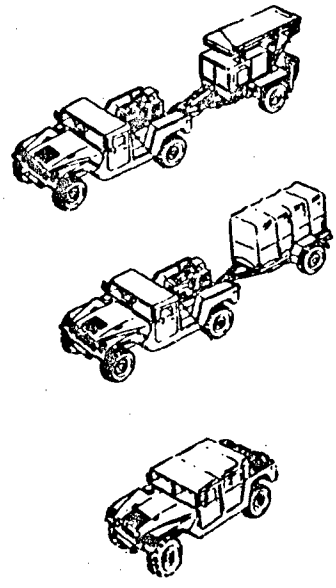
PM, RADAR/COMBAT ID

AN/TPQ-36, FIREFINDER RADAR HIGH MOBILITY, MULTIPURPOSE WHEELED VEHICLE CONFIGURATION

PRODUCT MANAGER: LTC Anthony DiRienzo, DSN 996-5018
COMM 908/544-5018

PE & LINE #: SSN: BZ7325

DESCRIPTION: The High Mobility, Multipurpose Wheeled Vehicle (HMMWV) Materiel Change Upgrade will downsize the present configuration for use in the active army. The Operations Control Group (OCG) will be mounted on a M1097 HMMWV which will tow the Antenna Transceiver Group (ATG), which is mounted on the M116A2 Cargo Trailer. The M998 reconnaissance vehicle will tow a second MEP112A generator which is also mounted on a an M116A2 trailer. A Modular Azimuth Positioning System (MAPS) will be added to augment the capability for survey. Crew size will be reduced from eight to six personnel. The new configuration will be transportable by road, rail, and air to include the ability to be transported in two sorties by C-130 and larger aircraft, and have drive on/off capability.



HISTORICAL BACKGROUND:

Apr 90 - DA MSG authority to proceed with Block IIB, HMMWV.
Aug 90 - FIREFINDER Configuration Control Board concurrent in AN/TPQ-36(V) HMMWV upgrade.
Sep 90 - SAAD tasked to fabricate five FIREFINDER Radar HMMWV Configuration preproduction models; TMEC approves HMMWV Product Improvement Program.
Oct 90 - Materiel Change approved by PEO-IEW.
Nov 91 - Fielding 7th ID.
Mar 92 - SAAD tasked to fabricate and apply 29 kits.
Apr 92 - SAAD tasked to fabricate and apply 14 additional kits.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
PRE-PRODUCTION PHASE																												
EARLY FIELDING																												
FUE																												
PRODUCTION																												
FIRST ARTICLE TEST																												
KIT APPLICATION																												

REQUIREMENTS DOCUMENT: Materiel Change 1-88-07-0004. Letter, USAFAS, ATSF-TSM-TA, 5 Jul 90, subject "Restructure of the FIREFINDER Block II Program."

TYPE CLASSIFICATION: Standard approved Mar 92.

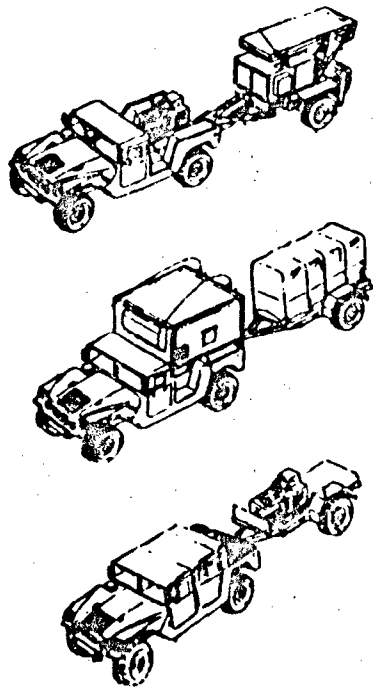
FIREFINDER RADAR HMMWV CONFIGURATION, AN/TPQ-36, IS A MORTAR AND ARTILLERY LOCATING RADAR.

PM, RADAR/COMBAT ID

AN/TPQ-36, FIREFINDER ELECTRONICS UPGRADE

PRODUCT MANAGER: LTC Anthony DIRienzo, DSN 996-5018
COMM 908/544-5018

PE & LINE #: SSN: BZ7325



DESCRIPTION: The AN/TPQ-36(V)8 Electronics Upgrade will improve Operations Control Group (OCG) through the installation of state-of-the-art electronics and Common Hardware/Software (CHS) in the Lightweight Multipurpose Shelter (LMS). The new OCG will be mounted on an M1097 "Heavy" HMMWV which will tow the Antenna-Transceiver Group (ATG) on a modified M116A2E1 trailer. A second M1097 HMMWV will carry a palletized MEP-112A generator and will tow an M116A2E1 cargo trailer. A HMMWV reconnaissance vehicle (M998 or M1039) will tow a second ("back up") MEP-112A generator mounted on an M116A2E1 trailer. Major subsystems of the new OCG include an Operator Control Station (OCS), a Control/Display Terminal (CDT), radar processor, and shelter. The OCS will serve as the man-machine interface. The CDT will allow the operator to command and control system operation from a site up to 100 meters remote from the shelter. The radar processor will perform all system processing functions not assigned to the OCS and will be programmable and reconfigurable to maximize system performance under varying target and operating environmental conditions. The LMS will enhance the man-machine interface and electronics environment by providing 50 percent more interior space.

HISTORICAL BACKGROUND:

Oct 89 - Block IIB configuration requirements defined by TRADOC.
Jul 90 - DA authorized phasing of Block IIB.
Jan 91 - Configuration Control Board concurred with AN/TPQ-36 Materiel Change package.
Apr 92 - AAE approved program initiation.
Sep 92 - Source Selection Evaluation concluded.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
RFP/EVALUATION																												
LRIP PRODUCTION																												
LRIP TESTING																												
IPR																												
PRODUCTION																												
FUE																												
KIT APPLICATION																												

REQUIREMENTS DOCUMENT: Materiel Change 1-90-07-0016. Letter USAFAS ATSF-TSM-TA, 13 Apr 92, subject: "Refinements of Requirements for the FIREFINDER AN/TPQ-36(V)8 Electronics Upgrade Materiel Change Program".

TYPE CLASSIFICATION:

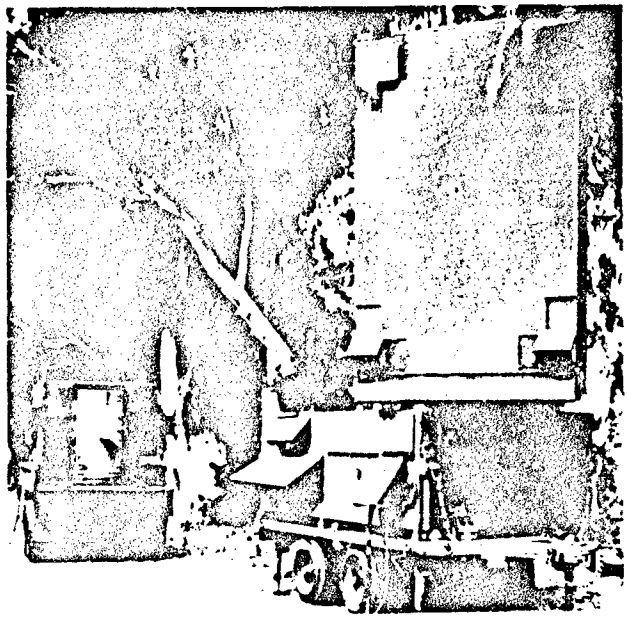
AN/TPQ-36, FIREFINDER ELECTRONICS UPGRADE IS A MORTAR AND ARTILLERY LOCATING RADAR.

PM, RADAR/COMBAT ID

AN/TPQ-37, FIREFINDER ARTILLERY LOCATING RADAR

PRODUCT MANAGER: LTC Anthony DiRienzo, DSN 996-5018
COMM 908/544-5018

PE & LINE #: SSN: BZ7325



DESCRIPTION: The AN/TPQ-37 is a mobile Phased Array Artillery Locating Radar System. The operations shelter is identical to that used with the AN/TPQ-36(V)5 and consists of an Operations Control Group mounted on an M-35 series Truck, and the MEP-115A, 60 kilowatt, 400 hertz Generator Set mounted on a 5-ton Truck. This truck also tows the Antenna Transceiver Group consisting of the Phased Array Antenna, Transmitter, Receiver and associated electronics mounted on the MX-1048 Trailer, a 6-ton four wheel flatbed Cargo Trailer. Two AN/TPQ-37s are assigned to the Target Acquisition Battery of each division and employed with the AN/TPQ-36. AN/TPQ-37 is larger than the AN/TPQ-36 and its target acquisition range is greater. The system uses a combination of radar techniques and computer controlled functions to detect and accurately locate enemy artillery and rocket weapons to permit rapid engagement with counterfire.

HISTORICAL BACKGROUND:

Jun 72 - DA approved Materiel Need Statement; contract Research and Development award.
Nov 75 - DT/OT-I report.
Dec 76 - Low Rate contract award.
Feb 79 - Extended Low Rate contract award.
Dec 80 - DT-III Test report; IOC 1st Calvary Division, Ft. Hood.
Jun 81 - OT-III Test report.
Feb 81 - ASARC IIIA.
May 81 - Full Scale Production contract award.
Feb 83 - Initial Operational Capability (IOC) complete, Europe.
Jul 83 - IOC Korea.
Feb 84 - IOC FORSCOM, with 82nd Airborne.
Feb 86 - Production complete for Army.
Apr 92 - Last U.S. fielding.

REQUIREMENTS DOCUMENT: Mission Need Statement, 1 Jun 78.

TYPE CLASSIFICATION: Standard approved 18 Feb 81.

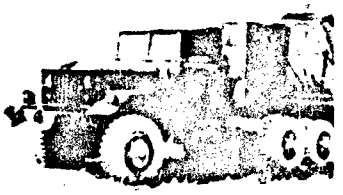
AN/TPQ-37 IS A MOBILE PHASED ARRAY ARTILLERY LOCATING RADAR SYSTEM.

PM, RADAR/COMBAT ID

ENHANCED FIREFINDER SYSTEM (EFFS)

PROJECT MANAGER: LTC Anthony DiRenzo, DSN 996-5018
COMM 908/544-5018

PE & LINE #: 64823.DL83; SSN: BA5100, BA5120



DESCRIPTION: The EFFS will product improve the AN/TPQ-37 Artillery Locating Radar. Improvements include mechanical upgrades to improve reliability, availability and maintainability, improved off-road traction, and a Precision Strike mode. Additional improvements that will result from this upgrade include improved Electronics Counter-Countermeasures (ECCM), self-survey, increased range and more processing capability when combined with the AN/TPQ-36(V)8 Operations Control Group shelter. This system will be strategically deployable and operable at all levels of conflict.

HISTORICAL BACKGROUND:

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
IPR					I																							
ANTENNA/TRANSMITTER					I	—	—	—	—	I																		
SHELTER INSTALLATION									I	—	—	I																
TESTING													I	—	I													
MILESTONE III IPR																	I											
PRODUCTION																		I	—	—	—	—	—	—	—	—	—	—

REQUIREMENTS DOCUMENT: Draft O&O Plan, Mar 91; new ORD to be developed and staffed in FY93.

TYPE CLASSIFICATION:

AFFS WILL PRODUCT IMPROVE THE AN/TPQ-37 ARTILLERY LOCATING RADAR.

PM, RADAR/COMBAT ID

BATTLEFIELD COMBAT IDENTIFICATION SYSTEM (BCIS)

PRODUCT MNAGER: MAJ Glenn Geoghegan, DSN 996-5851
COMM 908/544-5851

PE & LINE #: 64817.482 SSN: BA0510

DESCRIPTION: BCIS will involve the implementation of multiple, interoperable active and passive technologies suitable for positive identification of friendly and enemy ground targets, through a phased approach of quick fix, near, mid, and far term solutions. BCIS will enable weapon systems to conduct target engagements beyond visual identification range by providing identification beyond the maximum range of the weapon system to reduce fratricide incidents.

HISTORICAL BACKGROUND:

May 91 - BCIS task force established.
Jun 91 - Broad Area Announcement (BAA) issued for BCIS solutions.
Sep 91 - BAA contracts awarded.
Jun 92 - BAA demonstration completed.

EVENTS SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
CONTRACT AWARD					▼																							
ENGINEERING & MANUFACTURING DEVELOPMENT					▼				▼																			
PLATFORM INTEGRATION									▼				▼															
TT/LUT									▼	▼																		
LOW RATE PRODUCTION													▼				▼											
MILESTONE III IPR																	▼											

REQUIREMENTS DOCUMENT: Joint Mission Need Statement, Draft ORD, 2 Jul 92.

TYPE CLASSIFICATION:

BCIS IS A FAMILY OF ACTIVE AND PASSIVE TECHNOLOGY SOLUTIONS TO ELIMINATE BATTLEFIELD FRATRICIDE.

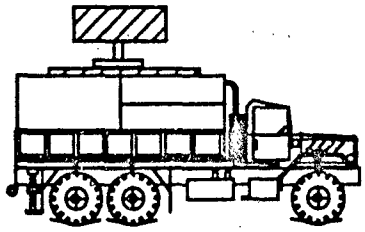
PM RADAR/COMBAT ID

GROUND BASED SENSOR (GBS)

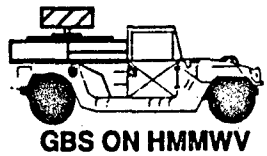
PRODUCT MANAGER: LTC Michael Howell, DSN 788-1673
COMM 205/722-1673

PE & LINE #: 64820.DE10 SSN: WK5053

DESCRIPTION: The GBS is an NDI system capable of providing search and track functions against fixed and rotary wing aircraft. The GBS is a part of the Forward Area Air Defense (FAAD) System. There will be six GBSs located in the Air Defense Battalion of all divisions. Each GBS will be netted with the Command, Control and Intelligence network to report those targets it is tracking. In Continuity of Operations (CONOPS), GBS will communicate directly to the Fire Control system of support FAAD weapons. Each GBS will incorporate the capability to provide the Indentification Friend or Foe (IFF) function to identify friendly aircraft and will have Non-Cooperative Target Recognition (NCTR) technology to passively identify friendly and hostile aircraft.



GBS ON 5 TON TRUCK



GBS ON HMMWV

HISTORICAL BACKGROUND:

1986 - JRMB approved Milestone Decision Review II/IIIA.
Jun 89 - First solicitation withdrawn.
Jun 90 - NDI Best Value Request for Proposal.
Sep 90 - Seven proposals received.
Feb 92 - NDI contract award.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
PRE-PRODUCTION (6)	I								I																			
PRE-PRODUCTION TESTING					I								I															
LRIP PRODUCTION									I											I								
PRODUCTION													I															
FUE									PRE-PROD				I				PROD	I										
PRODUCTION QUALIFICATION TEST																	I	I										

REQUIREMENTS DOCUMENT: FAAD GBS ROC, Jan 88, revision 1, Nov 89; revision 2, Nov 90.

TYPE CLASSIFICATION:

GBS IS AN NDI SYSTEM CAPABLE OF PROVIDING SEARCH AND TRACK FUNCTIONS AGAINST FIXED AND ROTARY WING AIRCRAFT.

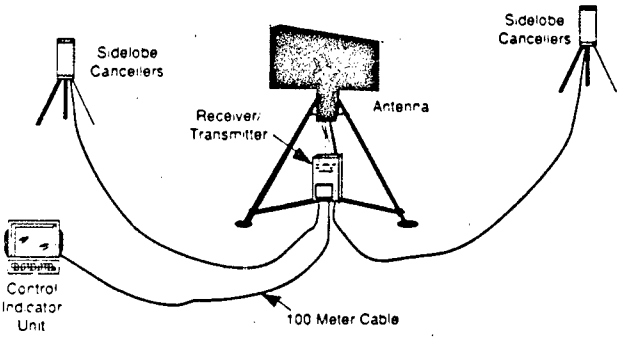
PM, RADAR/COMBAT ID

LIGHT AND SPECIAL DIVISION INTERIM SENSOR (LSDIS)

PRODUCT MANAGER: LTC Michael Howell, DSN 788-1673
COMM 205/722-1673

PE & LINE #: SSN: AD4500

DESCRIPTION: The LSDIS is a lightweight, Non-Developmental, short range air defense sensor. LSDIS will provide 360 degree acquisition, early warning, and alerting of fixed and rotary wing aircraft. LSDIS replaces the Forward Area Alert Radar (FAAR) and will be fielded in Light/Special Divisions and other selected Air Defense Artillery (ADA) Battalions. LSDIS consists of an antenna, pedestal assembly, receiver/transmitter and control unit.



HISTORICAL BACKGROUND:

Jul 90 - Directed Procurement.
May 91 - Directed Procurement contract award.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
PRODUCTION																												
FIRST ARTICLE TEST																												
PRODUCTION QUALIFICAITON TEST																												
FAAD C2I INTEGRATION TEST																												
DELIVERIES																												
FUE																												

REQUIREMENTS DOCUMENT: ONS, 6 Jul 89; ORD validated 26 Jul 90.

TYPE CLASSIFICATION: Limited Procurement-Urgent, Jul 90.

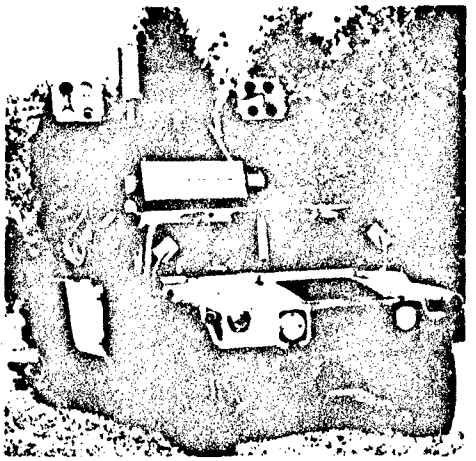
LSDIS IS A LIGHTWEIGHT, NON-DEVELOPMENTAL, SHORT RANGE AIR DEFENSE SENSOR.

PM, RADAR/COMBAT ID

NON-COOPERATIVE TARGET RECOGNITION (NCTR)

PRODUCT MANAGER: Mr. Martin Shuhandler, DSN 996-5016
COMM 908/544-5016

PE & LINE #: 64817.D356 NCTR-1
64817.D494 NCTR-4
64817.D495 NCTR-2



DESCRIPTION: The NCTR devices provide positive identification of aircraft allowing air defense weapon systems to detect and engage targets at longer ranges than currently possible. The NCTR devices complement each other and cooperative Identification Friend or Foe (IFF) systems and permit operations at extended ranges while reducing the risk of targeting friendly aircraft. The devices consist of a sensor and processor interfacing with the host display. They will be integrated and deployed on individual air defense weapon systems (AVENGER, GBS and HAWK).

HISTORICAL BACKGROUND:

Mar 90 - NCTR 4 Engineering and Manufacturing Development (EMD) contract award.
Mar 91 - NCTR 1 Engineering and Manufacturing Development contract award.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
NCTR 1:																												
AVENGER EMD																												
TEST																												
LRIP																												
GBS EMD																												
TEST																												
LRIP																												

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
NCTR 4:																												
HAWK EMD									(NO PROCUREMENT)																			
GBS TECHNOLOGY PROVE OUT																												

REQUIREMENTS DOCUMENT: FAAD Capstone ROC, Jul 86; NCTR 4, ORD/ROC TAB, Mar 90.

TYPE CLASSIFICATION:

NCTR DEVICES PROVIDE POSITIVE IDENTIFICATION OF AIRCRAFT FOR AIR DEFENSE WEAPON SYSTEMS OPERATORS.

PM SW

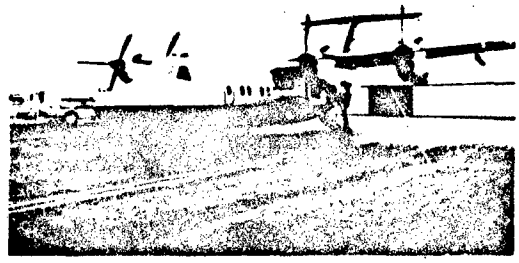
PM, SW

AIRBORNE RECONNAISSANCE LOW (ARL)

PRODUCT MANAGER: LTC Stan Niemiec, DSN 229-5189
COMM 703/349-5189

PE & LINE #:

DESCRIPTION: The ARL is an airborne day/night reconnaissance asset designed for Low Intensity Conflict/Counter Narcotics applications. ARL collects, processes, and disseminates intelligence in real-time. The system is designed for forward deployment. A total of three systems (three aircraft each will be procured.



HISTORICAL BACKGROUND:

May 90 - Requirement identified by USASOUTHCOM Statement of Need.
Jan 91 - Sole Source Request for Proposal released.
Mar 91 - Contract award.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
OPERATIONAL DEMONSTRATION			!																									
SYSTEM DELIVERY (COMINT) - 2 AIRCRAFT					!																							
SYSTEM DELIVERY (IMINT) - 1 AIRCRAFT					!																							
OPTION FOR 3 MULTI-FUNCTION AIRCRAFT EXERCISED					!																							
SYSTEMS DELIVERY											!																	
RETROFIT FIRST THREE AIRCRAFT													!	_	_	_	_	_	_	!								

REQUIREMENTS DOCUMENT: USASOUTHCOM SON approved Jun 90.

TYPE CLASSIFICATION: LPU approved May 90.

ARL IS A TACTICAL FIXED WING COMMUNICATIONS INTERCEPT AND DIRECTION FINDING SYSTEM.

PM, SW

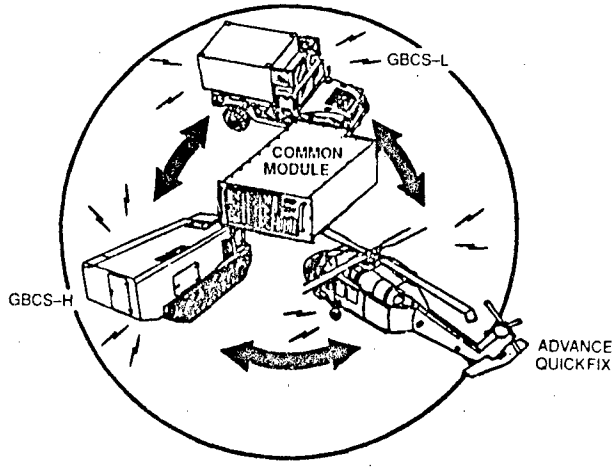
INTELLIGENCE AND ELECTRONIC WARFARE COMMON SENSOR (IEWCS)

PRODUCT MANAGER:
Ground Based Common Sensor-Light: LTC Jeffrey Sorenson, DSN 229-7071
COMM 703/347-7071

Ground Based Common Sensor-Heavy: Mr. Daniel Yates, DSN 229-7069
COMM 703/347-7069

Advanced QUICKFIX: Mr. James Hunt, DSN 229-6768
COMM 703/347-6768

PE & LINE #: 6.42.70 SSN: BZ7326 (GBCS-L, GBCS-H)
BZ9752 (GBCS-L, Material Change)
AB3000 (Advanced QUICKFIX)



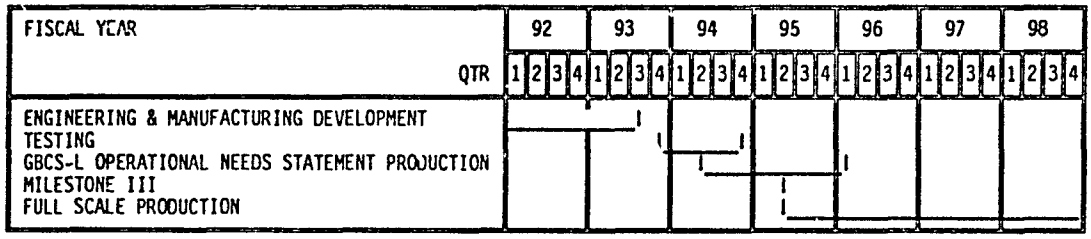
IEW COMMON SENSOR INCLUDES COMMON MODULE DEVELOPMENT FOR GBCS-L AND GBCS-H AND ADVANCED QUICKFIX.

DESCRIPTION: The Intelligence and Electronic Warfare Common Sensor program provides for an integrated airborne and ground based signals intercept, collection, processing, direction finding, and emitter geolocation and for a communications jamming capability. The three elements are: Ground Based Common Sensor-Light (GBCS-L) configured in a heavy HMMWV for deployment to light, airborne, and air assault divisions, light separate brigades, and light and airborne corps. Ground Based Common Sensor-Heavy (GBCS-H, configured in an Electronic Fighting Vehicle System (EFVS) (a Bradley derivative) for deployment to armored and mechanized infantry divisions, Armored Calvary Regiments, heavy separate brigades and heavy corps. Advanced QUICKFIX configured in a BLACKHAWK helicopter for deployment to all divisions and Armored Calvary Regiments. The system provides for a quantum increase in capability over the current generation of fielded systems; increasing the frequency coverage, adding a low probability of intercept capability, increasing inter/intrasystem interoperability, increasing mobility, maintainability, availability, reliability, and survivability, and adding geolocation capability sufficient for targeting by organic artillery systems. The IEWCS provides for the replacement of TACJAM, TEAMMATE, TRAILBLAZER, TRAFFIC JAM, TEAMPACK, and QUICKFIX. Two critical IEWCS subprograms are: 1) TACJAM-A which provides for development of common modules and subsystems necessary to intercept, locate, identify, and jam conventional and low probability of intercept communications signals; 2) CHALS-X which provides for the common subsystem for geolocation of emitters. The Electronic Intelligence capability is to be provided by the minor adaptation of a non-developmental item. An open system architecture concept which provides for the introduction of material changes via software or circuit boards is being employed.

HISTORICAL BACKGROUND:

Sep 91 - IEWCS Integration contract awarded.

EVENTS SCHEDULE:



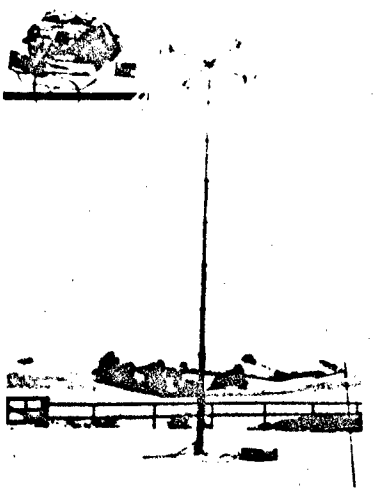
REQUIREMENTS DOCUMENT: TACJAM-A ROC, Jul 86. 82nd Airborne Division Operational Needs Statement, Jul 88. IEW GBCS ROC, Oct 90. Advanced QUICKFIX Material Change, Sep 91.

TYPE CLASSIFICATION: GBCS-L Operational Needs Statement System approved May 90. GBCS-L, GBCS-H, Advanced QUICKFIX, approved Mar 95.

IEWCS IS AN INTEGRATED AIRBORNE/GROUND SIGINT/EW PROGRAM.

PM, SW

AN/PRD-12, LIGHTWEIGHT MANTRANSPORTABLE RADIO DIRECTION FINDER SYSTEM (LMRDFS)



MANAGER: Mr. John Holzman DSN 229-6816
COMM 703/349-6816

PE & LINE #: 3.58.85 (TCP); SSN: K06800

DESCRIPTION: The LMRDFS is a mantransportable ground based communications intercept, processing, and direction finding system. It consists of a receiver/processor and antenna subsystems that can be deployed by two personnel. There are six AN/PRD-12 systems per Light Division and twelve systems per USASOC Special Forces. A total of 110 systems are being procured for FORSCOM/USASOC and TRADOC. Ninety-nine additional systems are being procured for the TEAMMATE HF frequency extension materiel change. The system searches for, intercepts, and provides for direction finding locations of enemy HF/VHF/UHF communications emitters. The AN/PRD-12 will interoperate with the TEAMMATE system via communications links in the direction finding mode.

HISTORICAL BACKGROUND:

Dec 87 - Contract awarded.
Jun 89 - System Confidence Demonstration.
Aug 90 - Completed testing at Fort Huachuca.
Nov 90 - Contract Modifications awarded to demonstrate frequency extension.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
PRODUCTION DELIVERIES																												
FIELDING																												

REQUIREMENTS DOCUMENT: QRC-59 approved by AEWIC, Jun 86 .

TYPE CLASSIFICATION: LPU based on QRC-59.

LMRDFS IS A MANTRANSPORTABLE GROUND BASED COMMUNICATIONS INTERCEPT, PROCESSING, AND DIRECTION FINDING SYSTEM.

PM, SW

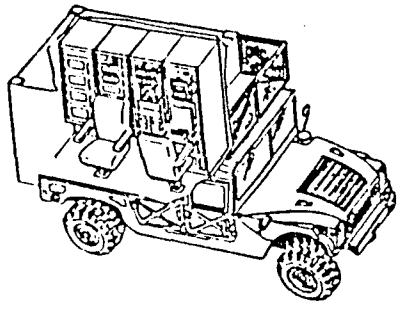
AN/TRQ-32, TEAMMATE

PRODUCT MANAGER: LTC Jeffrey Sorenson, DSN 229-7071
COMM 703/349-7071

PE & LINE #: 3.58.85 (TCP); SSN: BZ9752 (TM)
BZ7326 (GBCS-L)

DESCRIPTION: TEAMMATE is a tactical ground based communications intercept, processing and direction finding system. TEAMMATE is mounted in a shelter carried on a Commercial Utility/Cargo Vehicle (CUCV). There are three TEAMMATE systems per Division, two systems per separate Brigade/Armored Cavalry Regiment (ACR) and six per Corps. The system is used to search for, intercept, record, locate and report on radio signals in the HF/VHF/UHF frequency ranges. The system operates in a netted configuration for direction finding purposes. AN/TRQ-32(V)2 includes Data Link and KG-84 COMSEC to interoperate with processing centers. Ongoing materiel changes include addition of HF direction finding; an enhanced self location capability; a Host Interface Unit for connectivity with Tactical Commanders Analysis Center (TCAC) and ASAS; replacement of AN/VRC-47 with SINCGARS radio; and, a feature to permit internetting with QUICKFIX for direction finding. Planned Block improvements will evolve TEAMMATE into the IEW Common Sensor-Light.

PHOTO: CUCV-MOUNTED TEAMMATE
DRAWING: NEXT GENERATION SYSTEM IN HMMWV WITH NEW MISSION EQUIPMENT



HISTORICAL BACKGROUND:

Jun 82 - Contract award.
Mar 84 - First Article Test (FAT).
May 84 - IOC for AN/TRQ-32(V)1.
Jul 85 - Materiel Release.
Mar 87 - FAT for the AN/TRQ-32(V)2 completed.
Jan 89 - DTSR Production and Integration contract award.
Apr 90 - AN/PRD-12 Integration contract award.
Sep 90 - Host Interface Unit contract award.
Mar 91 - TEAMMATE/QUICKFIX Interoperability contract award.
Sep 91 - EMD contract award (GBCS-L/AQF/GBCS-H).

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
TEAMMATE MATERIEL CHANGES:																												
PRODUCTION																												
FIELDING																												

REQUIREMENTS DOCUMENT: TEAMMATE ROC, Jun 74.

TYPE CLASSIFICATION: TEAMMATE, Standard-A (V1) approved Jul 85.

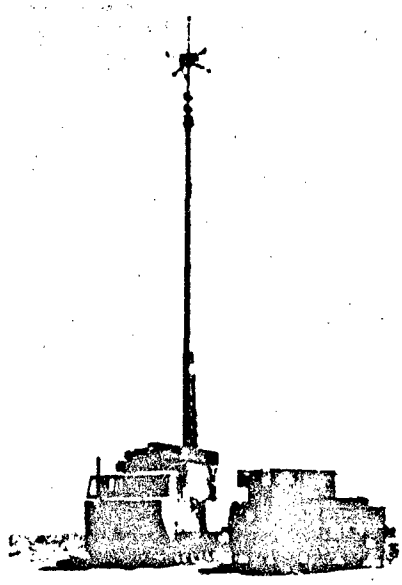
TEAMMATE IS A TACTICAL GROUND BASED COMMUNICATIONS INTERCEPT, PROCESSING, AND DIRECTION FINDING SYSTEM.

PM, SW

AN/TSQ-138, TRAILBLAZER

PROJECT LEADER: Mr. Dan Yates, DSN 229-6771
COMM 703/349-6771

PE & LINE #: 3.58.85 (TCP); SSN: BZ9751



DESCRIPTION: TRAILBLAZER is a high capacity ground based communications intercept, processing, and direction finding system. It is mounted in a shelter carried on a M1015 Tracked Vehicle which tows a Trailer Support Unit (TSU). AAO is for five TRAILBLAZER systems to be assigned to each Heavy division. A total of 68 systems were procured. The system is used to search for, intercept, record, identify, locate and report on radio signals in the HF/VHF/UHF frequency ranges. The system operates in a netted configuration and interoperates with the airborne QUICKFIX system for direction finding. Current block improvements include addition of: an enhanced self location capability; a digital temporary storage recorder; a Host Interface Unit for connectivity with TCAC, ASAS, and other Intelligence and Electronic Warfare Systems. The planned block improvement program to evolve TRAILBLAZER into the GBCS-H is required to keep the fielded operational capability current with the threat.

HISTORICAL BACKGROUND:

Jul 85 - AN/TSQ-138 Production contract awarded.
Apr 88 - TRAILBLAZER/QUICK FIX interoperability demonstration.
Aug 88 - FUE AN/TSQ-138.
Sep 90 - Fielding completed; Product Improvement Program inititated.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
TRAILBLAZER: PRODUCTION																												
FIELDING																												

REQUIREMENTS DOCUMENT: TRAILBLAZER ROC, Jun 84.

TYPE CLASSIFICATION: TRAILBLAZER, Standard, Sep 90; Type classification standard GBCS-H scheduled 2QFY95.

TRAILBLAZER IS A HIGH CAPACITY GROUND BASED COMMUNICATIONS INTERCEPT, PROCESSING, AND DIRECTION FINDING SYSTEM.

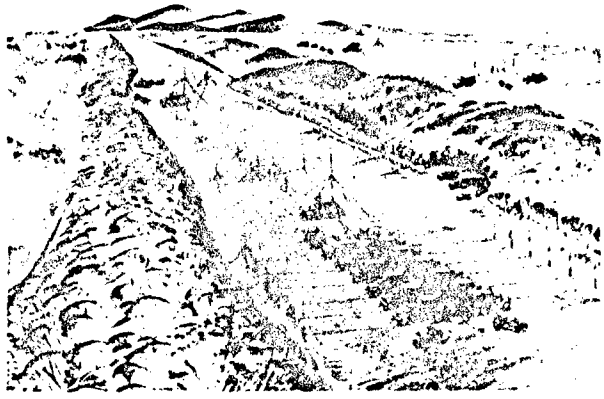
PM, SW

AN/TSQ-152, TRACKWOLF

PRODUCT MANAGER: LTC Jeffrey Sorenson, DSN 229-7071
COMM 703/349-7071

PE & LINE #: SSN: V18200

DESCRIPTION: TRACKWOLF is a mobile, ground based High Frequency (HF) skywave communications intercept and direction finding system. It consists of a Direction Finding Subsystem (DFS) and a Collection and Processing Subsystem (CPS). TRACKWOLF is an Echelons Above Corps asset assigned to MI Battalions. The first of five required systems is currently being procured on a Quick Reaction Capability (QRC) basis. The second system, which is scheduled for procurement in FY94, will be reduced in number of shelters and downsized to fit on heavy High Mobility, Multipurpose Wheeled Vehicles (HMMWVs) to satisfy rapid deployment mission requirements. The system capabilities include automated direction finding using single station location technology coupled with collection, processing, analysis and reporting functions. TRACKWOLF replaces the obsolete Operational Unit Transportable Systems (OUTS) which utilizes tube technology and does not possess the necessary mobility to be deployed on today's battlefield. TRACKWOLF DFS consists of AN/TRD-27 Direction Finding/Single Station Location Shelters and AN/TRQ-41 HF Sounder/Communications Shelters carried on standard 5-ton trucks. CPS consists of AN/TRR-36 Communications/Signal Search Shelters, AN/TSY-1 Collection/Processing Shelters, and AN/TSX-1 Analysis Shelters also on standard Army 5-ton trucks. The system will interoperate with EAC Intelligence/Electronic Warfare Analysis systems including TOPGALLANT/SSP-S/ASAS. A large portion of the mission equipment being procured is Non-Developmental Item modules originally developed by NSA for strategic sites.



HISTORICAL BACKGROUND:

Sep 88 - Contract awarded.
May 89 - Critical Design Review conducted.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
IOT&E																												
FIRST UNIT EQUIPPED																												
PRODUCTION AWARD (ENHANCED TRACKWOLF)																												
FIELDING (ENHANCED TRACKWOLF)																												

REQUIREMENTS DOCUMENT: QRC-60, Nov 86.

TYPE CLASSIFICATION: Limited Procurement-Urgent approved Nov 86.

TRACKWOLF IS A MOBILE GROUND BASED HF SKYWAVE COMMUNICATIONS INTERCEPT AND DFS EMPLOYED AT ECHELONS ABOVE CORPS.

PM, SW

EH-60A, QUICKFIX

PRODUCT MANAGER: Mr. James Hunt, DSN 229-6768
COMM 703/349-6768

PE & LINE #: 6.47.20.DK12 SSN: AB3000

DESCRIPTION: QUICKFIX is a tactical heliborne communications intercept, direction finding, and jamming system. QUICKFIX consists of AN/ALQ-151 intercept and direction finding mission equipment, an AN/TLQ-17A communications jammer, and airborne self-protection equipment mounted in a modified UH-60A helicopter. The Army Acquisition Objective is three systems per Division and Army Cavalry Regiment (ACR). A total of 66 systems were procured. The system is used to search for, intercept, record, locate, report on and jam radio signals in the HF/VHF frequency ranges. QUICKFIX systems interoperate with each other and TRAILBLAZER in a netted configuration for direction finding purposes. Current materiel changes include development of a Host Interface Unit (HIU) for connectivity with Tactical Commanders Analysis Center (TCAC) and ASAS, and development of features to permit netting with TEAMMATE for direction finding. This will dramatically improve performance in Light Divisions and ACRs. Block improvements will evolve QUICKFIX into the AQF.

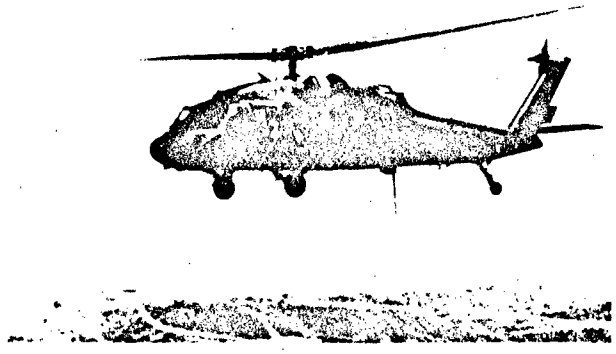


PHOTO: EH-60A, QUICKFIX

HISTORICAL BACKGROUND:

Apr 83 - YEH-60A Prototype delivered.
Sep 84 - Production contract awarded.
Feb 88 - First Unit Equipped.
Apr 88 - TRAILBLAZER/QUICKFIX Interoperability Demonstration.
Mar 90 - Product completed.
Jun 90 - Fielding completed.
Oct 91 - Initiate Product Improvement Program.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
QUICKFIX: PRODUCTION																												
FIELDING																												

REQUIREMENTS DOCUMENT: ROC, May 84.

TYPE CLASSIFICATION: Standard approved Nov 77.

QUICKFIX IS A TACTICAL HELIBORNE COMMUNICATIONS, INTERCEPT, DIRECTION FINDING, AND JAMMING SYSTEM.

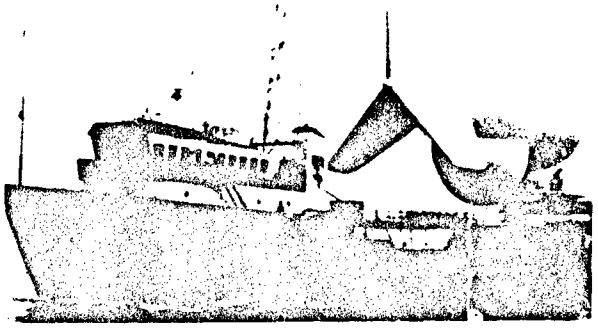
PM, SW

SMALL AEROSTAT SURVEILLANCE SYSTEM (SASS)

PRODUCT MANAGER: LTC Stan Niemiec, DSN 229-5189
COMM 703/349-5189

PE & LINE #:

DESCRIPTION: Small Aerostat Surveillance System (SASS) is a tethered aerostat carrying a multimode radar system for detection of air, sea, and ground targets. SASS consists of a 55,000 cubic foot helium filled aerostat carrying a modified AN/APG-66 radar. The aerostat tether is attached to a ground mooring system located either on the ground or on ship. The aerostat is designed to operate at altitudes from 1500 to 2500 feet and detect low flying aircraft, small vessels, and ground moving vehicles at extended ranges. A full complement of communications and navigation equipment is on board the SASS ship to assist in accurate target location and reporting of detected targets to interested command elements. The SASS is interoperable with the Grisly Hunter and any other aircraft or UAV using a commercially available communications suite. The communications on SASS permit freeze frame video to virtually any location via military or commercial satellite, telephone, and UHF, VHF, or HF data links. Planned improvements include upgrading current radar performance against moving ground targets, militarizing selected components for ground based applications, upgrading the communiations capabilities for interoperability, site surveillance capabilities, and integration of an ESM capability into each of the deployed ships. SASS I shipborne system is currently operating in support of an OCONUS low intensity conflict (LIC), counter narcotic (CN) mission. SASS II shipborne system is currently operating in support of DOD JTF-Four drug interdiction activities.



HISTORICAL BACKGROUND:

Oct 84 - USCINCSO revised Statement of Need for Aerostat Systems.
Jan 85 - Deputy Secretary of Defense established SASS program.
Mar 86 - JCS decision to deploy SASS to Korea.
Apr 86 - SASS I/SASS II ground-based versions deployed.
May 89 - SASS I deployed OCONUS.
Apr 90 - Shipborne SASS III option exercised.
Jul 90 - Shipborne SASS II deployed to JTF-Four; Shipborne SASS II completed acceptance testing and is operationally deployed to JTF-Four.
Oct 91 - Congressional director to transfer management of Coast Guard assets (SBA) to Army management.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
SASS I/II OPERATIONAL	▬	▬	▬	▬																								
SASS III OPERATIONAL				▬	▬	▬	▬	▬																				
SBA TRANSFER	▬	▬	▬	▬																								
SBA OPERATIONS	▬	▬	▬	▬																								
MILESTONE DECISION FOR COMMON CONFIGURATION (5 SYSTEMS)				▬																								
5 SYSTEMS OPERATIONAL					▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬				
SYSTEMS UPGRADES									▬	▬	▬	▬	▬	▬	▬	▬												

REQUIREMENTS DOCUMENT:

TYPE CLASSIFICATION: Limited Procurement Urgent approved May 87.

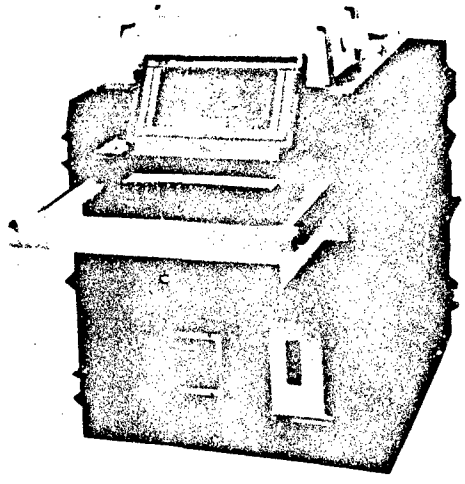
SASS IS A TETHERED AEROSTAT CARRYING A MULTIMODE RADAR SYSTEM FOR DETECTION OF AIR, SEA, AND GROUND TARGETS.

PM, SW

TIGER

PROJECT OFFICER: Mr. John Holzman, DSN 229-6816
COMM 703/349-6816

PE & LINE: SSN: BZ9753



DESCRIPTION: The TIGER system is a Net Radio Protocol (NRP) relay. It consists of a GRID 1535 computer, a MAGNAVOX NRP card, an ARC-164 Radio and KG-84 Crypto. The system is contained in a transit case and can be powered from standard tactical vehicles. There are three TIGERs per division and four per separate brigade. The IEW sensors (e.g., TEAMMATE, and TRAILBLAZER) communicate with Tactical Command and Control (TCAC) over an NRP Datalink. This link allows timely dissemination of critical battlefield intelligence data. The NRP data link is UHF and requires radio Line-of-Site to operate. This requires the sensor and the fusion system to be deployed relatively close together. The TIGER NRP relay allows the fusion system to be deployed at a more reasonable stand off distance and still communicate with the sensors. The TIGER system is also configured to allow for control and termination of the NRP Datalink if the TCAC is not deployed or is being relocated.

HISTORICAL BACKGROUND:

Nov 88 - 108th MI Battalion tested a TIGER prototype.
Dec 89 - 110th MI Battalion utilized TIGER prototype in REFORGER.
Nov 90 - DA directs immediate procurement to support Operation Desert Shield; MAGNAVOX directed to produce TIGER.
Jan 91 - Initial deployment (Operation Desert Shield).

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
PRODUCTION DELIVERIES	▬				▬																							
FIELDING					▬	▬	▬	▬																				

REQUIREMENTS DOCUMENT: ONS and HQDA message, Nov 90.

TYPE CLASSIFICATION:

TIGER IS A NET RADIO PROTOCOL RELAY SYSTEM TO PROVIDE TIMELY DISSEMINATION OF CRITICAL BATTLEFIELD INTELLIGENCE DATA.

CECOM

CECOM RD&E CENTER

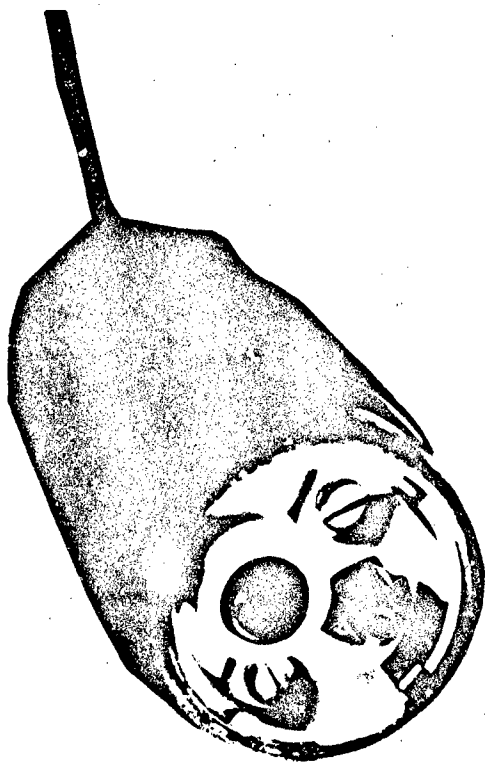
C3 SYS DIR

C3 SYS DIR

CX-13295/G, TACTICAL FIBER OPTIC CABLE ASSEMBLY (TFOCA) AND ANCILLARY ITEMS

PROJECT OFFICER: Mr. Nick Karalekas, DSN 995-4784
COMM 908/544-4784

PE & LINE #: CUSTOMER



DESCRIPTION: The TFOCA is used as a component of ground tactical fiber optic communications systems. These cable assemblies and ancillary items can be effectively utilized in deploying ground tactical field communications systems which are lightweight, small in size, and support dispersed operations due to extended non-repeatable transmission lengths. A completed cable assembly on a standard RC-453/G reel consists of a specified length (up to 1 kilometer) of 6mm outer diameter cable containing two tightly-buffered, radiation hard, 50/125 micrometers multimode fibers terminated with duplex hermaphroditic biconic connectors. The connector is rugged, field installable, waterproof, and resistant to the stringent environment typical of tactical military applications. The cable assembly is rated and tested for operation at temperatures ranging from -55°C to +85°C. Cable assemblies are made in several lengths to meet various deployment configurations. They are easy to install, use no adhesives, and have excellent stability with temperature variations. Companion connector components were developed as part of the ancillary items. Cable assembly adaptors and repair kits are available.

HISTORICAL BACKGROUND:

Aug 84 - TFOCA R&D contract awarded to AT&T.
Jan 86 - TFOCA adopted by DOD as the standard for all ground tactical applications.
Mar 89 - Production contract awarded to AT&T by PM, MSCS.
May 90 - First Article Test successfully completed.
Oct 90 - Proposal for requirements contract received.
Mar 92 - TFOCA requirements contract award to AT&T Technologies.

EVENT SCHEDULE:

Future events are dependent upon customer orders.

REQUIREMENTS DOCUMENT: Not applicable as TFOCA is a component.

TYPE CLASSIFICATION: Standard approved 1989.

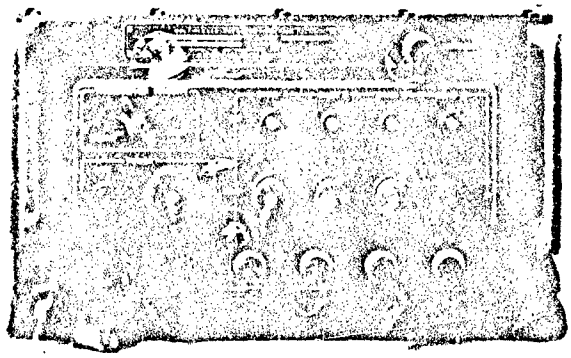
TFOCA IS UTILIZED AS A COMPONENT OF GROUND TACTICAL FIBER OPTIC COMMUNICATIONS SYSTEMS.

C3 SYS DIR

TD-1456/VRC, FREQUENCY HOPPING MULTIPLEXER (FHMUX)

PROJECT OFFICER: Ms. Terri Younger-McAuley, DSN 995-3060
COMM 908/544-3060

PE & LINE #: 62782 DEV LIN: Z28333



DESCRIPTION: Tactical C3 vehicles frequently support installations of four radios and four whip antennas. The multiple antennas readily identify the vehicle as a C3 platform and invite enemy firepower. FHMUX will mask tactical C3 functions by reducing the vehicle's antenna visual signature. The FHMUX will allow up to four SINCGARS and/or VRC-12 radios, in frequency hopping or fixed frequency modes of operation, to use a single high power broadband antenna. The FHMUX will replace the manually tuned, fixed-frequency TD-1289 multiplexer currently in the Army inventory. Additional benefits of the FHMUX are a reduction of antenna setup and teardown times, and a well defined radio frequency isolation between radios to control cosite interference.

HISTORICAL BACKGROUND:

May 84 - Exploratory Development contract awarded to Xetron.
Jun 86 - Two exploratory prototypes delivered.
Jul 87 - O&O Plan approved.
Sep 89 - FSD contract awarded to Xetron.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
TRANSITION TO PM, SINCGARS			I																									
FOUR UNITS DELIVERED			I																									
SIXTEEN UNITS DELIVERED							I																					
IOT&E									I																			
MDR III										I																		
LRIP CONTRACT AWARD													I															
FUE DATE																	I											
IOC																					I							

REQUIREMENTS DOCUMENT: ROC approved, May 91.

TYPE CLASSIFICATION:

FHMUX WILL EXTEND A MULTIPLEXING CAPABILITY TO SINCGARS FREQUENCY HOPPING RADIOS AND WILL REDUCE COSITE INTERFERENCE.

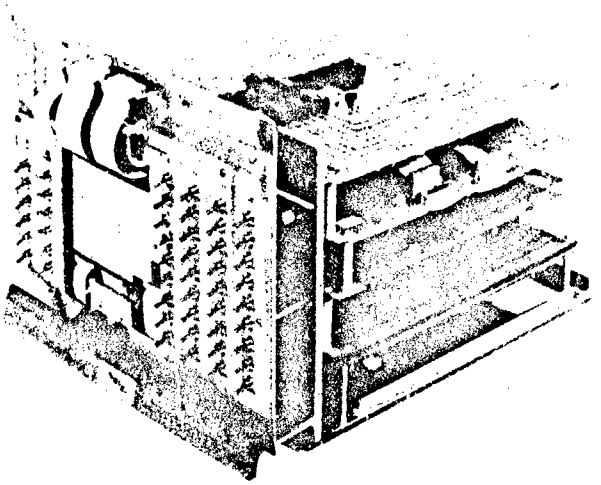
C3 SYS DIR

ADVANCED CONCEPTS AND TECHNOLOGY FREQUENCY AGILE SOLID-STATE TUNER (ACTFAST)

PROJECT OFFICER: Mr. Wilbur Guertin, DSN 992-0464
COMM 908/532-0464

PE & LINE #: 62782 AH92

DESCRIPTION: ACTFAST is a frequency-hopping antenna coupler used to match HF power amplifiers into whip, shorted loop, and long-wire antennas for ground and aircraft applications. Hopping can occur over the entire 2-30 megahertz high freqency band at full power 400 watt (USA) and 2 kilowatt (USAF), contrasted with present day hoppers restricted to a narrow frequency range and long tuning times. Innovative cooling techniques and solid-state switches eliminate the need for slow and unreliable electromechanical devices to assure high reliability, fast speed and quiet operation, all contributing to maximum security against hostile jammers and increased transmission efficiency. Ability to tune in 50 microseconds enhances interoperability with Automatic Link Establishment (ALE) systems mandated by MIL-STD-188-141A, and at hopping rates up to 10,000 hops per second, greatly increases the ability to evade jammers. Development efforts are being considered for immediate insertion into the Improved High Frequency Radio (IHFR) Program as a form, fit and function replacement for the Short Term Anti-Jam (STAJ) AN/GRC-193 radio antenna coupler, for use by USAF on C-130 aircraft, and for anticipated insertion into future Product Improvements of the IHFR and the Multiband/Multimode Radio Program. Additionally, the coupler will be considered for its ability to perform as a high power jammer component.



HISTORICAL BACKGROUND:

Nov 88 - The ACTFAST concept was originally submitted in response to FSHPAC solicitation but was not accepted.
Nov 89 - The ACTFAST concept was resubmitted in response to Broad Agency Announcement from Advanced Concepts and Technology (ACT) Committee (LABCOM).
May 90 - Accepted by ACT for FY91 funding; Additional funds MIPRs from USAF for joint participation and earlier start.
Sep 90 - Contract awarded to AEL.
Jan 92 - Contract extended to produce deliverable prototype.

EVENT SCHEDULE:

FISCAL YEAR		92				93				94				95				96				97				98			
	QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
DESIGN PLAN/CDR	TBD																												
CONTRACT EXTENDED		I																											
CONTRACT COMPLETION										I																			

REQUIREMENTS DOCUMENT: IHFR ROC.

TYPE CLASSIFICATION:

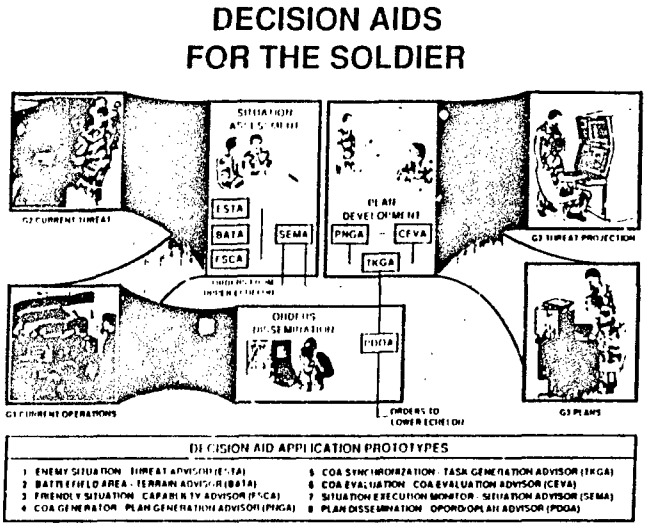
ACTFAST WILL DEVELOP ECM AND ECCM EQUIPMENT EMPLOYING VERY FAST HOPPING RATES TO ENSURE EFFECTIVE ANTI-JAM COMMUNICATIONS FOR ARMY AND AIR FORCE APPLICATIONS, AND REDUCE LINK ESTABLISHMENT TIMES IN ALE, AND CONVERSELY, TO INCREASE THE EFFECTIVENESS OF JAMMING SYSTEMS.

C3 SYS DIR

FORCE LEVEL AIRLAND BATTLE MANAGEMENT ADVANCED TECHNOLOGY DEMONSTRATION (ALBM ATD)

PROJECT OFFICER: Dr. Dirk R. Klose, DSN 995-2213
COMM 908/544-2213

PE & LINE #: 63772.D101



DESCRIPTION: This project encompasses the transition of automated decision aid and information management tools to enhance tactical commander and staff planning and operational Command and Control (C2) functions at Force Level (e.g., corps, division, brigade). These items will exploit advanced computing technology in the area of artificial intelligence (AI)/expert systems, knowledge based techniques from Army/DOD, industry, and academia exploratory techbase developments. They will embody refined operational user requirements/specifications in automated decision aid applications, support environment prototypes, and system architectures. The tools developed will be demonstrated in operational tests, transitioned to and integrated with PEO CCS, Program Manager, Battlefield Operating Systems (BOS) on Army Tactical Command and Control System (ATCCS) Common Hardware and Software (CHS) including Common ATCCS Support Software (CASS) and applications. Iterative rapid prototyping techniques and interactive storyboarding with subject matter experts and operational users will be applied in the development of the products. Functional capabilities to be provided by this program will support C2 on the move and will include: decision aid advisors for enemy-threat situation; battlefield area-terrain; friendly situation-capability; plan-task generation; course of action evaluation; situation execution monitoring and plan-Operational Order (OPORD) dissemination; automated freetext message reading, filtering, information extraction, correlation and alerting; and analog voice recognition and output. The capabilities provided will be accessible through a generic, intelligent, multi-media interactive, user-friendly soldier machine interface. The benefits to be derived include: reduced planning-decision/reaction times; more effective plans; improved situational awareness; minimized troop workload; improved combat sustainment; reduced orders/responsibility and misunderstanding; and faster and more effective plan/order dissemination and execution. The activities under this program are to be accomplished in coordination and cooperation with the user community through TRADOC Combined Arms Center (CAC), the developer PEO CCS/BOS Program Managers, and Joint Directors of Laboratories.

HISTORICAL BACKGROUND:

1987-1990 - Army/DARPA ALBM Program.
Dec 1990 - ALBM ATD contract award.
Dec 1991 - Limited Operational Capabilities demonstrated.
1992 - Battlefield Area Terrain Advisor (BATA) and Friendly Situation Capability Advisor (FSCA) were completed.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
ALBM ATD DECISION AID APPLICATION: TERRAIN ADVISOR																												
ALBM ATD DECISION SUPPORT ENVIRONMENT TOOLS																												
DECISION SUPPORT TOOLS																												
ALBM ATD DECISION AID APPLICATION: CAPABILITY ADVISOR																												
ALBM ATD DECISION AID APPLICATIONS: COA EVAL ADVISOR																												
ALBM ATD DECISION AID APPLICATIONS: THREAT ADVISOR																												

REQUIREMENTS DOCUMENT: ALBM ATD functional description/requirements specification, TRADOC CAC-CD, Future Battle Laboratory, Ft. Leavenwoth, KS, 8 Jan 91; Force level knowledge system concept, Lower Echelon knowledge system concept, Army C3IEW Master Plan, 29 Sep 89.

TYPE CLASSIFICATION:

ALBM ATD PROVIDES AUTOMATED ARTIFICIAL INTELLIGENCE/EXPERT SYSTEM PLANNING AND DECISION SUPPORT FOR ACCS.

C3 SYS DIR

FREQUENCY MANAGEMENT FOR INTEGRATED SYSTEM CONTROL (ISYSCON)

PROJECT OFFICER: Mr. Paul A. Major, DSN 995-2334
COMM 908/544-2334

PE & LINE #: 1L1.62701.AH92

DESCRIPTION: The Integrated System Control (ISYSCON) will provide the capability to manage the availability of Command and Control (C2) means in support of AirLand Battle-Future. ISYSCON will provide the tools necessary to perform the communications/automation management process by automating essential functions including: Network Planning and Engineering, Battlefield Spectrum Management (BSM), Wide Area Network (WAN) management, COMSEC management, and the Command and Control of Signal Units. This program/project will deal specifically with BSM for all battlefield emitters and those related portions of network planning and engineering. This includes the terrain analysis associated with propagation loss predictions, assignment of frequencies to all links and nets, and the resolution of conflicts between users of the Radio Frequency (RF) spectrum. This program will deal with developing the necessary algorithms and software to perform the total Army BSM mission and will be used as Government Furnished Software (GFS) to the ISYSCON Integration Contractor of PM, MSCS. It will capitalize on previous efforts under the Army Tactical Frequency Engineering System (ATFES) Test Bed as well as several other system or frequency band unique BSM efforts.

HISTORICAL BACKGROUND:

FY78 - ATFES Feasibility Study.
FY83 - ATFES Test Bed established.
FY88 - ATFES Test Bed expanded.
May 88 - ISYSCON White Paper.
Jul 89 - DISC4 approved ISYSCON concept.
Nov 89 - HQ TRADOC approved O&O plan.
Dec 91 - PM, MSCS Request for Proposal released.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
PM, MSCS ISYSCON CONTRACT AWARD			I																									
ALGORITHM/SOFTWARE DEVELOPMENT - ONGOING																												

REQUIREMENTS DOCUMENT: ROC approved, Oct 90.

TYPE CLASSIFICATION:

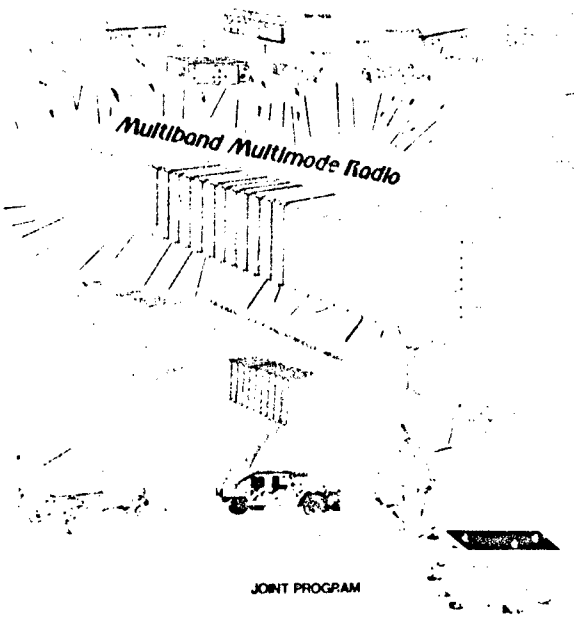
THE BATTLEFIELD SPECTRUM MANAGEMENT PORTION OF ISYSCON WILL PROVIDE SIGNAL C2 INFORMATION ON THE LOCATIONS OF ALL COMMUNICATIONS AND NON-COMMUNICATIONS EMITTERS, COSITE FREQUENCY ENGINEERING, FREQUENCY ASSIGNMENTS, AND MANAGEMENT AND CONTROL OF FREQUENCY USAGE.

C3 SYS DIR

MULTIBAND MULTIMODE RADIO (SPEAKEASY)

PROJECT ENGINEER: Mr. John J. Jeski, DSN 992-0444
COMM 908/532-0444

PE & LINE #: 1L1.62782.AH92



DESCRIPTION: The Multiband Multimode Radio (MBMR) program is a multi-phased effort at developing a radio system which is mostly software reconfigurable. During FY93 CECOM is participating in a joint program with the Air Force at Rome Laboratories (SPEAKEASY). This phase of the program is focusing on the development of a powerful digital signal processor, coding of some waveforms and the demonstration of the concept of a software programmable modular radio system. During future years, in anticipation of the Advanced Technology Demonstration (ATD) we will use the lessons learned during the Army/Air Force program to develop modules of a system which is software programmable and modular. The desired result of the ATD thrust of the MBMR effort will be a software-reconfigurable multipurpose radio that will, with the exception of some frequency-unique components, emulate many modes and functions associated with various frequency bands and radio systems that currently require individual radio systems. At the conclusion of the ATD, improvements will continue to be made to the radio to more meet the field requirements. In the mature design of the radio the concept of a common modular architecture will be paramount. A large percentage of the radio will consist of replicated modules which would be increased in number to permit processing of more complicated waveforms as they are developed. The modular architecture of the concept system will permit virtually unlimited life of the radio system by permitting increased performance with the addition of more common modules.

HISTORICAL BACKGROUND:

Sep 90 - Contract award.
Jun 92 - Contract restructed.

EVENT SCHEDULE: (AIR FORCE LEAD)

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
BREADBOARD																												
ANTENNA DEVELOPMENT																												
PHASE II DEVELOPMENT																												
RF DEVELOPMENT																												
MINIATURIZATION																												

REQUIREMENTS DOCUMENT: Army Signal School, Draft.

TYPE CLASSIFICATION:

SPEAKEASY IS A SOFTWARE RECONFIGURATION RADIO; BY MODIFYING THE SOFTWARE OF THE RADIO THE FUNCTION OR BAND OF THE RADIO CAN BE CHANGED.

C3 SYS DIR

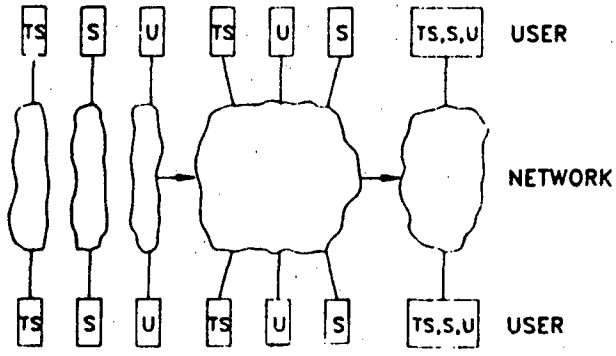
NETWORK SECURITY

PROJECT OFFICER: Mr. Robert Cicero, DSN 994-2004
COMM 908/544-2004

PE & LINE #: 39800 D21A

DESCRIPTION: The long term objective of network security is to secure all voice and data within every Army network system that communicates and/or processes any information of intelligence value. The goal is to develop small, user friendly low power equipment tailored to meet the Army system requirements in a cost effective manner. This effort will apply NSA generic hardware modules and software cryptographic algorithms by embedding them into host equipment. This will meet unique Army requirements to include the development of techniques to increase the physical protection of COMSEC equipment and keying material and will result in Army communication systems that are robust, automated and secure. This will be accomplished through the use of black gateways and investigation of technologies to assure authentication and access control for multi-level secure networks and multi-user terminals. Secure gateways will permit the soldier in the field to cross communication boundaries without the need to decrypt information within a red gateway.

SECURE NETWORK TECHNOLOGY



HISTORIC BACKGROUND:

Jan 1991 - Award COMSEC System Architecture Study; Funds MIPR to NSA for CANEWARE Models.
Apr 1991 - Award study on security effect on tactical protocol.

TECHNICAL:

Army Regulations require securing all classified information.
Modules developed for the Commercial CONSEC Endorsement Products (CCEP) program have been incorporated within network encryption equipment.
Investigation of NSA's developed software for embedding into host equipment.
Investigation of techniques used in BLACKER and CANEWARE COMSEC systems.
Army's needs are being defined.

PROGRAMMATIC:

To date, internal effort has been expended for the above work. Contractual effort is programmed for FY93 time frame.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
PREPARATION OF PROCUREMENT DOCUMENT	I																											
AWARD OF CONTRACTS FOR EXPLORATORY DEVELOPMENT MODULE					I																							
FIELD TESTING OF EXPLORATORY DEVELOPMENT MODULE													I															
MODULE WRAPAROUND																					I							

REQUIREMENTS DOCUMENT: The Signal Center is in the process of generating a requirements document.

TYPE CLASSIFICATION:

NETWORK SECURITY'S GOAL IS TO SECURE ALL NETWORKS WITHIN EVERY ARMY WEAPON SYSTEM THAT COMMUNICATES AND/OR PROCESSES ANY INFORMATION OF INTELLIGENCE VALUE.

C3 SYS DIR

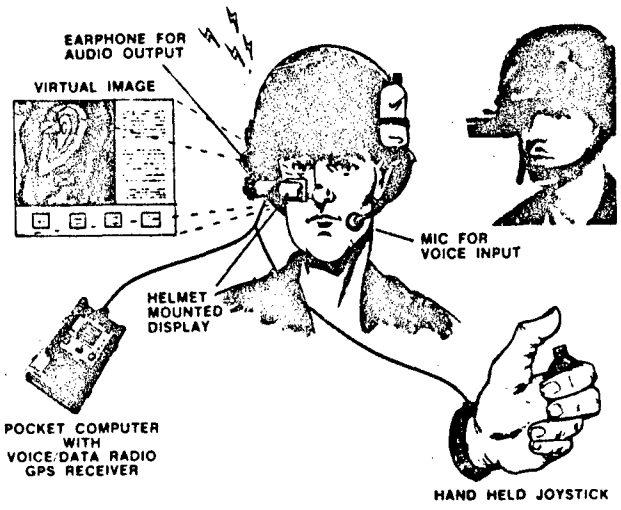
SOLDIER'S COMPUTER

PROJECT OFFICER: Mr. James G. Wright, DSN 995-2819
COMM 908/544-2819

TECHNICAL LEADER: Mr. Almon Gillette, DSN 995-4442
COMM 908/544-4442

PE & LINE #: 63772.D101

DESCRIPTION: The Soldier's Computer is a small, lightweight, portable, hands-free computer system designed for the individual soldier. This system will extend automation to the soldier level. Soldier's Computer system will incorporate a small sized, standard architecture computer with modular application cards (e.g., graphics, digital radio, voice recognition, video and mass memory storage), permitting easy configuration based on user's needs; a radio for wireless Local Area Network (LAN) operations, which can transmit integrated speech, data and video; a helmet or wrist mounted display (providing the resolution of a desk top monitor); manual, voice and video input devices; and a Global Positioning System (GPS) Receiver, permitting the soldier to view a map depicting friendly, enemy and his own position on the battlefield. Soldier's Computer will also integrate night vision devices and various sensors, to include medical monitoring. The modular architecture of Soldier's Computer will allow mission configurable applications to include (but not limited to) battlefield status, message management, training, field diagnostics and maintenance.



HISTORICAL BACKGROUND:

FY89 - ASCO concept.
2QFY90 - In-house development of Prototype.
4QFY90 - Concept Demonstration at AMC Technology Expo, Aberdeen, MD.
FY91-92 - Computer development for Soldier's Integrated Protective Ensemble (SIPE) Advanced Technology Transition Demonstration (ATTD).

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
BRASS BOARD FABRICATION AND TEST	!	_	!																									
PARTICIPATION IN SIPE ATTD			!	_	!																							
SIPE TRANSITION SUPPORT					!	_	_	_	!																			

REQUIREMENTS DOCUMENTS: Draft ORD, The Enhanced Integrated Soldier System - Dismounted, May 92.

TYPE CLASSIFICATION:

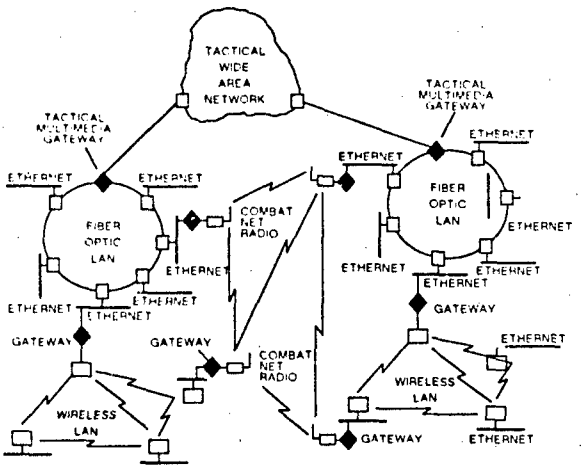
SOLDIER'S COMPUTER WILL EXTEND AUTOMATED COMMAND, CONTROL AND COMMUNICATIONS TO THE INDIVIDUAL SOLDIER LEVEL VIA A SMALL, LIGHTWEIGHT, PORTABLE, MISSION-CONFIGURABLE, INTEGRATED COMPUTER SYSTEM.

C3 SYS DIR

SURVIVABLE ADAPTIVE SYSTEMS-ADVANCED TECHNOLOGY DEMONSTRATION (SAS-ATD)

PROJECT MANAGER: Mr. Larry Levine, DSN 994-4506
COMM 908/544-4506

PE & LINE #: 63003 D247



DESCRIPTION: The SAS-ATD is an advanced development program whose objectives are the integration of new technological capabilities in communications and distributed processing and the demonstration of these capabilities to the PM/PEO Community. It will also design network systems in support of Command and Control (C2) on-the-move. The program is structured to facilitate the transition of emerging communication and distributed processing technologies into the Army Technical Command and Control System (ATCCS) Objective System. The program will also address the Army's longer term vision, known as BIS-2015. The local access portion of the ATCCS Objective System will provide the networked battlefield computers to suppoort all five of the Battlefield Functional Areas (BFAs). It will also provide the communications interconnectivity to support real-time command and control by use of integrated data, voice, images, video, and facsimile facilities, both among the elements of a dispersed command post through interconnection into a wide area ne ork. The CECOM C3 Systems Directorate manages a set of advanced technology programs that are directly related to the requirements of the ATCCS Objective System. The key components of these technology programs include: The integration of Fiber Distributed Data Interface (FDDI) fiber optics as a high capacity backbone local area network (LAN) supporting voice, data, and video; The development of a prototype wireless LAN to support the wideband interconnection of mobile and dispersed command post assets; The development of interfaces between FDDI fiber optic LANs and external communcations networks using protocols such as B-ISDN; The integration of a LAN resident multimedia gateway capability that makes intelligent use of available narrowband tactical communications media in a dynamic scenario; The development of automated network initialization, configuration and management tools to enable a dispersed command post to operate effectively in a dynamic tactical environment; The development of advanced communications protocols, including tactical enhancements to Open Systems Intercommection (OSI) protocols; The integration of security devices and technology for protection of dispersed command post assets.

HISTORICAL BACKGROUND:

Jun 90 - Program Definition.
Dec 90 - Program approval by SAG.
Aug 91 - Briefed to Deputy Assistant Secretary of the Army; Briefed Deputy Commanding General, AMC.
Sep 91 - Revised Technical Plans.
Mar 92 - Technical Data Package approved at DA level.

EVENT SCHEDULE:

FISCAL YEAR		92				93				94				95				96				97				98			
QTR		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
LOCAL-AREA PACKET RADIO:	DEMO					I																							
	TRANSITION									I																			
HIGH-BANDWIDTH WIRELESS LAN:	DEMO												I			I													
	TRANSITION																I												
AUTOMATIC NETWORK MANAGEMENT:	DEMO															I													
	TRANSITION																I												
TACTICAL MULTINET GATEWAY:	DEMO												I			I													
	TRANSITION																I												
HIGH SPEED NETWORK SECURITY:	DEMO															I													
	TRANSITION																I												
FIBER OPTIC TACTICAL LAN:	DEMO												I																
	TRANSITION													I															

REQUIREMENTS DOCUMENT:

TYPE CLASSIFICATION:

SAS-ATD WILL DEMONSTRATE A SET OF ADVANCED TECHNOLOGIES WHICH ARE APPLICABLE AND EASILY TRANSITIONED INTO THE LOCAL ACCESS PORTION OF ATCCS.

C3 SYS DIR

VEHICULAR INTERCOMMUNICATIONS SYSTEM (VIS)

PROJECT MANAGER: Mr. Christopher Wantuck, DSN 995-2421
COMM 908/544-2421

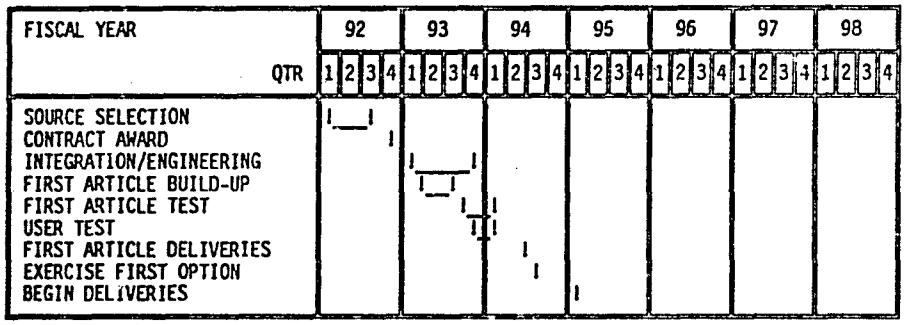
PE & LINE #: 37/B71100

DESCRIPTION: The VIS is an intercom and radio access communications system, primarily for crew members of armored track vehicles. It consists of a Master Control Station (MCS), Full Function Crew Stations (FFCS), Monitor Only Stations (MOS), Radio Interface Unit (RIU), Active Noise Reduction (ANR) headsets, and power signal cables. The MCS allows for 1) programming of radios to crew members; 2) radio listening silence; 3) connection to field phone or other vehicle; and, 4) connection to two combat radios. An FFCS provides volume adjustment and radio selection whereas an MOS only provides volume adjustment. The RIU is used for applications where three or four radio capability is required. The ANR headsets are provided in a helmet liner with a noise canceling microphone. The ANR earcups will phase cancel noise that penetrates the earcups seal, thereby providing improved sound reduction. Initial VIS fielding will be front line vehicles (force package I) such as Abrams tanks (M1A1/M1A2), Bradley Fighting Vehicles (M2, M3), M577's, M109A6 Paladins, and Standardized Integrated Command Post System (SICPS). Other vehicles will be considered as their requirements deem necessary. VIS is procured as a Non-Developmental Item.

HISTORICAL BACKGROUND:

Sep 86 - HASC/SASC zero VIS funding.
Mar 87 - Committee Reports: Vehicles fund for VIS.
Aug 87 - TRADOC re-evaluates ROC.
Aug 88 - VIS transferred from PEO COMM to CECOM.
Oct 88 - $10M OPA-2 appropriated for VIS.
Feb 89 - HASC/SASC uphold authorization for funds.
Feb 90 - Five candidate VIS tested.
May 90 - DA level IPR postponed.
Nov 90 - Two candidate VIS tested.
Jan 91 - SPR decision - procure VIS.
Sep 91 - Solicitation released.
Dec 91 - Proposals received.

EVENT SCHEDULE:



REQUIREMENTS DOCUMENT: Required Operational Capability, Jul 86.

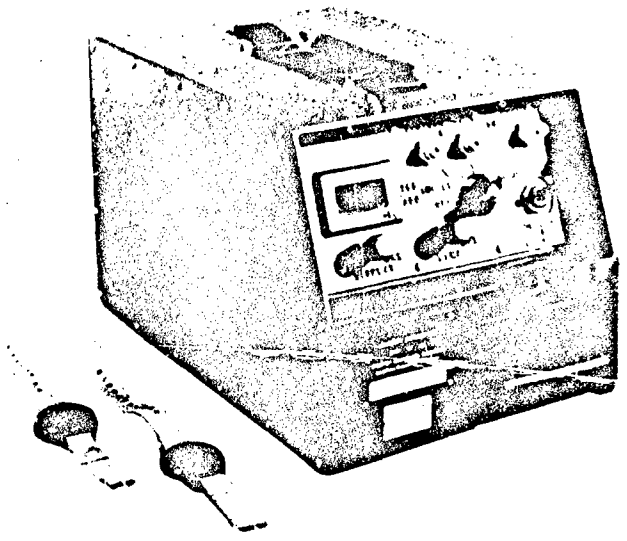
TYPE CLASSIFICATION: Generic approved May 91; Standard approved Jul 92.

VIS IS AN INTERCOM AND RADIO ACCESS COMMUNICATIONS FOR CREW MEMBERS OF ARMORED TRACK AND COMMAND POST VEHICLES.

EW/RSTA DIR

EW/RSTA DIR

AN/PDR-75, RADIAC SET



PROJECT OFFICER: Mr. Michael Basso, DSN 995-3202
COMM 908/544-3202

PE & LINE #: A-16-05187 BLIN 605187

DESCRIPTION: The AN/PDR-75, Radiac Set is composed of the Computer Indicator Radiac CP-696/PDR-75 (Reader), Carry Case CY-8420/PDR-75, and three power cables. The Dosimeter (DT-236/PDR-75) is designed to measure short duration, high intensity neutron radiation and prompt gamma radiation resulting from nuclear explosions and gamma rays from fall-out. The dosimeter is contained in a two-part case and is a type that can be worn the same as a wristwatch. The reader is capable of opening, reading, and closing the dosimeter. Two separate reading elements contained in the Reader consisting of an ultra violet light source, filters, and a light detector for reading the gamma dose, plus a constant current source and a peak reading voltmeter for reading the neutron dose. A digital meter displays a combined reading of the two separate reading elements. The range of the system is one to one thousand centigrade. The CP-696/PDR-75 is powered from a 24 volt DC source.

HISTORICAL BACKGROUND:

Mar 80 - DT/OT completed.
Sep 84 - First Production contract awarded to Fisher Controls Limited.
Sep 85 - First Article Test completed
Aug 86 - Second Production contract awarded to Fisher Controls Limited (now Plessey Controls Limited).
Jul 87 - Third Production contract award, (two contractors) 50 percent Small Business Set Aside - Sechan Electronics, Lititz, PA, and 50 percent unstricted - Harshaw/Filtrol (now Engelhard Corporation), Solon, OH.
Aug 87 - Delivery of equipment from first Production contract (with secure lighting retrofit).
Jun 89 - First Unit Equipped.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
AWARD CONTRACT (FY92-95)			I																									
FIRST EQUIP DELIVERY							I																					

REQUIREMENTS DOCUMENT: DA approved Materiel Need for Individual (Personal) Dosimetry Equipment, 13 Feb 73, CARDS Paragraph 1212b(28).

TYPE CLASSIFICATION: Standard approved, Aug 83.

AN/PDR-75 IS A NUCLEAR RADIATION DETECTION SYSTEM USED TO MEASURE AND READ-OUT NEUTRON AND GAMMA RADIATION RESULTING FROM NUCLEAR EXPLOSIONS AND GAMMA RAYS FROM FALLOUT.

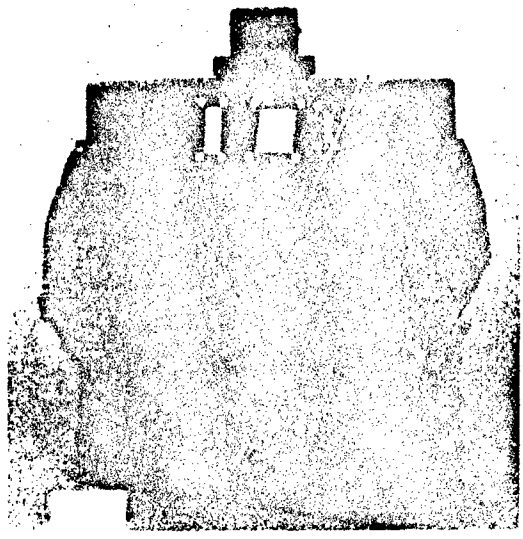
EW/RSTA DIR

AN/PPN-19, TRANSPONDER SET

PROJECT LEADER: Mr. Paul King, DSN 996-5191
COMM 908/544-5191

PE & LINE #: BLIN 905163

DESCRIPTION: The AN/PPN-19(V), Transponder Set is a Multifunction Radar Transponder Beacon (MRTB) that is self-contained, man-portable, and can be deployed and operated by a single individual. The system is of modular construction with integral antenna and weighs approximately 24 pounds with its battery. During operation, the AN/PPN-19(V) responds to interrogations by tactical aircraft radars with beacon modes and provides terminal guidance for ordnance delivery or drop zone location. AN/PPN-19(V) replaces the PPN-18, GAR-I and UPN-34.



HISTORICAL BACKGROUND:

Apr 81-Jun 83 - Engineering Development contract.
Jan 83-Jun 83 - DT/OT II.
Jun 84 - Milestone III IPR.
Sep 84 - Initial Production contract award, 160 units - Army.
Sep 85 - Production Option contract award, 112 units - Marine Corps, 8 units - Navy, 4 units - Air Force.
Jun 86 - Second Production option contract award, 184 units - Marine Corps, 6 units - Navy.
Nov 86 - Completed First Article Test (FAT).
Jun 87 - First Production delivery.
Feb 88 - Initial Operational Capability.
Sep 89 - Follow-on Production contract awarded to United Telecontrol Electronics (UTE) for 106 units (101 units - Army, 5 units - Navy).
Sep 91 - Option quantity awarded for 60 additional units.
Dec 91 - Completed FAT.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INITIAL QUANTITY FIELDING COMPLETE			I																									
UNITS DELIVERED (166)					I	____	I																					

REQUIREMENTS DOCUMENT: Letter Requirement, approved 20 Sep 79. The equipment is a nonmajor item, CARDS Reference Number 1301-R.

TYPE CLASSIFICATION: Standard A approved.

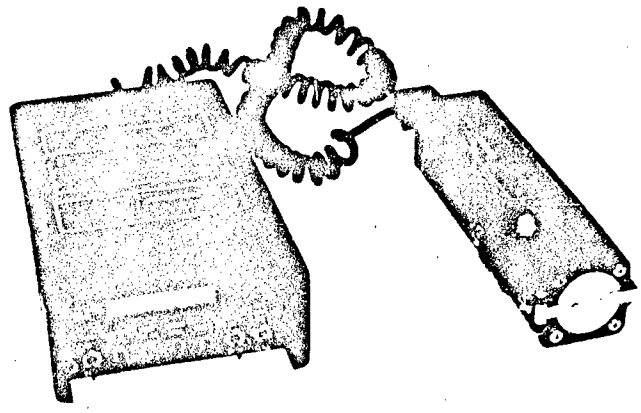
AN/PPN-19(V), TRANSPONDER SET IS A MULTIFUNCTION RADAR TRANSPONDER BEACON.

EW/RSTA DIR

AN/VDR-2, RADIAC SET

PROJECT OFFICER: Mr. Walter Swaylik, DSN 995-3155
COMM 908/544-3155

PE & LINE #: BLIN 805185



DESCRIPTION: The AN/VDR-2 as a single instrument can perform ground radiological surveys in vehicles or in the dismounted mode by individual soldiers as a hand held instrument. It can also provide a quantitative measure of radiation to decontaminate personnel, equipment and supplies. The components of the Radiac Set include the Radiacmeter IM-243, Probe DT-616, and Pouch with strap. The M1, M2, M80, M113/577, M151, M880, M998 and M1008 vehicles are designated for radiac installation by the user. Installation kits for these vehicles are Common Table of Allowances (CTA) items. Initial fielding of kits to USAREUR is for M1, 2/3, M113, M998, and M1008 vehicles. The Army Chemical Research and Development Center, APG, MD uses a specially modified AN/VDR-2 in the NBC Reconnaissance Concept Evaluation Program. This program provides for a RECON vehicle (M113 and M2) to survey contaminated areas. The AN/VDR-2 modified with a digital serial port computer interface will detect radiation levels and display them remotely on a vehicular computer. AN/VDR-2 is intended to replace, on a one-to-one basis, the Radiac Sets IM-174/PD and AN/PDR-27( ).

HISTORICAL BACKGROUND:

1976-7	-	Procurement of prototype digital radiac sets from MDH Industries, Xetex, Incorporated, and RCA.
1979	-	Procurement of Advanced Developmental model of AN/VDR-2 from Xetex, Incorporated.
1980	-	QMR revalidated; Procurement of Advanced Model Digital Radiac (breadboard) from NRC.
1982	-	Cancellation of AN/VDR-1 in favor of AN/VDR-2.
1983-4	-	Procurement of NRC Test Models and DT Testing of Xetex and NRC Radiacs.
1984	-	OT Testing of Xetex and NRC Radiacs.
1986	-	Award Production contract DAAB07-86-C-P038 to NRC.
May 87	-	Exercised Option for 2167 units.
Aug 87	-	Exercised Option for 238 units.
Nov 87	-	Production began.
Mar 88	-	Exercised Option for 3019 units.
Sep 89	-	Competitive Production contract awarded.
May 90	-	Second Program Year awarded.
Jan 91	-	Third Program Year awarded.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
FOLLOW-ON-COMPETITIVE FY92 PRODUCTION			!																!									

REQUIREMENTS DOCUMENT: Qualitative Materiel Requirement (QMR) for Tactical Survey Meter and Vehicle Radiac System AN/VDR-1 (CARDS Para 1239a(17)(U), Mar 71, revalidated by USATRADOC, Mar 80 for the AN/VDR-2.

TYPE CLASSIFICATION: Standard (NDI) approved 1985.

AN/VDR-2 PERFORMS GROUND RADIOLOGICAL SURVEYS IN VEHICLES OR BY INDIVIDUAL SOLDIERS AS A HAND HELD INSTRUMENT.

NVEOD

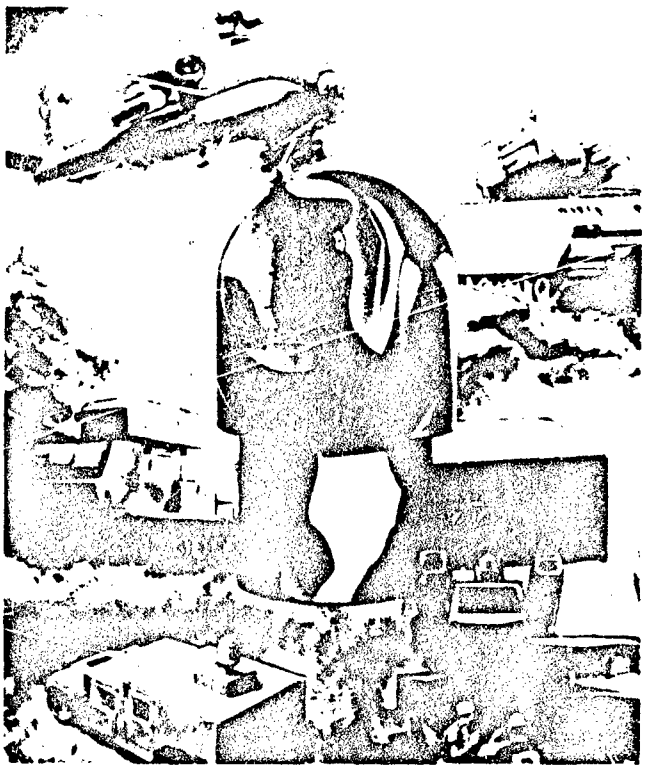
NVEOD

ADVANCED AIR DEFENSE ELECTRO-OPTICAL SENSOR (AADEOS)

PROJECT OFFICER: Mr. Todd Carr, DSN 654-3061
COMM 703/704-3061

PE & LINE #: 63710/DK70-33

DESCRIPTION: The AADEOS is an advanced ground-based Infrared Search and Track (IRST) system. It is capable of providing autonomous, 360 degree, passive acquisition and simultaneous tracking of multiple aircraft against various backgrounds at Forward Area Air Defense (FAAD) engagement ranges. The primary focus of this system is the Detection of inbound attack and pop-up helicopters in high clutter environments. The system is composed of an Infrared Receiver, a Signal and Data Processor, and Displays and Controls Module. AADEOS was selected as one of the Army's Advanced Technology Transition Demonstra tion (ATTD) programs. Potential candidate applications for AADEOS within FAAD include Avenger, a stand-alone scout for Light and Special Forces Divisions and as an adjunct to the Ground Based Sensor (GBS).



HISTORICAL BACKGROUND:

Dec 88 - AADEOS Acquisition Plan Approved.
Jan 89 - Milestone 0 Decision.
Aug 89 - Contract award to General Electric.
Nov 91 - AADEOS delivery.

EVENTS SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
PROGRAM REVIEW	I																											
TECHNICAL TEST/USER DEMONSTRATION					I																							
TEST INTEGRATION WORKING GROUP					I																							
IPR I/II							I																					

REQUIREMENTS DOCUMENT: FAAD Capstone ROC, 6 Jun 1986.

TYPE CLASSIFICATION:

AADEOS IS AN ADVANCED GROUND-BASED IRST SYSTEM CAPABLE OF PROVIDING AUTONOMOUS, 360 DEGREE, PASSIVE ACQUISITION AND SIMULTANEOUS TRACKING OF MULTIPLE AIRCRAFT FOR FAAD.

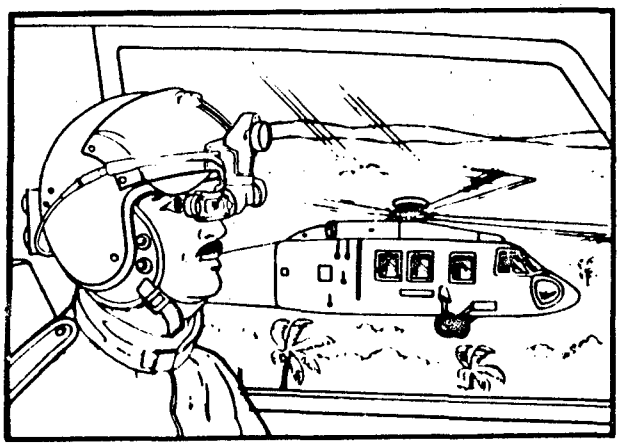
NVEOD

ADVANCED PILOT'S AID ADVANCED TECHNOLOGY DEMONSTRATION (APA ATD)

PROJECT OFFICER: Mr. Edward J. Bender, DSN 654-1316
COMM 703/704-1316

PE & LINE #: PE 63710A/DK86

DESCRIPTION: The APA ATD is directed toward satisfying expressed user needs for increased field-of-view (FOV) and improved visual acuity in an intensified night pilotage system. These performance improvements will be achieved through the utilization of novel optical technologies and advanced technologies for intensifier tube fabrication. APA ATD will additionally address expressed user needs for integrated symbology and will utilize experience gained from currently fielded intensifier systems to improve human factors. These advancements will significantly improve operational effectiveness and reduce pilot workload. APA will demonstrat technologies applicatble to a follow-on to the AN/AVS-6, Aviator's Night Vision Imaging System (ANVIS). It is intended for use in the Army's cargo, utility, and current scout aircraft.



HISTORICAL BACKGROUND:

Dec 90 - APA ATD approved by Senior Advisory Group.
Jan 92 - Technical feeder contracts awarded.

EVENTS SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
AWARD CONTRACT(S)					▮																							
PRELIMINARY DESIGN REVIEW							▮																					
BRASSBOARD SYSTEM(S)									▮																			
CRITICAL DESIGN REVIEW										▮																		
IN PROCESS REVIEW										▮																		
PROTOTYPE SYSTEM DELIVERIES											▮																	
NVEOD LAB/FIELD TESTS											▮																	
USER OPERATIONAL TESTS													▮															
TEST REPORT COMPLETE													▮															
TRANSITION DECISION														▮														

REQUIREMENTS DOCUMENT: It is intended to modify ANVIS ROC for added performance capabilities provided by APA.

TYPE CLASSIFICATION:

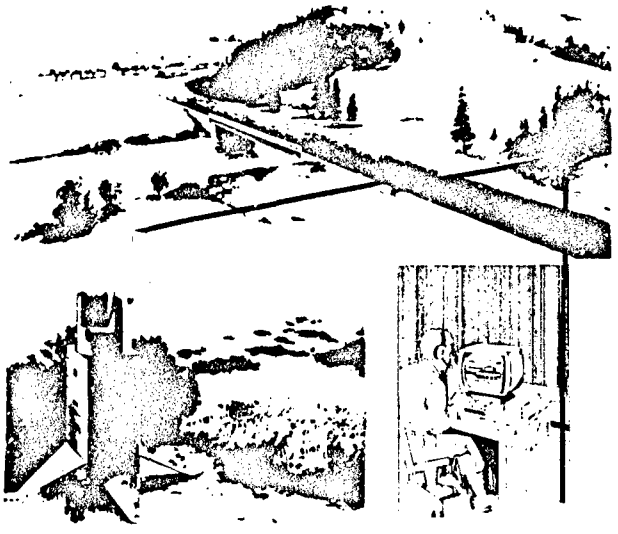
APA IS AN ADVANCED INTENSIFIER PILOTAGE SYSTEM PROVIDING KEY FOV, VISUAL ACUITY, SYMBOLOGY, AND HUMAN FACTORS TO ENHANCE OPERATIONAL EFFECTIVENESS AND REDUCE PILOT WORKLOAD.

NVEOD

DAY-NIGHT SENTRY ADVANCED TECHNOLOGY DEMONSTRATION (D-NS ATD)

PROJECT MANAGER: Mr. Jack Lillie, DSN 654-3059
COMM 703/704-3059

PE & LINE #: 63710 DK70 53



DESCRIPTION: The D-NS ATD is a program that will demonstrate multi-sensor fusion techniques which can be applied toward developing affordable and lightweight modular systems for use in remote area surveillance and reconnaissance. With the need for reduced manpower, a low-cost autonomous sensor capability is critical to fill the gap to provide remote surveillance. DNS will fuse existing low-cost portable sensors and will demonstrate the capability to provide area surveillance during limited visibility day-night operation. D-NS ATD will lead to a Technical Data Package for the Engineering and Manufacturing Development of a lightweight fully automated D-NS system.

HISTORICAL BACKGROUND:

Nov 90 - Day-Night Sentry approved as an ATD by the Senior Advisory Group.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
REQUEST FOR PROPOSALS					I																							
CONTRACT AWARD							I																					
CONTRACT DATA REQUIREMENTS									I																			
DEMONSTRATION															I													

REQUIREMENTS DOCUMENT: Technical Development Plan, HQ TRADOC.

TYPE CLASSIFICATION:

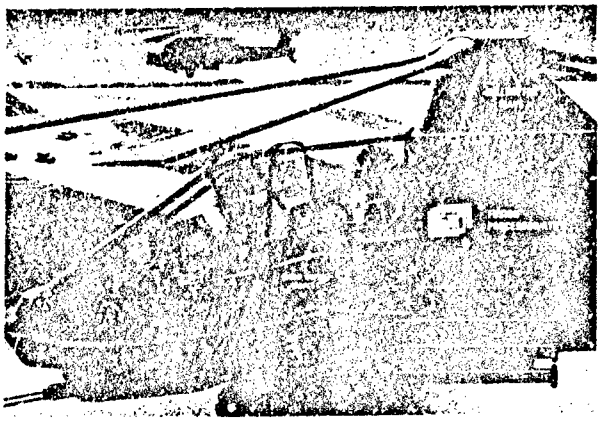
D-NS ATD IS DIRECTED TOWARDS SATISFYING THE USER NEED TO AUTONOMOUSLY ACQUIRE TARGETS IN REMOTE AREAS.

NVEOD

MULTI-SENSOR ACQUISITION AND TARGETING FOR AIRBORNE SYSTEMS (MSAT-AIR)

PROJECT OFFICER: Dr. Donald Reago, DSN 654-1301
COMM 703/704-1301

PE & LINE #: 63710 DK70

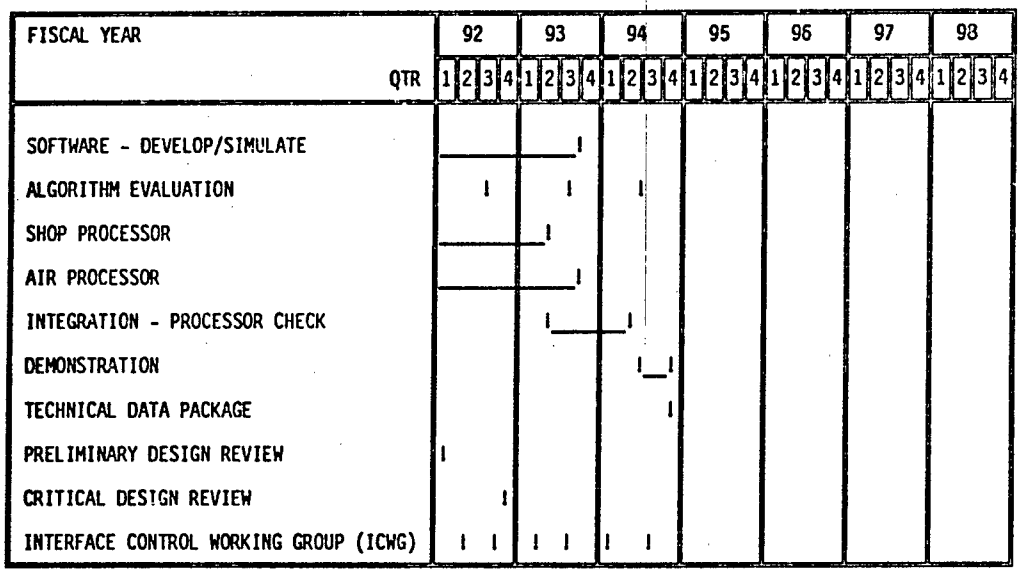


DESCRIPTION: The MSAT-AIR demonstrates multi-sensor fusion in an operational environment against tactical targets utilizing second generation Forward Looking Infrared (FLIR) and Millimeter Wave (MMW) radar sensors. This demonstration will result in a Technical Data Package for an operations effectiveness of multi-sensor target acquisition for the Light Helicopter (LH) and Apache programs. This effort is directed toward satisfying LH needs to transition from Aided Target Detection and Classification (ATD/C) to Aided Target Recognition (ATR) at longer ranges, over larger search sectors, and within shorter time lines. The potential also exists to explore the application of the technology demonstrated from MSAT-AIR fusion processing to ground combat vehicles.

HISTORICAL BACKGROUND:

1986-89 - Multi-sensor Fusion Demonstration.
1988-90 - Multi-sensor Feature Level Fusion Program.
1990-91 - AAWWS and Infrared Data Evaluation Program.

EVENT SCHEDULE:



REQUIREMENTS DOCUMENT: Generic Technology Prototype. Future Army requirements are addressed in LH ROC.

TYPE CLASSIFICATION:

MSAT-AIR PROVIDES MULTI-SENSOR AIDED TARGET RECOGNITION WITH FEWER FALSE ALARMS AT LONGER RANGES, OVER LARGER SEARCH SECTORS, AND WITHIN SHORTER TIME LINES.

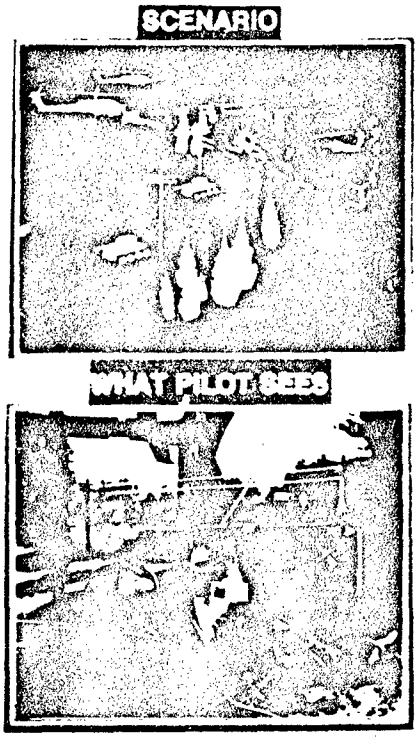
NVEOD

OBSTACLE AVOIDANCE SYSTEM (OASYS)

PROJECT OFFICER: Mr. Robert Branigan, 654-1373
COMM 703/704-1373

PE & LINE #: 63710 DK86

DESCRIPTION: The OASYS is an active laser scanning system for detection and warning of obstacles located within the flight path of a helicopter. Obstacles include wires, trees, towers, antennas, and terrain features. The system scans the volume of space in front of the helicopter and then processes the laser returns to determine the presence and location of obstacles. Hazard warnings a re presented to the pilot on his pilotage display.



HISTORICAL BACKGROUND:

1988-89 - Flight Simulation Study
1989 - Non-Developmental System Evaluation.
1990 - OASYS Development contract awarded.
1991 - Flight simulation to study man-machine-interface.
1992 - Contract to develop aiternative laser radar source awarded.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
OASYS DEVELOPMENT																												
USER FLIGHT TEST																												
ENGINEERING & MANUFACTING DEVELOPMENT																												

REQUIREMENTS DOCUMENT: Draft O&O Plan, Feb 89.

TYPE CLASSIFICATION:

OASYS IS A WARNING SYSTEM TO ALERT HELICOPTER PILOT OF OBSTACLES WITHIN THE FLIGHT PATH.

SED

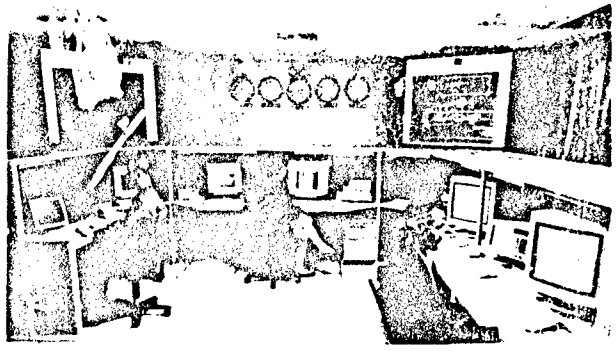
SED

ARMY INTEROPERABILITY NETWORK (AIN)

PROJECT OFFICER: Dr. Myron Holinko, DSN 992-8238
COMM 908/532-8288

PE & LINE #: 64805 097

DESCRIPTION: The AIN is the Army's nationwide distributed network for supporting software and interoperability of Army systems throughout their life-cycle. AIN's Central Control at Fort Monmouth, New Jersey interconnects Army Tactical Command and Control System Life Cycle Software Engineering Center (LCSEC) sites, the tactical communications LCSEC site, other Army test agencies/sites, joint services/agencies tactical C3I systems/testbed, and combined allied systems/testbeds (future). AIN provides the capability to develop, test, and maintain the software and interoperability of C3I systems from remote locations, by affording access to the actual interfacing C3I systems. AIN is a means of ensuring C3I systems work before and after fielding through proper software, integration and interoperability testing. It is available for use by developers, testers, evaluators, and maintainers of Army C3I systems. The AIN is operational and successfully serving a growing number of users.



HISTORICAL BACKGROUND:

Mar 84 - ACCS Systems Engineering Implementation Plan (SEIP) was approved.
Aug 87 - Conduct Demonstration of JINTACCS Automated Message Processing System (JAMPS) interoperability with soldier-operators from TRADOC; conducted one week JINTACC training of 513th MI Det using AIN facility.
Sep 87 - EJSE contract award to Analysis and Computer System Incorporated (ACSI).
Jan 88 - System Requirements Review (SRR) and System Design Review (SDR) for the Enhanced JTIDS System Exerciser (EJSE) - subsystem for TADIL J testing.
Nov 88 - Established connection to satellite facilities.
Sep 89 - Awarded System Integration Support contract to ARINC.
May 90 - Block 0 Architecture completed.
Jun 90 - Block 0 Design completed.
Nov 90 - Established connection to satellite facilities.
Apr 91 - AIN Central Control operations began; First customer test support using T1 (1.544Mbps) communications.
Jun 91 - MSE connectivity established.
Jul 91 - MSE X.25 Protocol testing capability established.
Sep 91 - Transportable Remote Site System developed.
Nov 91 - Block 0 Remote Sites installations completed; TACSAT interface capability established.
Feb 92 - SINCGARS Radio interface capability established.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4												
INTEROPERABILITY DEVELOPMENT & TEST SUPPORT																												
ADD REQUIRED NETWORK SITES			▼																									
BLOCK-1: FINILIZE DESIGN AND PLANS	▼																											
SUBSYSTEM DESIGN	▼																											
BUILD					▼																							

REQUIREMENTS DOCUMENT: HQ AMC approved ACCS CMIT Plan, Jun 86; System Engineering Implementation Plan, Feb 84; JINTACCS Army Management Plan (JAMP), Mar 86. ATCCS Test an Evaluation Master Plan (Revision 1), Jan 88. O&O Plan, Apr 90; Statement of Requirement, Dec 90.

TYPE CLASSIFICATION:

ARMY INTEROPERABILITY NETWORK PROVIDES THE TOOLS TO EFFECTIVELY CLOSE THE GAP BETWEEN THE DEVELOPER, TESTER, TRAINER, AND IMPLEMENTOR OF ARMY C3I SYSTEMS AND THE METHODOLOGY FOR CREATING AND MAINTAINING INTEROPERABILITY AMONG THEM.

SSD

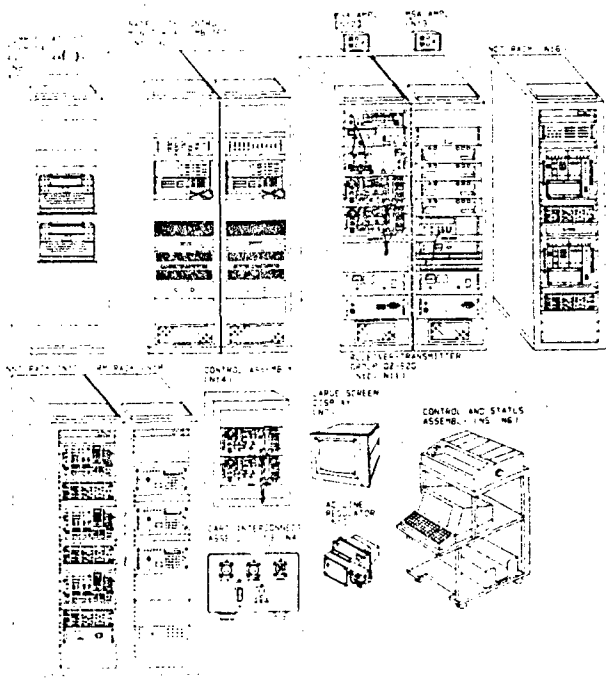
SSD

AN/FSQ-124, DEFENSE SATELLITE COMMUNICATIONS SYSTEM GROUND MOBILE FORCES CONTROL LINK (DGCL)

TECHNICAL PROJECT LEADER: Mr. Edward Hrycayk, DSN 992-3169
COMM 908/532-3169

PE & LINE #: K49500

DESCRIPTION: The AN/FSQ-124, DGCL is a control system that plans, controls, and monitors a Ground Mobile Forces Super High Frequency Communications Network operating over a Defense Satellite Communications System (DSCS) Satellite.



HISTORICAL BACKGROUND:

Sep 81 - NDI IPR approval for production.
Jun 82 - Production contract award.
Aug 84 - First Artical Test.
Apr 85 - Initial Operational Capability.
May 92 - Requirement for AN/FSQ-124A established by Joint Staff.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
PRODUCTION CONTRACT					I																							

REQUIREMENTS DOCUMENT: DSCS Program Plan FY82-86.

TYPE CLASSIFICATION: Standard approved Sep 81.

DGCL IS A SET OF EQUIPMENT FOR MANAGING THE GMF SATELLITE COMMUNICATIONS SUB-NETWORK. THE SYSTEM INCLUDES EQUIPMENT FOR COMMUNICATING DIRECTIVES AND MEASURING PERFORMANCE.

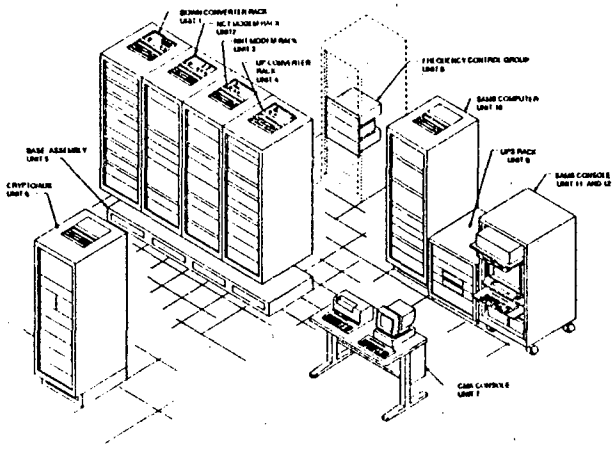
SSD

AN/FSQ-173/174 NABS/SKYNET SATELLITE COMMUNICATIONS CONTROL CENTRAL (SCCC)

PROJECT LEADER: Mr. Edward Hryczyk, DSN 992-3169
COMM 908/532-3169

PE & LINE #: K49500

DESCRIPTION: The NATO Air Base Satcom (NABS) and SKYNET SCCCs are composed primarily of equipment common to the AN/FSQ-124 SCCC and are designed to control Ground Mobile Forces (GMF) type terminals. The NABS-SCCC (AN/FSQ-173) will be installed at, and operate within NATO SATCOM facilities to control the NABS network. The SKYNET-SCCC, AN/FSQ-174 will be installed at and operate within a UK Satellite Communications Control facility and will control a GMF Satelliite Communications Network operating on the SKYNET Satellite.



HISTORICAL BACKGROUND:

Sep 87 - NABS/SKYNET SCCC contract award.
Sep 88 - ECP-001 awarded (ECP added a VAX based SAMS and a Control Monitor and Alarm (CMA) system in NABS).
Sep 89 - ECP-002 awarded (ECP modified SAMS AJ re-host design).

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
PRODUCTION CONTRACT			▼																									
INSTALLATION OF NABS, KESTER, BELGIUM	▼																											
INSTALLATION OF NABS, FOLLY LAKE, NOVA SCOTIA	▼																											
INSTALLATION OF SKYNET, RAF OAKHANGER, UK					▼																							

REQUIREMENTS DOCUMENT: DSCS Program Plan FY 82-86.

TYPE CLASSIFICATION: Standard approved Sep 81.

NABS/SKYNET SCCC WILL PROVIDE OPERATIONAL CONTROL OF A TRANSPORTABLE SATELLITE COMMUNICATION SUB-NETWORK OPERATING ON THE NATO SATELLITE FOR SUPPORT OF NATO AIRBASES AND UNDER THE DIRECTION OF THE NATO SATCOM CONTROL CENTER.

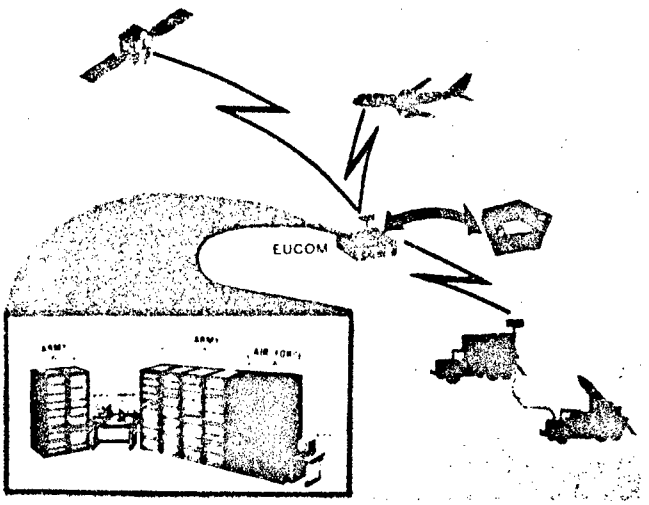
SSD

AN/GSC-40, COMBINED GROUND COMMAND POST TERMINAL

PROJECT LEADER: Mr. Nathan Smith, DSN 992-2128
COMM 908/532-2128

PE & LINE #: 738017Q2

DESCRIPTION: The Ultra High Frequency (UHF) Special Communication System (SCS) ground segment consists of two satellite communications terminals: AN/GSC-40 Combined Ground Command Post Terminal; and AN/MSC-64 Force Terminal. AN/GSC-40 is a non-transportable rack configuration designed for installation into fixed command centers. It will operate the SCS Force Terminal nets using from one to three kilohertz AFSATCOM channels depending on the number of AN/MSC-64s in the net. The system will have limited antijam (AJ) capability and on-line encryption.



HISTORICAL BACKGROUND:

Sep 80 - Production MOU signed with Naval Ocean Systems Center (NOSC).
Mar 81 - Army directed to provide for two terminals to communicate simultaneously through two satellites (dual satellite access).
Apr 81 - First Article Test completed.
Sep 81 - MOU modified to include dual access.
Oct 82 - Installation of first two terminals.
Apr 83 - First Unit Equipped (Europe).
May 87 - Initial Operational Capability (IOC) for first seven terminals.
Dec 86 - Contract award for AN/UYK-42(V)3 Message Processing Units.
May 87 - IOC for NAVEUR.
Dec 87 - Remote Operations Capability fully operational.
Sep 89 - Firm requirements received to install SCTR in AN/GSC-40.
Nov 90 - Transitioned to Level II Management.

REQUIREMENTS DOCUMENT: ROC, Jan 77.

TYPE CLASSIFICATION: Standard approved May 83.

AN/GSC-40 IS A SATELLITE COMMUNICATIONS CONTROL TERMINAL FOR THE UHF SPECIAL COMMUNICATION SYSTEM WHICH HAS LIMITED ANTI-JAM CAPABILITY AND ON-LINE ENCRYPTION. THE AN/GSC-40 IS THE COMMAND POST TERMINAL FOR NETWORKS MADE UP OF AN/MSC-64s AND AN/GSC-40s.

SSD

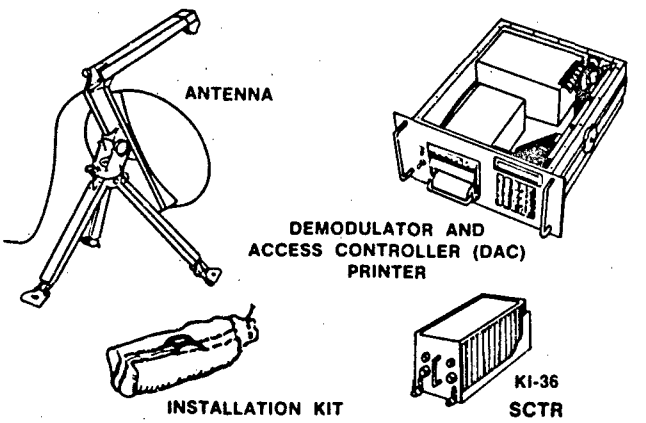
AN/GSR-42, SINGLE CHANNEL TRANSPONDER RECEIVING SET (SCTRS)

PROJECT LEADER: Mr. Nathan Smith, DSN 992-2128
COMM 908/532-2128

PE & LINE #: MC

DESCRIPTION: The SCTRS is a Product Improvement to the to the AN/MSC-64 and AN/GSC-40 Ultra High Frequency (UHF) Satellite Communications Terminals that will permit reception of Emergency Action Messages (EAMs) in the Super High Frequency (SHF) Band. The SCTRS consists of a 3-foot parabolic antenna, demodulator and printer. It is a special purpose receiver. The SCTRS receives from the Single Channel Transponder on DSCS III Satellites.

SCTR COMPONENTS



HISTORICAL BACKGROUND:

Feb 87 - NDI contract award to MA/COM Government Systems, Incorporated.
Mar 89 - Awarded printer Engineering Change Proposal.
Nov 90 - Transitioned to Level II Management.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
FIRST UNIT EQUIPPED				I																								
USER DEMONSTRATION				I																								
PRODUCTION CONTRACT					I																							

REQUIREMENTS DOCUMENT: ROC, Aug 74.

TYPE CLASSIFICATION: Standard approved Jun 77.

SCTRS RECEIVE EAMs FROM THE SINGLE CHANNEL TRANSPONDER ON DSCS III SATELLITES.

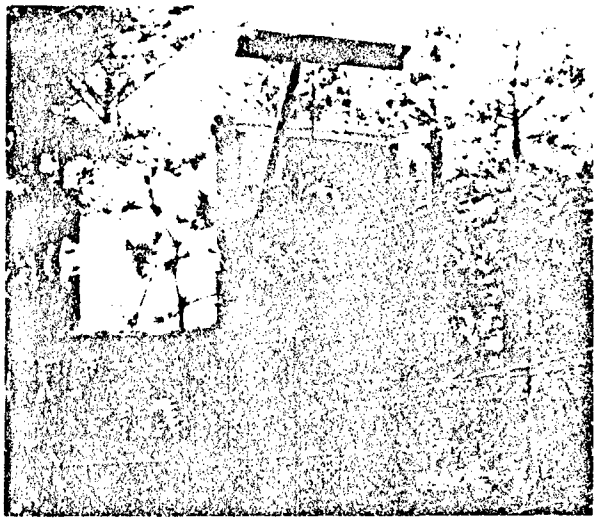
SSD

AN/MSC-64, SINGLE CHANNEL UHF SPECIAL COMMUNICATIONS SYSTEM-FORCE TERMINAL

PROJECT LEADER: Mr. Nathan Smith, DSN 992-2128
COMM 908/532-2128

PE & LINE #: 331.42 & E7090

DESCRIPTION: The AN/MSC-64 is an Ultra High Frequency (UHF) Satellite Communication System which receives Emergency Action Messages (EAMs) transmitted from the AN/GSC-40. There are three versions: AN/MSC-64(V)1 (Mobile Command Post); AN/MSC-64(V)2; and AN/MSC-64(V)3 (devanized). Secure record traffic communication is provided by all terminal types. The system makes use of satellites under AFSATCOM and Navy Fleet Satellite programs. AN/MSC-64 terminals (21 Air Force, 12 Army, 2 Navy) are being equipped with a Single Channel Transponder Receiver (SCTR) to provide a secondary receive only capability at certain critical sites to insure reception of critical messages. The SCTR is funded as the Enhanced FAN PIP. A second PIP has been identified by EUCOM ROC 28-80 for an electronic interconnect between the Regency Net and FAN Terminals.



HISTORICAL BACKGROUND:

Jan 74 - NDI decision.
Sep 78 - Production contract awarded for AN/MSC-64 (all deliveries).
Feb 81 - Initial Operational Capacity/First Unit Equipped (IOC/FUE).
Jan 86 - Last operational terminals released to users.
Feb 87 - Production contract for SCTR PIP was awarded to MA/COM Government Systems, Incorporated.
Sep 89 - Firm requirement received to install SCTR in AN/MSC-64(V).
Nov 90 - Transitioned to C2S2 Level II Management.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
FUE SCTR				I																								
USER DEMONSTRATION				I																								

REQUIREMENTS DOCUMENT: Original ROC 8-74.

TYPE CLASSIFICATION: Standard approved Jun 77.

AN/MSC-64 IS A UHF SATELLITE COMMUNICATIONS SYSTEM WHICH RECEIVES EAMs TRANSMITTED FROM THE AN/GSC-40.

SSD

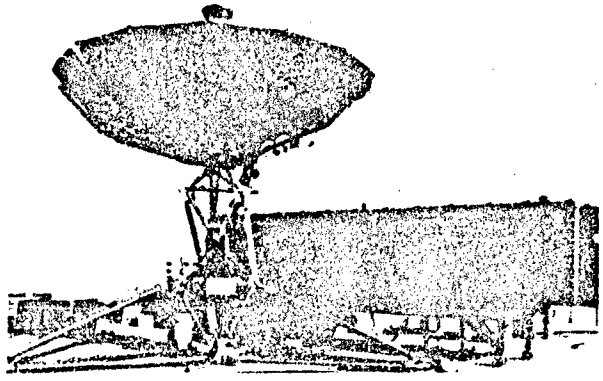
AN/MSQ-114, SATELLITE COMMUNICATIONS CONTROL TERMINAL

TECHNICAL LEADER: Mr. Arnold Pearson, DSN 992-3169
COMM 908/532-3169

PRODUCT LEADER: Mr. Edward Hryczyk, DSN 992-3169
COMM 908/532-3169

PE & LINE #: K49500

DESCRIPTION: The AN/MSQ-114 is part of the Ground Mobile Forces (GMF) Satellite Communications Control System which is used to manage the satellite communication capability assigned to the satellite terminals operating within the tactical network. The primary function of the AN/MSQ-114 is to continuously monitor satellite communications transmissions for the purpose of assuring that all network terminals are operating within the proper limits of frequency, power output and channel capacity. AN/MSQ-114 will also reconfigure the network in the event of jamming, satellite degradation or other disruptions of the satellite links. AN/MSQ-114 can control up to 50 GMF Satellite Communications terminals. The Satellite Automatic Monitoring System (SAMS) is a computer based system used for the management of a GMF Satellite Communications Network (SCN). The network is being "upgraded" to use Spread Spectrum Multiple Access (SSMA) carriers in addition to the frequency division multiple access. The Anti-Jam (AJ) modem has been retrofitted into the AN/MSQ-114 van #4 at Tobyhanna. Van #1 was exchanged for Van #4. The AJ modem provides the SSMA carrier capability to the network.



HISTORICAL BACKGROUND:

Sep 78 - Production contract for four control terminals awarded to RCA Corporation.
Sep 79 - Production contract for Satellite Automatic Monitoring Systems (SAMS) awarded to Ford Aerospace Communications Corporation (FACC).
Feb 80 - First delivery of terminals.
Jun 82 - Last delivery of terminals.
Dec 82 - Follow-On Evaluation.
Dec 86 - Contract awarded to FACC for SAMS Software Upgrade at a cost of $5.7M.
Jul 87 - SAMS AJ Upgrade Preliminary Implementation Review.
Nov 87 - SAMS AJ Update Critical Implementation Review.
Mar 89 - Van #4 modification completed.
Apr 91 - Van #1 was exchanged for Van #4.

EVENT SCHEDULE: Decommissioning of the AN/MSQ-114 and Integration Equipment into Defense Satellite Communications System (DSCS) Operations Center is tentatively planned for FY93-43.

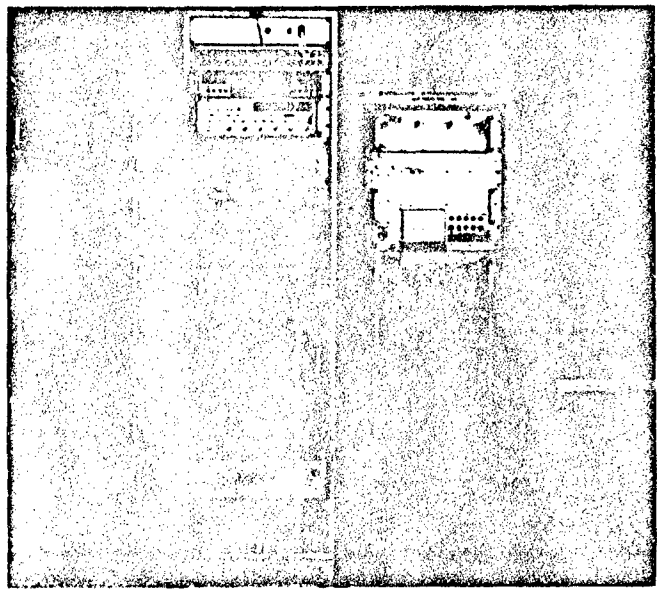
REQUIREMENTS DOCUMENT: TACSATCOM Qualitative Materiel Requirement (QMR), 12 Nov 71.

TYPE CLASSIFICATION: Standard approved Apr 77.

AN/MSQ-114 SATELLITE COMMUNICATIONS MONITORING AND CONTROL CENTRAL PROVIDES REALTIME COMMAND AND CONTROL FOR UP TO 50 GMF SUPER HIGH FREQUENCY SATELLITE COMMUNICATIONS TERMINALS.

SSD

AN/USC-28(V), SATELLITE COMMUNICATIONS SET



PROJECT LEADER: Mr. Brian Cilli, DSN 992-2538
COMM 908/532-2538

PE & LINE #: BA8300

DESCRIPTION: The AN/USC-28(V) (Ground) is an advanced spread spectrum modulation system which operates with Defense Satellite Communications System (DSCS) satellite communications terminals to provide jamming resistant SATCOM network control and digital user communications. AN/USC-28(V) can be configured to accommodate up to 15 user data channels. The equipment interfaces with the Digital Communications Satellite Subsystem (DCSS) in fixed terminals and is also installed in the transportable AN/GSC-49(V) terminals. A special airborne version of the AN/USC-28(V) is installed in the Super High Frequency (SHF) terminal aboard the National Emergency Airborne Command Post (NEACP), the E-4B. The equipment interoperates with the Navy shipboard OM-55 Spread Spectrum equipment. The AN/USC-28(V), by virtue of the jamming protection it affords, insures the military utility of the DSCS. The AN/USC-28(V) modem was modified to mitigate the scintillation effects which would be caused by high altitude nuclear blast. The modification has backward capability so that the AN/USC-28(V) can operate in the normal mode or in the mitigated mode.

HISTORICAL BACKGROUND:

Jun 78 - IPR/Type Classification approval.
Sep 78 - Production contract award.
Jul 81 - Production award for JRSC.
Nov 81 - First Unit Equipped.
Apr 82 - Initial Operational Capability.
Jun 84 - Follow-on Production contract awarded.
Feb 87 - Mitigation modification award.
Sep 87 - Awarded Depot Repair Service contract.
Dec 87 - Contractor completed last delivery of this system.
Feb 87 - Mitigation modification award.
May 90 - Mitigation/NRM Hybrid Retrofit modification award.
Nov 90 - Transitioned to Level II Management.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
PRODUCTION CONTRACT	▬	▬	▬	I																								

REQUIREMENTS DOCUMENT: DSCS Program Plan as approved by Assistant Secretary of Defense.

TYPE CLASSIFICATION: Standard approved Jun 78 .

AN/USC-28(V) PROVIDES AN ELECTRONIC COUNTER COUNTER MEASURE (ECCM) CAPABILITY FOR STRATEGIC SATCOM SYSTEMS.

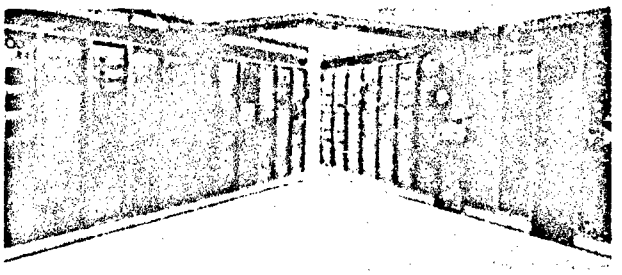
SSD

DIGITAL COMMUNICATIONS SATELLITE SUBSYSTEM (DCSS)

PROJECT LEADER: Ms. Cathy Young, DSN 992-3232
COMM 908/532-3232

PE & LINE #: BB8501

DESCRIPTION: The DCSS encompasses the modulation, multiplex, coding and processing equipment necessary to assemble various types of user data into a digital form suitable for transmission over a Satellite Link, in both the protected and unprotected modes. The protected mode employs spread spectrum multiple access techniques utilizing the AN/USC-28 Modem. The unprotected mode employs frequency division multiple access techniques utilizing the OM-73 Modem. In the unprotected mode, the DCSS can feed the AN/FSC-78, AN/GSC-52, or AN/GSC-39 Terminal with up to 90 megabits of user data. DCSS is deployed as part of the Defense Satellite Communications System (DSCS) and essentially provides a unique wide band digital transmission capability. DCSS is required at each Earth Terminal Complex withing the DSCS Network in either a building or a van configuration, and its modular design permits unique configurations to meet each DSCS site's specific communication requirement.



HISTORICAL BACKGROUND:

Jul 74 - MOU with Tobyhanna Army Depot (TOAD).
Jun 77 - Operational Test II.
Jul 78 - First Unit Equipped.
Jan 80 - Second fielding completed.
Jul 89 - Transition to Level II management.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
PRODUCTION DELIVERIES																												

REQUIREMENTS DOCUMENT: DISA DSCS FY92-97 Program Plan.

TYPE CLASSIFICATION:

DCSS PROVIDES DIGITAL EQUIPMENT CAPABILITIES FOR DSCS TERMINAL SITES.

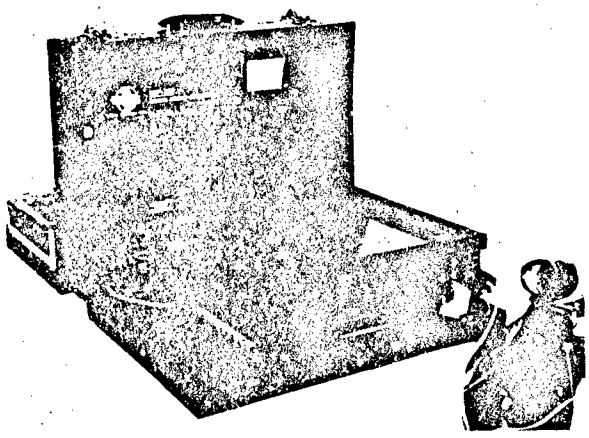
SOF

SOF

AN/GRC-233, SPECIAL OPERATIONS COMMUNICATIONS ASSEMBLAGE (SOCA V.1)

PROJECT OFFICER: Mr. Jerry Mohr, DSN 995-2391
COMM 908/544-2391

PE & LINE #: D474



DESCRIPTION: The SOCA V.1 is a secure voice, data and compressed video communications system. The Digital Message Processor (DMP-122) provides two capabilities to generate, display, store, transmit and receive data via High Frequency (HF) and Ultra High Frequency (UHF) communications systems. The HF Communications Suite (HF-5000) provides the system's HF transmit and receive functions. The UHF Communications Suite (LST-5C) provides the capability to transmit and receive information via a SATCOM link.

HISTORICAL BACKGROUND:

Feb 87 - DA directed Limited Procurement-Urgent.
Sep 89 - Contract award.
2QFY91 - Emergency release of two SOCAs to support Desert Shield.

EVENTS SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
TRAINING	I																											
DELIVERY	I				I																							
MATERIEL RELEASE		I																										
FIRST UNIT EQUIPPED			I																									

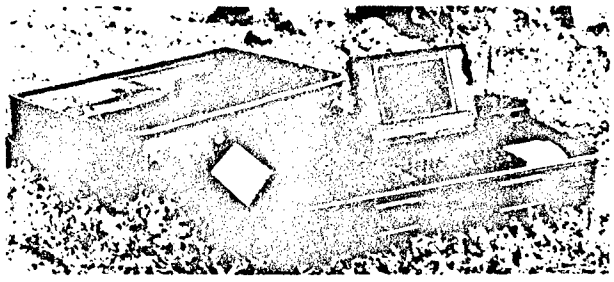
REQUIREMENTS DOCUMENT: Operational Needs Statement, Nov 88.

TYPE CLASSIFICATION: Limited Procurement-Urgent approved Feb 87.

AN/GRC-233 CONSISTS OF TRANSIT CASE DEPLOYABLE COMMUNICATIONS ASSEMBLAGES TO PROVIDE NON-SI INTELLIGENCE, C2, ADMINISTRATION, AND LOGISTICS TRAFFIC TO THE SPECIAL OPERATIONS FORCES (SOF) COMMUNITY.

SOF

AN/GSC-59A, LIGHTWEIGHT DEPLOYABLE COMMUNCATIONS (LDC)



PROJECT OFFICER: Mr. Edward Erskin, DSN 995-2246
COMM 908/544-2246

PE & LINE #: D474

DESCRIPTION: The LDC is a suitcase deployable digital communications system modular in design. It provides message processing and staff automation support above team level, using organic transmission equipment. The LDC configuration consists of an intelligent computer workstation, radio and wireline communications interface, and a letter/graphics printer.

HISTORICAL BACKGROUND:

Mar 89 - Limited Procurement-Urgent authorization.
1QFY91 - Limited Procurement-Urgent extension granted; Production contract awarded.

EVENTS SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
PRODUCTION																												
TECHNICAL TEST																												
FIRST UNIT EQUIPPED																												
MATERIEL RELEASE																												

REQUIREMENTS DOCUMENT: Limited Procurement-Urgent, 22 Mar 89.

TYPE CLASSIFICATION: Limited Procurement-Urgent, 22 Mar 89; extended 1QFY91 until withdrawal or obsolescence.

LDC IS A RUGGEDIZED, FIELD GRADE PORTABLE COMMUNICATIONS SYSTEM FOR USE BY THE SPECIAL OPERATIONS FORCES IN TACTICAL GROUND ACTIONS.

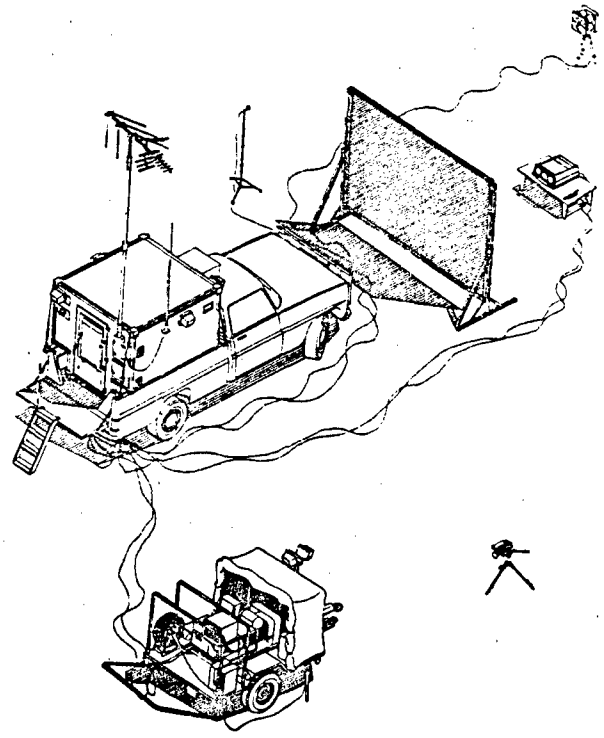
SOF

AN/MSQ-85B, MOBILE AUDIO-VISUAL SYSTEM

PROJECT OFFICER: Mr. Ignatius Phillips, DSN 995-4327
COMM 908/544-4327

PE & LINE #: D476

DESCRIPTION: The AN/MSQ-85B is a mobile visual dissemination and collection system housed in an S-250 Shelter, and mounted on an M-1028 Commercial Utility Cargo Vehicle (CUCV). A second M-1008 CUCV is used to tow the trailer mounted generator, and provide cargo space for mission equipment that cannot be transported in the shelter. Primary power source is a PU-751/M 5 kilowatt trailer mounted diesel generator. It can also be operated on 120/240 Volts AC, single phase 60 hertz commercial power. The system is used to provide audio-visual programs for presentation to audiences in remote areas. The system can receive television, and AM/FM/SW radio programs for editing, storage, and local presentation by projection television, still picture and loudspeaker. The audio-visual mission equipment is Non-Developmental Item (NDI) and commercial off-the-shelf (COTS), and includes: television monitors and receivers, video and audio cassette recorders, video camera and projector, 35mm camera and film processor, 35mm projector, AM/FM/SW receiver, and the AN/PIH-1 Public Address Set.



HISTORICAL BACKGROUND:

3QFY90 - Instructor Key Personnel (IKP) training.
Aug-Nov 90 - Emergency Materiel Release of four systems for Desert Storm.
Aug 92 - CECOM conditional Materiel Release.

EVENTS SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
MATERIEL RELEASE			!																									
PRODUCTION					!																							
FIRST UNIT EQUIPPED (FUE)					!																							

REQUIREMENTS DOCUMENT: Limited Procurement-Urgent, May 90.

TYPE CLASSIFICATION: Limited Procurement-Urgent approved May 90.

AN/MSQ-85B IS A MOBILE AUDIO-VISUAL INFORMATION COLLECTION AND DISSEMINATION SYSTEM USED FOR PSYCHOLOGICAL PURPOSES.

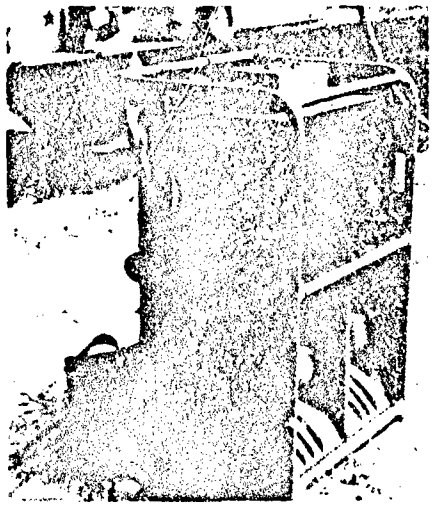
SOF

AN/PIH-1, PUBLIC ADDRESS SET

PROJECT MANAGER: Mr. Marvin Kass, DSN 992-0398
COMM 908-532-0398

PE & LINE #: 0476

DESCRIPTION: The AN/PIH-1 is a one-man portable audio broadcast system to be used for psychological operations. It will provide high quality audio deception and voice dissemination by friendly indigenous personnel and operational forces throughout the Psyop target area. It will reproduce sound in a realistic manner over a 1000 meter minimum range to support Psyops. It will be lightweight, capable of operating off standard military batteries and vehicle power 24 volts DC. It will weigh no more than 30 pounds and be durable enough to be parachuted in with the operator it will support Psyops campaigns at the tactical level.



HISTORICAL BACKGROUND:

Oct 90 - Letter contract award.
Feb 91 - All 300 units delivered to various Psyop units; Emergency Materiel Release for 300 units fielded.
Jul 92 - Depot Level Maintenance contract awarded to Government Owned Contractor Operated (GOCO)/Lexington Blue Grass Army Depot (LABD).

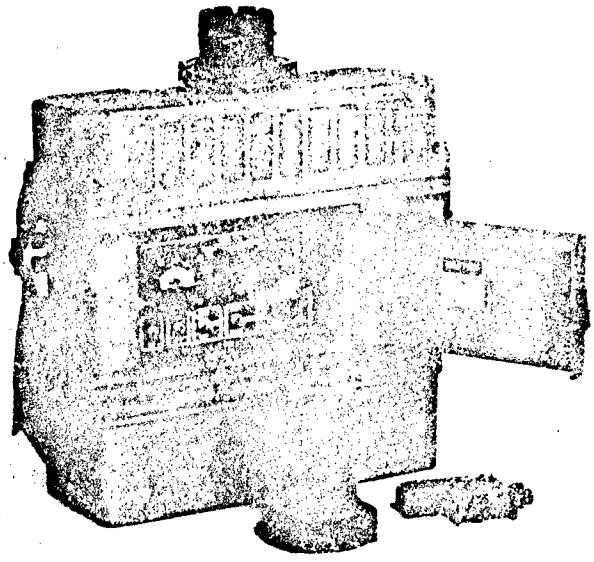
REQUIREMENTS DOCUMENT: Limited Procurement-Urgent, Mar 90.

TYPE CLASSIFICATION: Limited Procurement-Urgent approved, Mar 90.

AN/PIH-1 IS A ONE-MAN PORTABLE AUDIO BROADCAST SYSTEM MOUNTED ON A BACKPACK TO ALLOW LOUDSPEAKER MISSIONS IN REMOTE AREAS WITH HIGH MOBILITY.

SOF

AN/PPN-19, RADAR TRANSPONDER



PROJECT OFFICER: Mr. Kevin Lee, DSN 995-2301
COMM 908/544-2301

PE & LINE #: D475

DESCRIPTION: The AN/PPN-19 is a device that responds to an airborne radar interrogation, and provides to the aircraft tne beacon ID and position. It is used for en route navigation, drop zone location, air strip marking and ordnance delivery.

HISTORICAL BACKGROUND:

Sep 89 - Contract award of 106 Transponders.
Sep 91 - Option award of 66 Transponders.
1QFY92 - First Article Test and report accepted.

EVENTS SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
PRODUCTION CONTRACT					▼																							
MATERIEL RELEASE					▼																							
FIRST UNIT EQUIPPED (CURRENT BUY)							▼																					

REQUIREMENTS DOCUMENT: Letter Requirement, 28 Sep 79.

TYPE CLASSIFICATION: Standard approved 1 Jun 84.

AN/PPN-19 IS A DEVICE THAT RESPONDS TO AN AIRBORNE RADAR INTERROGATION, AND PROVIDES TO THE AIRCRAFT THE BEACON ID AND POSITION.

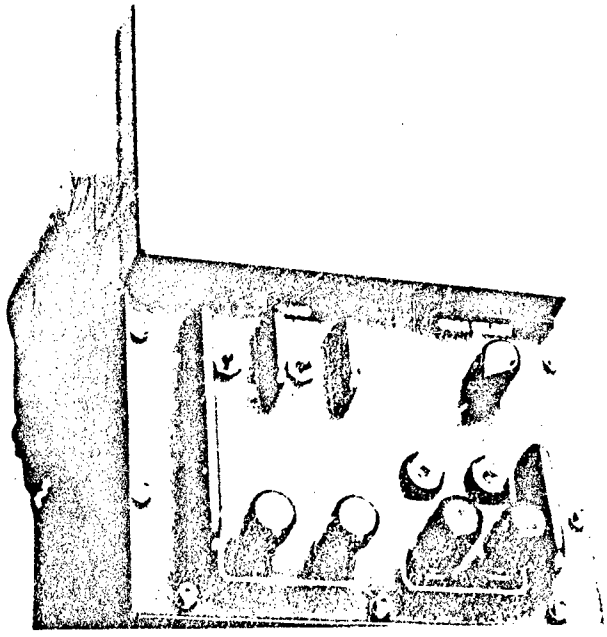
SOF

AN/PPN-20, MINIATURE MULTIBAND BEACON (MMB)
AN/PPM-4, TEST SET

PROJECT MANAGER: Mr. Kevin Lee, DSN 995-2301
COMM 908-544-2301

PE & LINE #:

DESCRIPTION: The AN/PPN-20 will replace the AN/PPN-19. AN/PPN-20 is a self contained lightweight man-portable ground emplacement radar transponder designed for use by the Special Operations Forces. AN/PPN-20 will be a third of the size and weight of the AN/PPN-19. It also included a dedicated Test Set, AN/PPM-4.



HISTORICAL BACKGROUND:

Aug 91 - Prototype Development contract award.

EVENTS SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
PROTOTYPE DEVELOPMENT	!						!																					
TECHNICAL TEST AND CUSTOMER TEST					!		!																					
MILESTONE II IPR								!																				
LOW RATE INITIAL PRODUCTION											!								!									

REQUIREMENTS DOCUMENT: ROC, Nov 90.

TYPE CLASSIFICATION:

AN/PPN-20 IS A SELF CONTAINED LIGHTWEIGHT MAN-PORTABLE GROUND REPLACEMENT RADAR TRANSPONDER DESIGNED FOR USE BY THE SPECIAL OPERATIONS FORCES.

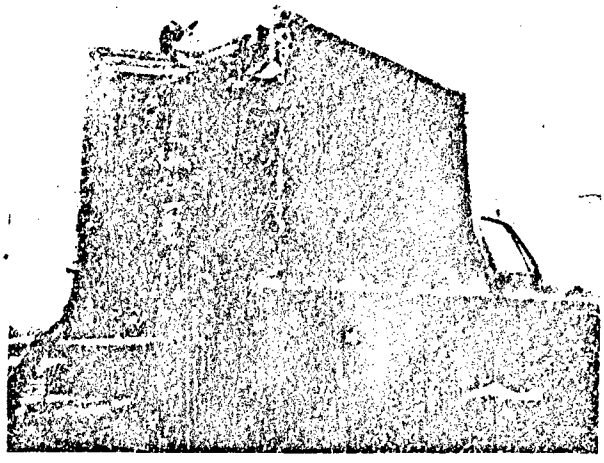
SOF

AN/TSC-122, COMMUNICATIONS CENTRAL

PROJECT OFFICER: Mr. Robert Yee, DSN 995-2279
COMM 908/544-2279

PE & LINE #: D474

DESCRIPTION: The AN/TSC-122 will provide the Special Forces with multichannel radio access to the Defense Communications System (DCS) (AUTODIN and DSN) and provide intra-theater communications between operating bases. The assemblage will consist of non-developmental components configured in an S-250 Shelter or equivalent, which will be mounted on a customer-owned M-1028 CUCV or M-1097 High Mobility Multi-purpose Wheeled Vehicle (HMMWV). The system will communicate with the current family of DCS Communications Centrals, provide single-channel High Frequency (HF) data communications with the present standard radio teletypewriter sets, AN/GRC-122 and AN/GRC-142, and single-channel voice communications with standard Army HF radios including the IHFR family. A 2,500 mile communications range will be provided by Sloping "V" antennas included as part of the system.



HISTORICAL BACKGROUND:

Jun 86 - AMC Procurement Request Notice issued.
Jul 86 - Market Investigation.
Jan 87 - User technical requirements re-defined.
Apr 89 - Contract Award.
4QFY90 - Materiel Release.
1QFY91 - FUE.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
MILESTONE III	I																											
PRODUCTION CONTRACT	———				I																							
TYPE CLASSIFY-STANDARD IPR					I																							

REQUIREMENTS DOCUMENT: Limited Procurement-Urgent.

TYPE CLASSIFICATION: Limited Procurement-Urgent approved Dec 86, HQDA.

AN/TSC-122 IS A MULTICHANNEL HF RADIO COMMUNICATION CENTRAL THAT WILL PROVIDE ACCESS TO THE DEFENSE COMMUNICATIONS SYSTEMS AS WELL AS PROVIDING LONG RANGE POINT-TO-POINT VOICE AND DATA COMMUNICATIONS IN THE 2 TO 30 MHz FREQUENCY RANGE.

SOF

AN/TSQ-171, PSYCHOLOGICAL WARFARE PROGRAMMING CENTER

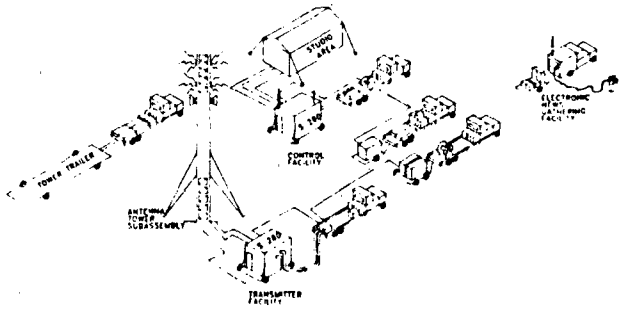
PROJECT MANAGER: Mr. Ignatius Phillips, DSN 995-4327
COMM 908-544-4327

PE & LINE #:

DESCRIPTION: The AN/TSQ-171 is a 5 kilowatt transportable television broadcast system incorporating transmitter and control facilities housed in S-280 shelters, and an electronic news gathering (ENG) facility housed in an S-250 Shelter mounted on an M1028 Commercial Utility Cargo Vehicle (CUCV). The system provides pre-recorded or live color television broadcast on VHF channels 7 through 13 in NTSC, PAL, or SECAM format. The system incorporates studio, editing, and pre-recorded program capabilities. The ENG can provide real-time television coverage with the control facility by microwave link. Dipole antennas are mounted atop a 100 meter mast and can be mounted in either an omnidirectional or a directional configuration. Power is provided by two 60 kilowatt generator and one 5 kilowatt generator.

TV-T5 System

System Diagram



HISTORICAL BACKGROUND:

Sep 90 - Emergency Materiel Release for Desert Shield.

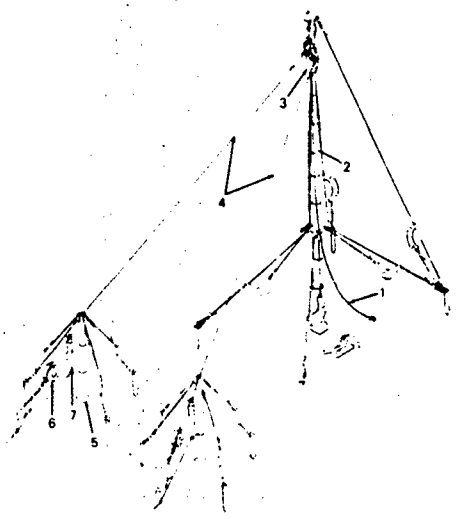
REQUIREMENTS DOCUMENT: Letter Requirement, Apr 86.

TYPE CLASSIFICATION: Exemption requested Jun 92.

AN/TSQ-171 IS A 5 KILOWATT TRANSPORTABLE TELEVISION BROEDCAST SYSTEM INCORPORATING TRANSMITTER AND CONTROL FACILITIES HOUSED IN S-280 SHELTERS.

SOF

OE-452/PRC ANTENNA GROUP, SPECIAL OPERATIONS RADIO ANTENNA KIT (SORAK)



PROJECT OFFICER: Mr. Jerry Mohr, DSN 995-2391
COMM 908-544-2391

PE & LINE #: 0474

DESCRIPTION: The SORAK is a kit of lightweight components for constructing and erecting mission specific High Frequency (HF) or Very High Frequency (VHF) antannas for tactical outstation use.

HF Antennas: Terminated Sloping Dipole - short range
117 ft. Sloping "V" - short or medium range
234 ft. Sloping "V" - medium or long range
438 ft. Bent Longwire - long range
VHF Antennas: 176 ft. Inverted "V"

HISTORICAL BACKGROUND:

Sep 89 - Contract award.
May 92 - Materiel Release.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
DELIVERY																												
FIRST UNIT EQUIPPED																												

REQUIREMENTS DOCUMENT: ROC, Jul 89.

TYPE CLASSIFICATION: Generic approved Jun 89; Standard approved Sep 92.

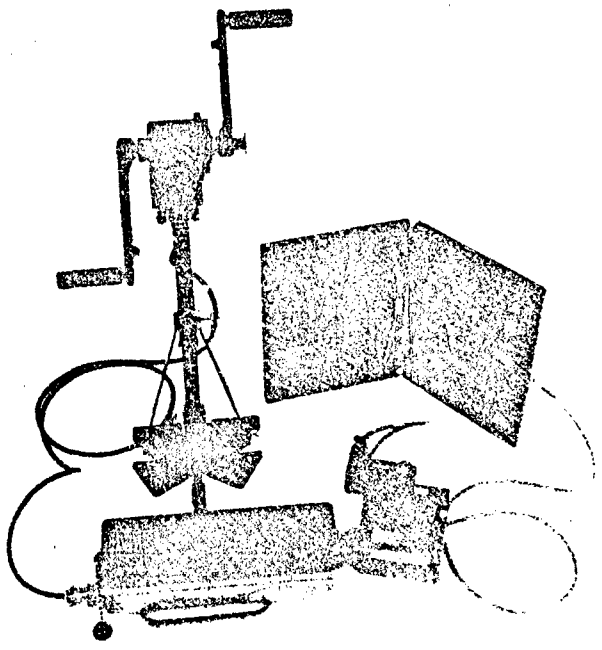
SORAK IS A KIT OF ANTENNAS USED WITH HF AND VHF RADIO SETS.

SOF

OP-177/U, POWER SUPPLY ASSEMBLY

PROJECT OFFICER: Mr. John Peace, DSN 995-2049
COMM 908/544-2049

PE & LINE #: 1110011A/D474



DESCRIPTION: The OP-177/U, Power Supply Assembly provides a kit of small non-depleting electrical power producing devices. It is a family of three electronic power sources and interconnecting appliques used to recharge SOF rechargeable batteries. OP-177/U, Power Supply Assembly configuration is a follows:

1 ea System Carrying Bag with Sling

1 ea Generator Bag containing:
- 1 ea G-67B/G Generator, direct current
- 1 ea Interconnecting Cable

2 ea Solar Bags, each containing:
- 2 ea Solar Panels
- 2 ea Power Supply Adapters
- 2 ea DC/DC Adapters
- 4 ea Interconnecting Cables

1 ea AC/DC Power Converter containing:
- 1 ea International/Universal Wall Socket Adapter Kit.

EVENTS SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
MILESTONES I/III (TYPE CLASSIFY STANDARD-A)					I																							
PRODUCTION AWARD (STANDARD-A)					I																							
USER AND TECHNICAL TEST (STANDARD-A)							I		I																			
START PRODUCTION DELIVERY (STANDARD-A)									I																			
FIRST UNIT EQUIPPED (STANDARD-A)													I															

REQUIREMENTS DOCUMENT: Validated ORD, Nov 91.

TYPE CLASSIFICATION: Limited Procurement-Urgent approved Mar 89.

OP-177/U, POWER SUPPLY ASSEMBLY PROVIDES A KIT OF SMALL NON-DEPLETING ELECTRICAL POWER PRODUCING DEVICES.

SOF

TAMT-50, TRANSPORTABLE 50 KILOWATT AMPLITUDE MODULATED RADIO TRANSMITTER

PROJECT MANAGER: Mr. Ignatius Phillips, DSN 995-4327
COMM 908-544-4327

PE & LINE #:

DESCRIPTION: The TAMT-50 is a transportable information dissemination system utilizing the standard amplitude modulation (AM) broadcasting band (535-1630 kilohertz). It is mounted in a military standard 2:1 expandable International Standards Organization (ISO) Shelter. The system is capable of receiving and recording AM and AM shortwave for re-transmission. The TAMT-50 Transmit/Receive Shelter integrates with selected AN/TRT-22 components providing a transportable, self- contained 50 kilowatt AM commercial broadcast capability.

HISTORICAL BACKGROUND:

EVENTS SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INTEGRATION																												
TESTING																												
TRAINING																												
FIRST UNIT EQUIPPED																												

REQUIREMENTS DOCUMENT: DA directed message, Jan 83; EEROC, Oct 86.

TYPE CLASSIFICATION: Exemption requested Jun 92.

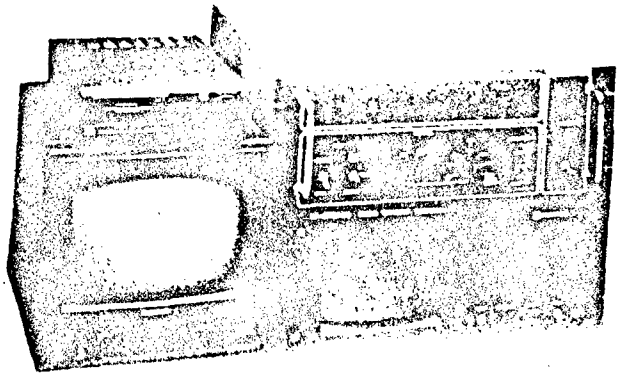
TAMT-50 IS A TRANSPORTABLE INFORMATION DISSEMINATION SYSTEM UTILIZING A STANDARD AM BROADCASTING BAND.

SOF

ELECTRONIC FILMLESS CAMERA SYSTEM (EFCS)

PROJECT OFFICER: Mr. Marvin Kass, DSN 992-0398
COMM 908/532-0398

PE & LINE #: D476



DESCRIPTION: The EFCS consists of a forward area outstation and rear area base station. The outstation still-video camera (hand-held or tripod mounted) captures, electronically stores, and converts the picture/image data to a digital format suitable for radio transmission. The base station converts the data to a TV picture and/or a printed image. Identification: aircraft at 1000 meters; faces at 200 meters; personnel gear/weapons at 600 meters; Base Station has a capacity to copy documents or fingerprints.

HISTORICAL BACKGROUND:

1QFY91 - Contract award.

EVENTS SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
TECHNICAL TEST			I																									
DELIVERY			I																									
USER TEST			I	I																								
FIRST UNIT EQUIPPED						I																						

REQUIREMENTS DOCUMENT: ROC, 13 Dec 89.

TYPE CLASSIFICATION: Generic approved Dec 89.

EFCS PROVIDES SURVEILLANCE AND INTELLIGENCE GATHERING CAPABILITY (SCENES, PERSONNEL I.D., DOCUMENTS).

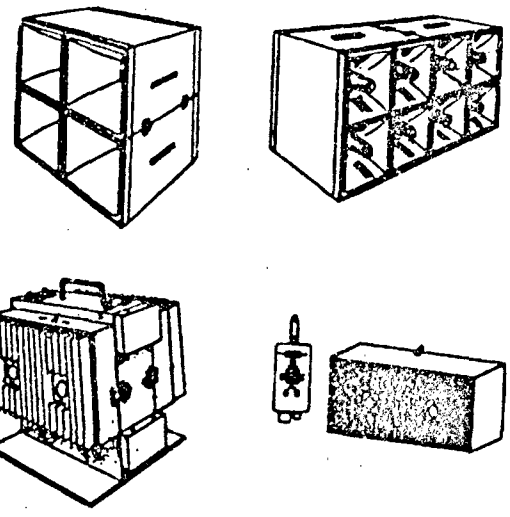
SOF

FAMILY OF LOUDSPEAKERS (FOL)

PROJECT MANAGER: Mr. Jerry Mohr, DSN 994-2391
COMM 908-544-2391

PE & LINE #: D476

DESCRIPTION: The FOL is a family of modular audio broadcast system which will provide PSYOPS forces with the capability to provide high quality audio dissemination and acoustic deception while transported mounted in vehicles (wheel, track), aircraft (rotary wing), and dismounted for ground operations.



HISTORICAL BACKGROUND:

Sep 91 - Validated Mission Need Statement (MNS).
Jun 92 - Developed Acquisition Strategy Report.
Jul 92 - Market Investigation.

EVENTS SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
CAB (INITIAL)			I																									
CAB						I																						
MILESTONE I/III IPR						I																						
SOURCE SELECTION EVALUATION BOARD						I	I																					
AWARD									I																			
CAB/IPR														I														
MATERIEL RELEASE																		I										
REQUIRED DELIVERY DATE																		I										
FIRST UNIT EQUIPPED																						I						

REQUIREMENTS DOCUMENT: Validated MNS, 26 Sep 91.

TYPE CLASSIFICATION:

THE FOL WILL BE MODULAR AND INCORPORATE AN INTERCHANGEABLE BUILDING BLOCK LOUDSPEAKER SYSTEM FOR USE BY PSYOPS FORCES IN A VARIETY OF APPLICATIONS.

C3I LRC

CCSLA

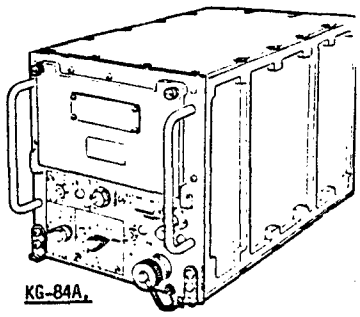
CCSLA

KG-84A, DEDICATED LOOP ENCRYPTION DEVICE
KG-84C, GENERAL PURPOSE TELEGRAPHY ENCRYPTION DEVICE

PROJECT MANAGER: Mr. Art Chavira, DSN 879-6165
COMM 602/538-8165

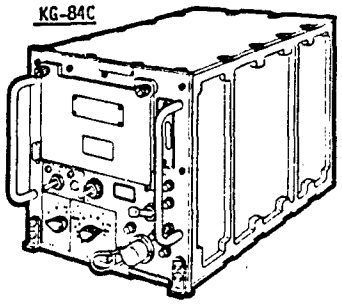
PE & LINE #: KG-84A - E03028
KG-84C - E03028

DESCRIPTION: The KG-84A/84C are lightweight, low power equipment that provide encryption/decryption of teletype-writers of input/output devices, including PC-type computers and facsimiles. KG-84A/84C are designed to be man-portable in tactical, strategic, vehicle, ship, aircraft and fixed plant environments. A distinguished feature of the KG-84C is the enhanced High Frequency (HF) capability designed for interoperability with the North Atlantic Treaty Organization Communications Equipment and with other services.



KG-84A

KG-84C



HISTORICAL BACKGROUND:

KG-84A	KG-84C	
Oct 83	Jun 86	- Final Qualitative and Quantitative Personnel Requirements Information.
Sep 82	Sep 85	- First Production contract award.
Feb 84	Sep 87	- First Article Testing.
Feb 84	Apr 88	- Initial Deliveries.
Jun 84	Jul 88	- Material Release.
Jul 84	Aug 88	- First Unit Equipped.
Sep 87	Jun 92	- Additional production buys.

REQUIREMENTS DOCUMENT: NSA developed.

TYPE CLASSIFICATION: KG-84A - Standard approved Dec 83; KG-84C - Standard approved Jun 86.

KG-84A/84C ARE GENERAL PURPOSE ENCRYPTION/DECRYPTION DEVICE FOR THE PROTECTION OF RECORD AND LOW DATA RATE TRANSMISSION LINKS IN TACTICAL, STRATEGIC, SHIP/AIR AND FIXED PLANT ENVIRONMENTS.

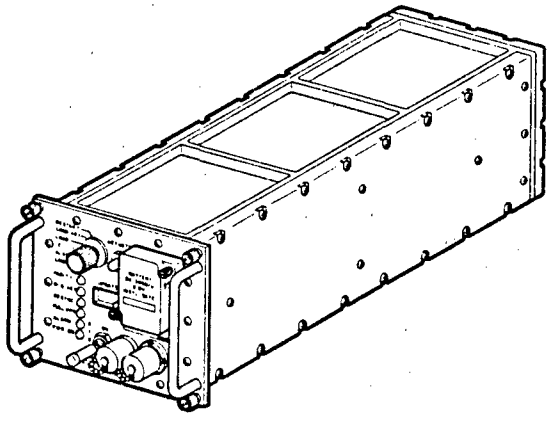
CCSLA

KG-194, TRUNK ENCRYPTION DEVICE

PRODUCT MANAGER: Mr. Herb Hensley, DSN 879-8253
COMM 602/538-8253

PE & LINE #: T64771

DESCRIPTION: The KG-194 is used for high speed digital encryption in strategic and sheltered environments. KG-194 is capable of digital voice and data encryption/decryption at rates from 9.6 Kps to 13 Mbps. KG-194 is simply a KG-94 with remote rekey capability (FIREFLY). KG-194 is FIREFLY compatible with only other KG-194/194A equipment. However, in the traditional mode of operation, the KG-194 is cryptographically compatible with the KG-81/94/94A/95-1 family of equipment. KG-194 is designed for installation in the HNF-81 or HGF-94 rack adapters and may be used in tactical, mobile, sheltered or fixed plant environments.



HISTORICAL BACKGROUND:

Sep 87 - Contract award to Group Technologies Corporation, Tampa, FL.
Jun 89 - Contract award to Allied-Signal Aerospace Company, Bendix Communications Division, Baltimore, MD.
4QFY89 - First Unit Delivery.

REQUIREMENTS DOCUMENT: O&O, 18 Oct 85.

TYPE CLASSIFICATION: Standard approved 30 Jan 86.

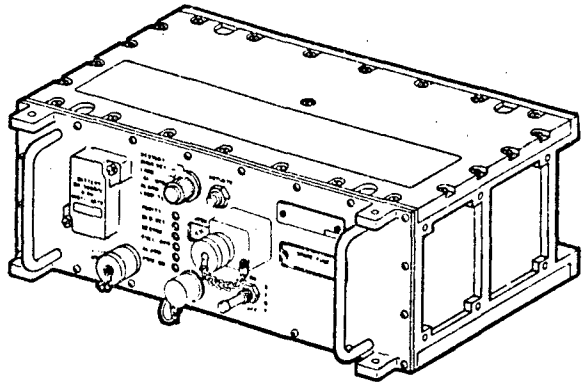
KG-194 IS USED FOR HIGH SPEED DIGITAL ENCRYPTION IN STRATEGIC AND SHELTERED ENVIRONMENTS.

CCSLA

KG-194A, TRUNK ENCRYPTION DEVICES

PRODUCT MANAGER: Mr. Herb Hensley, DSN 879-8253
COMM 602/538-8253

PE & LINE #: KG-194A and Interface Adapter Unit (IAU)
T08971



DESCRIPTION: The KG-194A is simply a KG-94A with remote, rekey capability (FIREFLY) added. The difference is in the transmit and power converter Printed Circuit Boards, innerconnect parentboard, and the front panel assembly. The FIREFLY feature provides the user with enhanced keying capability and increases the security of the equipment. The IAU (NSN: 5810-01-280-4746) is designed to mechanically and electrically adapt the KG-94A/194A to a TD-660 multiplexer. This allows the KG-94A/194A to be used to replace the KG-27 electronic key generator in pulse-code-modulated (PCM) applications. The IAU performs voltage-level translation interface. The IAU provides a rear panel configuration. KG-94A/194A with IAU assembly mounts into a 19-inch rack. The power required for the KG-94A/194A is supplied by the IAU. KG-194A is ruggedized and designed for use in tactical, mobile, sheltered, or fixed plant environments with the IAU.

HISTORICAL BACKGROUND:

1984 - Development contract (IAU) let by NSA awarded to Honeywell, Tampa, FL.
1985 - Production contract awarded to Motorola Scottsdale, AZ, for the KG-94 and KG-94A.
1987 - Production contract awarded Group Technologies Corporation, Tampa, FL, for the KG-194 and KG-194A.
1988 - Joint Service test conducted on the KG-94A installed with the IAU.
1989 - First Unit Equipped, KG-94A.
1990 - Production contract awarded to Allied-Signal Aerospace Company, Bendix Communications Division, Baltimore, MD for the KG-194 and KG-194A.
2QFY92 - First Unit Equipped, KG-194A.

REQUIREMENTS DOCUMENT:

TYPE CLASSIFICATION: Standard.

KG-194A IS USED FOR TACTICAL AND SHELTERED HIGH SPEED ENCRYPTION.

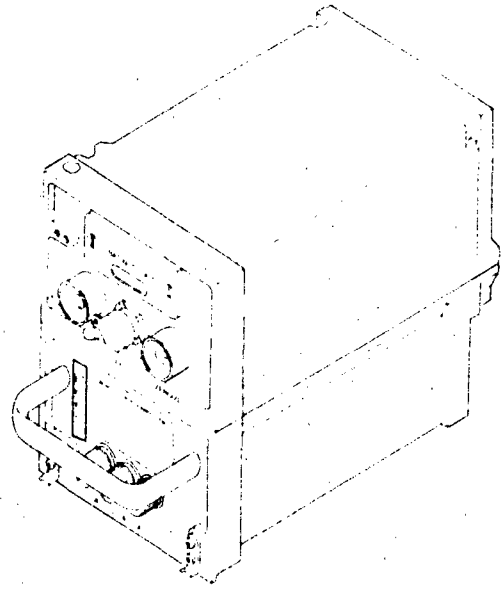
CCSLA

KIR-1C, IDENTIFICATION, FRIEND OR FOE INTERROGATOR COMPUTER
KIT-1C, IDENTIFICATION, FRIEND OR FOE TRANSPONDER COMPUTER

PRODUCT MANAGER: Ms. Melody Privette, DSN 879-8344
COMM 602/538-8344

PE & LINE #: KIR-1C X93250
KIT-1C X22266

DESCRIPTION: The KIR-1C is used to encrypt and decrypt the Mode 4 Identification, Friend or Foe (IFF) signal generated by ground, airborne, or shipborne IFF interrogator systems. KIT-1C is used to encrypt and decrypt the Mode 4 IFF signal received by ground, airborne, or shipborne, IFF transponder systems. They both provide facilities for electronic fill of the COMSEC key, versus the mechanical fill used in the KIR-1A and the KIT-1A.



EXTERNALLY BOTH THE KIR-1C AND KIT-1C ARE IDENTICAL. TOGETHER THEY MAKE UP THE KI-1C CRYPTOGRAPHIC COMPUTER

HISTORICAL BACKGROUND:

1986 - Development contract let by NSA for the KIR-1B/1C and KIT-1B/1C.
1987 - Contract modified to delete requirement for KIR-1B and KIT-1B.
1988 - Production contract award to Allied Signal-Bendix Communications Division, Baltimore, MD.
1989 - Joint service test conducted on KIR-1C and KIT-1C.
1991 - Air Worthiness Certification by AVSCOM; First Unit Equipped KIR-1C and KIT-1C; Initial Operational Capability KIR-1C and KIT-1C.

REQUIREMENTS DOCUMENT: ROC, 5 Oct 88 for the KIR-1C and KIT-1C.

TYPE CLASSIFICATION: Separate Type Classifications were not required as KIR-1C is an F3 modification of KIR-1A and KIT-1C is an F3 modification of KIT-1A.

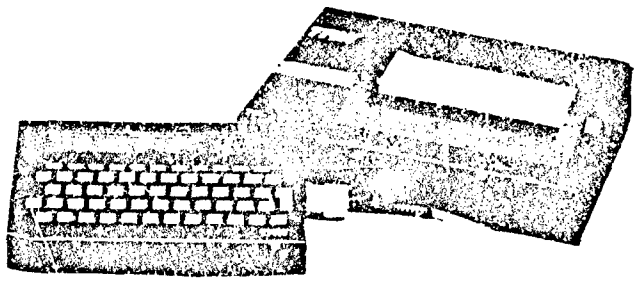
KIR-1C PROVIDES SECURE IFF MODE FACILITIES FOR IFF INTERROGATOR EQUIPMENT.
KIT-1C PROVIDES SECURE IFF MODE FACILITIES FOR IFF TRANSPONDER EQUIPMENT.

CCSLA

KL-43C, AUTOMANUAL SYSTEM

PRODUCT MANAGER: Ms. Lydia Tillman, DSN 879-8480
COMM 602/538-8480

PE & LINE #: Z11411



DESCRIPTION: The KL-43C is a portable, general purpose, off-line electronic crypto device that performs encryption/decryption. KL-43C protects written communications and provides encryption for messages passed over unprotected channels. It is also used for authentication. Messages can be transmitted electronically over compatible circuits using the internal modem. The device will secure all classifications and categories of information. It is a ruggedized terminal for field operation.

HISTORICAL BACKGROUND:

1989 - First Unit Equipped.

REQUIREMENTS DOCUMENTS: KL-43C was originally classifed as keying materiel, not equipment. Requirements documentation is being prepared.

TYPE CLASSIFICATION:

KL-43C IS A PORTABLE, GENERAL PURPOSE, OFF-LINE ELECTRONIC CRYPTO DEVICE THAT PERFORMS ENCRYPTION/DECRYPTION.

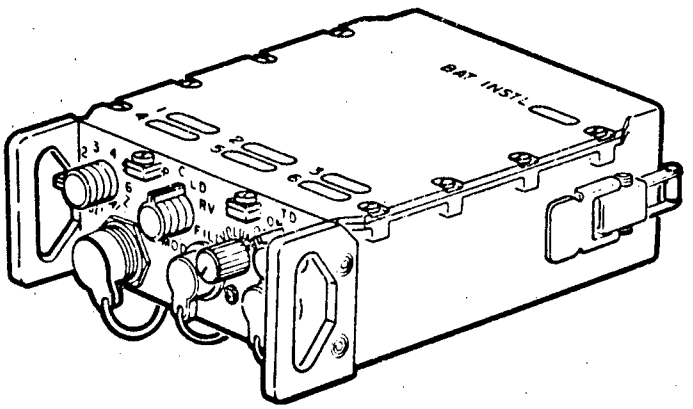
CCSLA

KY-57, COMMUNICATIONS SECURITY EQUIPMENT

PRODUCT MANAGER: Mr. Byron Wienberg, DSN 879-8342
COMM 602/538-8342

PE & LINE #: S01373

DESCRIPTION: The KY-57, Communications Security Equipment is a light-weight, direct current (DC) powered Controlled Cryptographic Item (CCI) used to provide secured voice or data communications equipments, including the non-ICOM SINCGARS, the AN/VRC-112, and the AN/PRC-70. KY-57 can be operated in manpack, shelterized, and vehicular configurations using CECOM (B16) developed/managed installation kits.



HISTORICAL BACKGROUND:

KY-57 has been in the field as the Army's primary tactical ration encryption device since 1979.

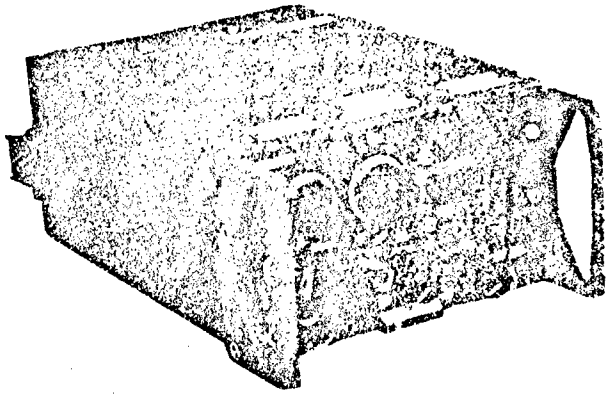
REQUIREMENTS DOCUMENT: ROC, 1972.

TYPE CLASSIFICATION: Standard approved 1975.

KY-57 IS A LIGHT-WEIGHT, DIRECT CURRENT POWERED CONTROLLED CRYPTOGRAPHIC ITEM.

CCSLA

KY-99, MINTERM TERMINAL



PRODUCT MANAGER: Mr. Roosevelt Watson, DSN 879-8234
COMM 602/538-8234

PE & LINE #: K47623

DESCRIPTION: The KY-99 is a lightweight, low-power, self-contained manpack terminal with embedded COMSEC. It is designed to provide secure voice/data for Improved High Frequency Radio (IHFR), and is interoperable in selected modes with a variety of DOD secure tactical terminals including the ANDVT Tactical Terminal (TACTERN). KY-99 is an integral part of the Joint Services System, and provides half duplex, narrowband secure voice and data for a variety of military applications. It is also available in vehicular and airborne versions with proposed KY-57 and KG-84 capability.

HISTORICAL BACKGROUND:

1987 - Development contract let by NSA.
1990 - Production contract awarded.
1991 - MINTERM Installation Kit contract awarded.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
FIRST UNIT DELIVERY			I																									
IOC					I																							

REQUIREMENTS DOCUMENT: BIOP/QQPRI final approval, Jun 91; JILSP published 31 Oct 91.

TYPE CLASSIFICATION: Standard approved.

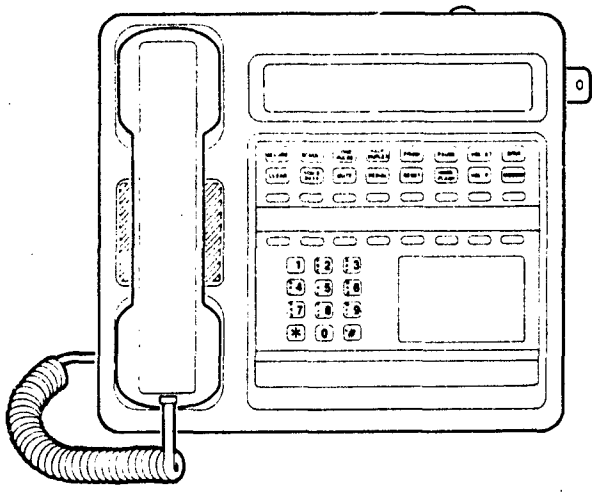
KY-99 PROVIDES SECURE NARROWBAND, HALF DUPLEX VOICE/DATA COMMUNICATIONS FOR A VARIETY OF DOD TACTICAL MILITARY APPLICATIONS.

CCSLA

SECURE TELEPHONE UNIT-III LOW COST TERMINAL (STU-III LCT)

PROJECT OFFICER: Ms. Lynn West, DSN 879-8338
COMM 602/538-8338

PE & LINE #: S40645



DESCRIPTION: The STU-III LCT is a self-contained modern business telephone which incorporated many modern telephone conveniences. The STU-III LCT provides secure voice, nonsecure (clear) voice and secure data communications in one easy to use telephone. Features include repertory dialing, automatic redial of last number dialed, and one-key dialing of memory-stored numbers. STU-III LCT is a wideband, two-wire, secure telephone. Its physical and security design include temper resistance, TEMPEST compliance, and optional HEMP protection. The STU-III operates full or half duplex over a single telephone line using echo cancelling modem technology. The baseline operation (voice and data) is 2,400 bits per second (bps), with enhanced models capable of 4,800 bps and 9,600 bps operation. It uses FIREFLY public cryptology and is interoperable with a variety of other secure communications requirements. STU-III LCT operates on any worldwide telephone system, replacing the secure telephone unit-II (STU-II). The STU-II was deemed too costly, bulky, and complicated to use, and had poor voice quality.

HISTORICAL BACKGROUND:

1985 - The Secretary of Defense (memorandum NSDD-45) replaced the STU-II with the STU-III; A significant feature of the STU-III program was parallel development and production by three companies with direct marketing and delivery to the user community; Three vendors (AT&T, Motorola, and GE (formerly RCA)) were selected for full scale development.
1986 - Production contracts award.
1988 - Risk analysis study to determine requirements for installation in Army facilities.
1992 - Approximately 60,000 STU-IIIs have been fielded based on risk analysis at a cost of just over $210 million.
IQFY92- STU-II equipment replacement completed.

REQUIREMENTS DOCUMENT: NSA development.

TYPE CLASSIFICATION: Standard approved 28 Oct 85.

STU-III LCT PROVIDES SECURE AND NONSECURE (CLEAR) VOICE/DATA TELEPHONE COMMUNICATIONS.

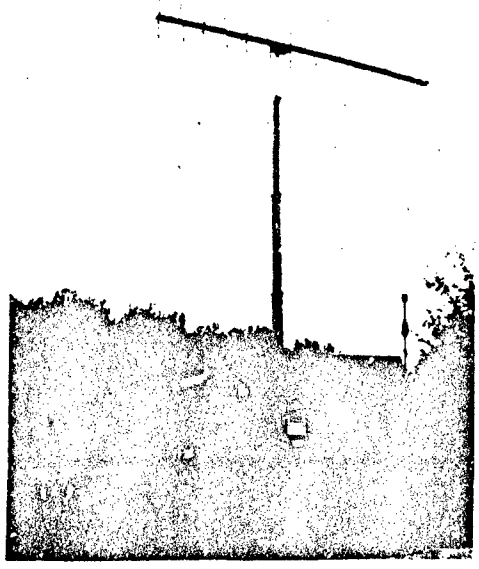
IMMC

IMMC

AN/TLQ-17A(V)3, TRAFFICJAM

PRODUCT MANAGER: Mr. John D. Zedo, DSN 229-6492
COMM 703/349-6492

PE & LINE #: SSN: BA6101



DESCRIPTION: TRAFFICJAM is a tactical communications jammer. The original vehicle configuration for the AN/TLQ-17A(V)1 TRAFFICJAM system was deployed using two M151 vehicles (jeeps) and two M416 towed trailers. This configuration has safety limitations so jeeps are being purged from the Army inventory. Consequently, the AN/TLQ-17A(V)1 was reconfigured to a High Mobility Multi-purpose Wheeled Vehicle (HMMWV) variant without trailers. The reconfigured system has a Log Periodic Array (LPA) antenna mounted on an S-250 Shelter. The objective is to repackage the existing Army systems: vehicle, shelters, intercoms, environmental and power systems, radio sets, antenna masts, and the jammer. This configuration is the AN/TLQ-17A(V)3. TRAFFICJAM also provides the jamming subsystem used in QUICKFIX heliborne COMINT and jamming system. The airborne version is the AN/TLQ-17A(V)2. SANDCRAB is the project name given to the system that employs an AN/TLQ-17A(V)3 and an OE-317 antenna. Its purpose is long range COMINT and jamming. There are no further product improvements planned for TRAFFICJAM.

HISTORICAL BACKGROUND:

Mar 85 - PIP #1-85-07-0491 approved.
Apr 85 - AR 70-15 waived.
Aug 87 - Production began.
Oct 88 - First AN/TLQ-17A(V)3 (Commercial Utility Cargo Vehicle (CUCV) Version) fielding.
May 89 - CUCV Version fielding completed.
FY90-92 - HMMWV fielding completed. System was deployed to Operation Desert Storm.
Jun 92 - Management transition from PM SW to IMMC.

EVENTS SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
TRANSITION TO LEVEL II			▼																									

REQUIREMENTS DOCUMENT: PIP #1-85-07-0491.

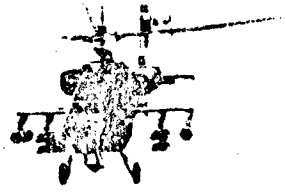
TYPE CLASSIFICATION: Standard approved Jul 88.

TRAFFICJAM IS A TACTICAL GROUND BASED AND AIRBORNE COMMUNICATIONS JAMMER.

SMD

SMD

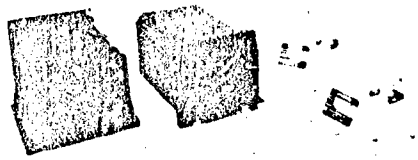
AN/APN-209(V), RADAR ALTIMETER SET



PROJECT MANAGER: Mr. Chris Cardinale, DSN 992-5271
COMM 908/532-5271

PE & LINE #:

DESCRIPTION: The AN/APN-209(V) Radar Altimeter Set provides a continuous indication of altitude of an aircraft 0 to 1500 feet above the surface of the earth and the features upon it by transmitting a radar signal to the ground, receiving the reflected signal and indicates the altitude of the aircraft on the Receiver-Transmitter (RT) unit and a remote indicator. The Altimeter Set operates from an aircraft supply having a nominal voltage of 28 volts DC. In addition, the RT, Height Indicator displays analog altitude, digital altitude warnings. There is no planned replacement of the AN/APN-209(V). Production quantities are identified through FY95 to support helicopter platforms. A helicopter flying at night is classified as nonmission capable if there is no working Radar Altimeter on board.



HISTORICAL BACKGROUND:

Aug 72 - Operational Evaluation.
Nov 73 - Competitive contracts awarded to Honeywell.
Jun 78 - Release of AN/APN-209.
Apr 79 - Transition from AVRADA to CECOM.
Jul 85 - Reliability improvement, reducing number of components.
Jul 89 - Transition from DMM Level III to SMD Level II.
Nov 90 - Antenna first competitive Production award.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
SYSTEM PRODUCTION																												
COMPETITIVE PRODUCTION - ANTENNA																												
ARMY ORGANIC DEPOT																												

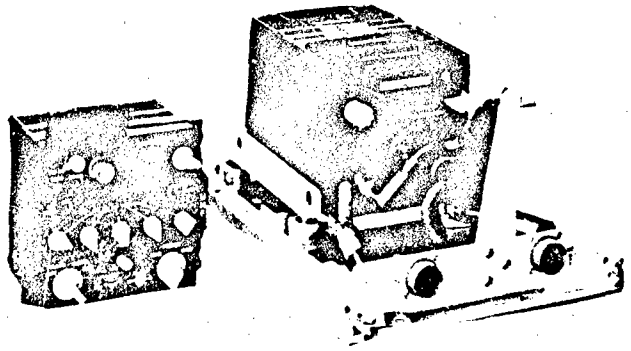
REQUIREMENTS DOCUMENT: Materiel Needs Statement, DA approved 21 Mar 73.

TYPE CLASSIFICATION: Standard approved Jun 76.

AN/APN-209(V) PROVIDES AN ACCURATE INDICATION OF ALTITUDE OF AN AIRCRAFT OVER AN ALTITUDE OF 0 TO 1500 FEET. THE ALTIMETER IS REQUIRED IF THE AIRCRAFT IS FLYING AT NIGHT OR OVER FEATURELESS TERRAIN.

SMD

AN/ARC-164(V), HAVE QUICK II (HQ II)



PROJECT OFFICER: Mr. Chris Cardinale, DSN 992-5271
COMM 908/532-5271

PE & LINE #: R13541

DESCRIPTION: The HAVE QUICK II radio set provides a 7,000 channel UHF tuneable receiver; an auxiliary guard receiver (nominally 243.000 megahertz) and 10-watt carrier transmitter for normal AM voice and Anti-Jam (AJ) Frequency Hopping communication mode. HAVE QUICK II radio set provides additional AJ improvements and features from the original HAVE QUICK radio.

HISTORICAL BACKGROUND:

Mar 82 - JCS directs all services to use HQ II for Electronic Counter-Counter Measure (ECCM) for UHF band.
Apr 89 - SMD directed to take HQ II lead.
Feb 90 - Material Change for HQ II implementation approved by CG, CECOM.
Jun 92 - First HQ I to HQ II modification kit applied.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
TECHNICAL MANUALS AND TRAINING					!																							
MODIFICATION KIT HQ I TO HQ II		!							!																			
FIELDING TIMING SYSTEMS											!						!											

REQUIREMENTS DOCUMENT: O&O Plan for Army Aviation UHF Radios, Nov 91.

TYPE CLASSIFICATION: Standard A approved 1987.

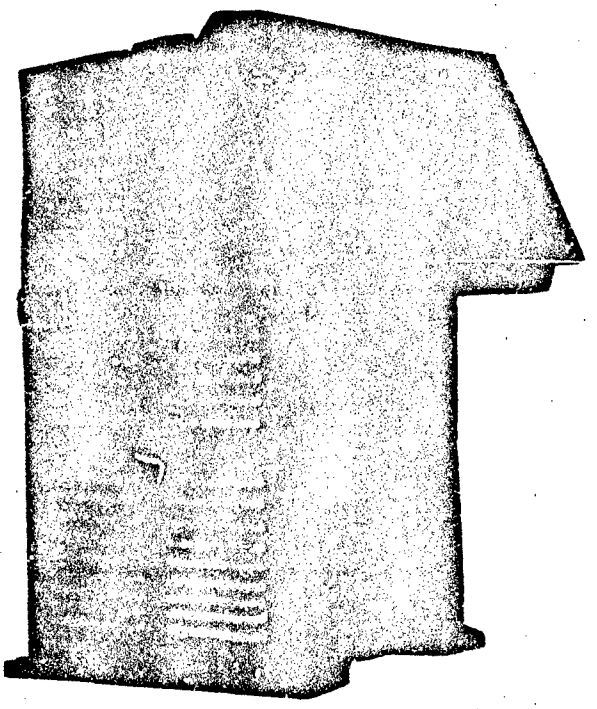
HQ II PROVIDES THE ARMY THE ABILITY TO COMMUNICATE WITH THE AIR FORCE, NAVY, AND NATO IN UHF-AM MODE, THE COMMUNICATIONS BAND FOR TACTICAL AIR OPERATIONS.

SMD

AN/ASC-15B, COMMUNICATIONS CENTRAL-CONSOLE

PROJECT OFFICER: Mr. Anthnoy Noyalis, DSN 992-5271
COMM 908/532-5271

LIN & BLIN #: C59313 AA0710



DESCRIPTION: The AN/ASC-15B console functions as an airborne or ground command post providing tactical voice/data communications in both secure and nonsecure modes. SC-15B is interfaced with the aircraft or ground auxiliary equipment to function as a secure/nonsecure automatic retransmission station and satellite communications command post and to provide channel scanning, intercommunication facilities for up to nine users and communication management for up to four operators. AN/ASC-15B provides AM and FM communications in the applicable HF, VHF, and UHF frequency ranges and provides NATO and Tri-Service interoperability during all types of military operations.

HISTORICAL BACKGROUND:

Oct 85 - Proof of Concept/Prototype Testing.
Jan 86 - O&O Plan Approved.
Apr 86 - Command and Control (C2) IPR.
Jun 86 - Senior Data Review Board Approval.
Jul 86 - Solicitation Issued.
Sep 86 - Contract Award - eight systems.
Jul 87 - Air Worthiness Qualification.
Jul 87-Sep 87 - User Testing.
Aug 87-Sep 88 - Contract Modifications for an additional 26 systems (total 34 systems).
Sep 90-Jan 91 - Unpriced contract awards for 10 systems to support Desert Storm.
Jun 92 - Contract award - four systems.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
CONTRACT MODIFICATION - 4 SYSTEMS		!																										
CONTRACT MODIFICATION - 7 SYSTEMS			!																									

REQUIREMENTS DOCUMENT: ROC, March 1991.

TYPE CLASSIFICATION: Limited Production - Urgent approved.

AN/ASC-15B PROVIDES BATTEFIELD COMMANDERS WITH THE C2 CAPABILITY FOR JOINT SERVICE OPERATIONS TO DIRECTLY CONTROL AND INFLUENCE THE BATTLE.

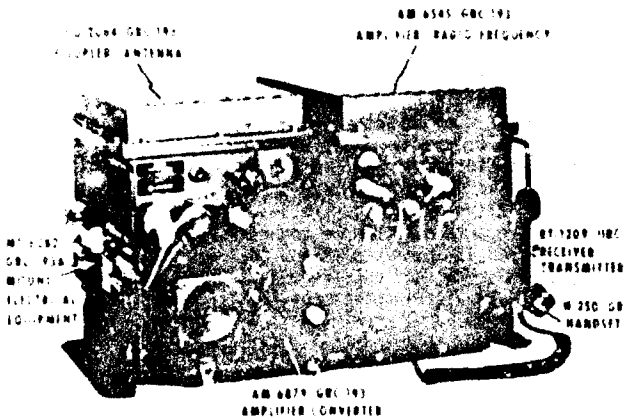
SMD

AN/GRC-193, IMPROVED HIGH FREQUENCY RADIO SET

PROJECT OFFICER: Mr. Mario Ambrosia, DSN 992-8941
COMM 908/532-8941

PE & LINE #: SSN: BB1600

DESCRIPTION: The AN/GRC-193 vehicular radio set provides secure voice and data C3 capability for tactical units in compatible AM, SSB, CW, and DATA modes at medium to high power (100-400 watts). AN/GRC-193 was produced in three configurations: AN/GRC-193; AN/GRC-193A; and AN/GRC-193B. The radios are secured with the KY-65 (voice) or KG-84 (data) and feature automatic antenna tuning. Frequency range is 2-30 megahertz providing 280,000 channels in 100 hertz increments. Other features include build-in-test capabilities, reflect power protection, and remote operation by wireline up to two kilometers. The radio interfaces with the AN/VIC-1 Vehicle Intercom System and is compatible with the AN/UGC-74 at 300 words per minute operated for voice and MOS 31K for teletype. AN/GRC-193B has all the above features with the addition of the short term anti-jam (STAJ) frequency hopping capability.



AN/GRC-193A RADIO SET

HISTORICAL BACKGROUND:

Jul 81 - USA Program Objective Memorandum established.
Dec 81 - Non-Developmental Item decision approved.
May 85 - Follow-On-Evaluation.
Sep 85 - FY85 Production contract award.
Nov 85 - Official transfer of program responsibility to PM, SINCGARS.
Dec 86 - First Unit Equipped.
Sep 87 - STAJ Compatible Production contract award.
Aug 90 - FAT completed.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
TRANSITION TO SMD FROM PM, SINCGARS					I																							

REQUIREMENTS DOCUMENT: ROC DA approved 30 Nov 81.

TYPE CLASSIFICATION: Standard A approved Jun 83; BOIP approved 22 Oct 86.

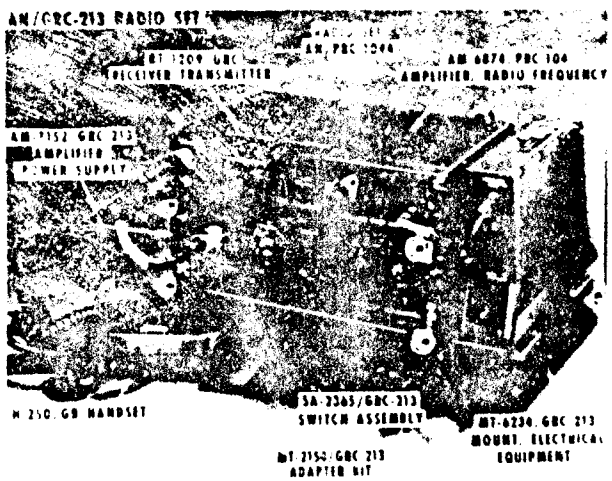
AN/GRC-193 IS A MEDIUM TO HIGH POWER VEHICULAR RADIO SET TO PROVIDE SECURE VOICE (KY-65) DATA C3 IN THE COMPATIBLE AM, SSB, CW, AND DATA MODES WITH AUTOMATIC ANTENNA TUNING AND 280,000 CHANNELS IN 100 HERTZ INCREMENTS.

SMD

AN/GRC-213, IMPROVED HIGH FREQUENCY RADIO SET

PROJECT OFFICER: Mr. Mario Amborsia, DSN 992-8941
COMM 908/532-8941

PE & LINE #: SSN: BB1802



DESCRIPTION: The AN/GRC-213, Improved High Frequency Radio Set (IHFR) provides a vehicular mounting capability as well as rapid removal for manpack only operations. It is a Low Power (20 watt) Manpack/Vehicular radio set composed of an AN/PRC-104A Manpack radio with all the necessary ancillary items. AN/GRC-213 will provide secure voice and data communications when used with the KY-65 voice, KY-84 data or future COMSEC equipments, in the SSB, compatible AM, CW and DATA modes. AN/GRC-213 is user operated and about as complex to use as the current family of VHF/FM radios. The radio features include automatic antenna tuning, 2-30 megahertz frequency range with 280,000 channels in 100 hertz increments, built in test features and receive squelch. The radio interfaces with the vehicular intercom system AN/VIC-1 and provides FM retransmission capability. All IHFR radios will provide secure voice communications with KY-65 or future COMSEC equipment.

HISTORICAL BACKGROUND:

Jul 81 - USA Program Objective Memorandum established.
Dec 81 - Non-Developmental Item decision approved.
May 85 - Follow-On-Evaluation.
Nov 85 - Official transfer of program responsibility to PM, SINCGARS.
Dec 86 - First Unit Equipped.
Sep 87 - STAJ Compatible Production contract award.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
TRANSITION TO SMD FROM PM, SINCGARS					I																							

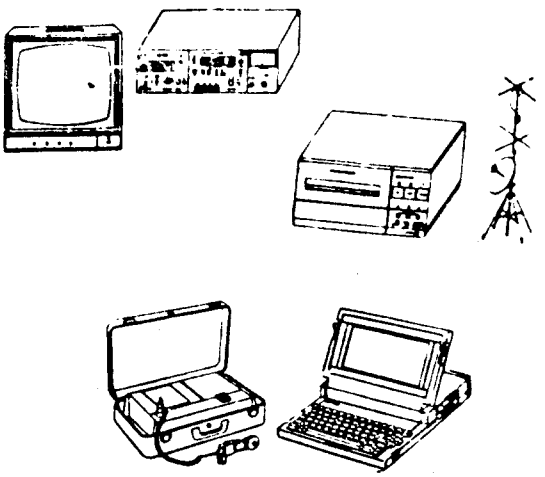
REQUIREMENTS DOCUMENT: ROC DA approved, 30 Nov 81.

TYPE CLASSIFICATION: BOIP approved, 22 Oct 86, Standard A.

AN/GRC-213, IHFR SET IS A LOW POWER MANPACK/VEHICULAR MOUNTED RADIO SET TO PROVIDE SECURE VOICE (KY-65) AND DATA C3 (KY-84). IT HAS AUTOMATIC ANTENNA TUNING, 280,000 CHANNELS IN 100 HERTZ INCREMENTS AND RETRANSMISSION CAPABILITY.

SMD

AN/GRQ-27 AND AN/GRQ-27(V)2, GOLDWING



PROJECT OFFICER: Mr. Michael Travisano, DSN 992-5108
COMM 908/532-5108

PE & LINE #: Z25282 SSN: W5990000GCH

DESCRIPTION: GOLDWING provides dedicated IEW communications capability required by Air Force weather teams supporting tactical Army operations. GOLDWING is a low density, secure data communications system employing HF FSK packet radio in the 1.6 to 30 megahertz frequency band. It operates at speeds up to 1200 baud and is designed to support meteorological operations. GOLDWING is a FORSCOM NDI procurement. It is scheduled to officially replace RATT rigs on Air Force weather team modified Tables of Organization and Equipment in the FY92/93 timeframe.

GOLDWING SYSTEM II AN/GRQ-27(V)2 augments the capabilities of the current (V)1 system to include support for automatic weather bulletin processing, automatic weather watch, reception of weather data.

HISTORIC BACKGROUND:

FY87 - Purchase of initial GOLDWING IEW communication system.
FY88 - Interface of GOLDWING and UAWS; Purchase of WRAASE Satellite Receiver Systems.
Sep 88 - Issued 50 systems to the first Weather Squadron, Fort Gillem with spare and communications Technical Manuals.
FY89 - Merger of Air Force Quick Reaction and Army GOLDWING Programs.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
TECHNICAL MANUALS DELIVERY					I																							
TYPE CLASSIFICATION							I																					
SPARES DELIVERY									I																			
DEPOT SUPPORT										I																		
TRANSITION TO LEVEL III													I															

REQUIREMENTS DOCUMENT: Awaiting O&O approval.

TYPE CLASSIFICATION: Standard B planned.

GOLDWING PROVIDES DEDICATED COMMUNICATIONS CAPABILITY REQUIRED BY AIR FORCE WEATHER TEAMS SUPPORTING TACTICAL ARMY OPERATIONS.

SMD

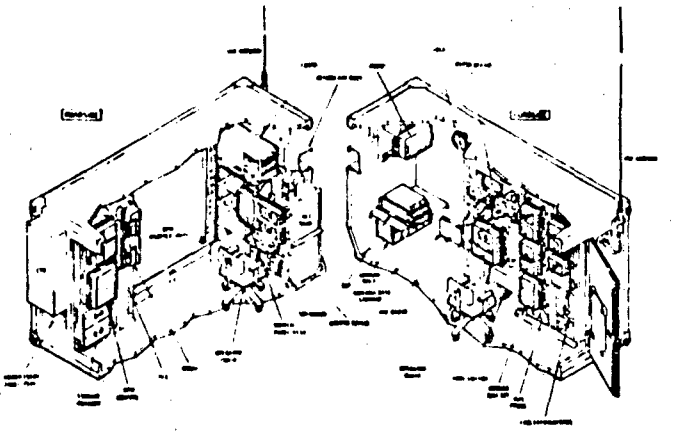
AN/GSG-10, TACFIRE

PROJECT OFFICER: Mr. Ed. Marcinkiewicz, DSN 992-6055
COMM 908/532-6055

PE & LINE #: F55750 (CORPS DIVARTY)
F55818 (DIVISION DIVARTY)
F83626 (BATTALION)

DESCRIPTION: TACFIRE is composed of computers and remote devices linked by digital communications using existing radio and wire communications equipment. TACFIRE automates selected field artillery command and control functions to provide efficient management of fire support resources.

SINGLE SHELTER DIVARTY



HISTORICAL BACKGROUND: The last TACFIRE fielding was completed in 1987. Installations of the two major modifications (Upgraded Counterfire Equipment and CP-1822) were completed in 1990. The TACFIRE/MSE interface device is currently being procured and fielded. Replacement of TACFIRE by AFATDS is scheduled to begin in 1994.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
TAC/MSE ID					!																							
TAC/MSE ID AWARD					!																							
TAC/MSE ID FIELDING						!																						
AFATDS FIELDINGS BEGIN REPLACING TACFIRE										!																		

REQUIREMENTS DOCUMENT: QMR, Mar 66.

TYPE CLASSIFICATION: Standard approved Oct 78.

TACFIRE AUTOMATES SELECTED FIELD ARTILLERY COMMAND AND CONTROL FUNCTIONS TO PROVIDE EFFICIENT MANAGEMENT OF FIRE SUPPORT RESOURCES.

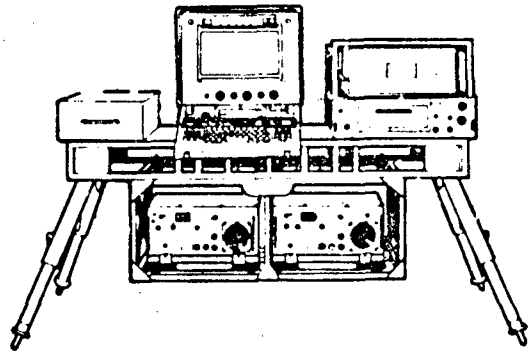
SMD

AN/GYK-29, BATTERY COMPUTER SYSTEM (BCS)

PROJECT OFFICER: Mr. Ed Marcinkiewicz, DSN 992-6055
COMM 908/532-6055

PE & LINE #: C40499

DESCRIPTION: The BCS is a small, on-line, militarized computer system used by the Army's cannon batteries, Multiple Launch Rocket System (MLRS) and LANCE. BCS increases field artillery mission effectiveness by providing two-way digital communications between TACFIRE and the battery, and by enabling accurate and rapid individual piece firing data computations.



HISTORICAL BACKGROUND:

1QFY88 - Transition to Systems Management Directorate

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
ATCCS-COMMON HARDWARE REPLACING BCS					!																							

REQUIREMENTS DOCUMENT: ROC, Oct 75.

TYPE CLASSIFICATION: Standard approved Sep 79.

BCS IS A SMALL, ON-LINE, MILITARIZED COMPUTER SYSTEM USED BY THE ARMY'S CANNON BATTERIES, MULTIPLE LAUNCH ROCKET SYSTEM AND LANCE.

SMD

AN/MYQ-4, DECENTRALIZED AUTOMATED SERVICE SUPPORT SYSTEM (DAS-3)

PROJECT OFFICER: MAJ Kenneth Hill, DSN 992-6052
908/532-6052

PE & LINE #: D78075

DESCRIPTION: The DAS-3 computer system was developed to provide decentralized automated supply and maintenance management support suitable for use by the army in the field. The field systems consist of automatic data processing equipment housed in mobile 35 foot air conditioned vans powered by standard military generators and/or commercial power. The DAS-3 environment is any of the non-divisional Direct Support Unit/General Support Units (DSU/GSU) of supply and maintenance management. DAS-3 is the ADPE interface between the direct support level and intermediate level of supply. DAS-3 is not field programmable. It utilizes functional application programs developed at central CONUS facilities and is suitable for worldwide deployment. A total of 203 systems were fielded from Dec 80 to Sep 83.

HISTORICAL BACKGROUND:

Dec 80 - First unit fielded (without supportability).
Apr 83 - Supportability achieved.
May 83 - Materiel Release approved.
Sep 83 - Last Production System fielded.
Feb 86 - Under Secretary of the Army was briefed on the recommended phase out plan for the DAS-3.
May 86 - CECOM awarded contract to Honeywell for $2.6M worth of spare parts for the DAS-3.
Jul 87-Aug 87 - Revised DAS-3 Acquisition Plan forwarded from CECOM to AMC and DA; CECOM procured $5.2M worth of spare parts from Honeywell.
Oct 87 - Transition of DAS-3 from TACMIS to Logistics Support Center, ISEC (renaned ISMA), Ft Monmouth.
Nov 87 - Draft DOD Inspector General report of Honeywell overpricing was received at CECOM for comment.
Apr 88-Sep 88 - CECOM procured $11.1M worth of spare parts from various contractors for the DAS-3.
Jan 88 - CECOM provided comments to draft DOD IG report on Honeywell overpricing.
Sep 90 - Service and Maintenance contract awarded to ICT.
Oct 90 - Honeywell contracts terminated.
Dec 91 - Transition of DAS-3 Program from ISMA to CECOM.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
PHASE OUT (PENDING TRADOC SCHEDULING)	I													I														

REQUIREMENTS DOCUMENT: ROC, 11 May 77, TRADOC ACN 29055; Revised by Logistics and Soldier Support Center, 22 Sep 80.

TYPE CLASSIFICATION: Standard approved Sep 80.

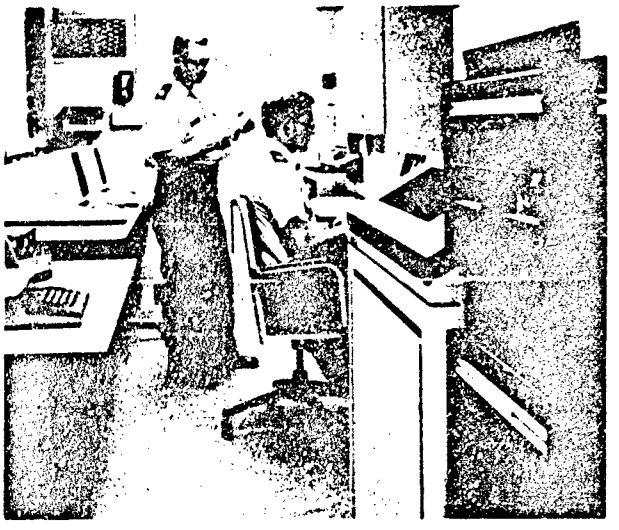
DAS-3 WAS DEVELOPED TO DECENTRALIZED AUTOMATED SERVICE SUPPORT SUITABLE FOR USE BY THE ARMY IN THE FIELD.

SMD

AN/MYQ-4A, DECENTRALIZED AUTOMATED SERVICE SUPPORT SYSTEM (DIVISION/CORPS) DAS-3(D/C)

PROJECT OFFICER: MAJ Kenneth Hill, DSN 992-6052
COMM 908/532-6052

LINE #: D 78325



DESCRIPTION: The DAS-3 (D/C) was designed to enhance the DAS-3 (AN/MYQ-4). The systems are similar, but the AN/MYQ-4 has the following distinguishing changes: additional ADP devices, communications interface section, and provisions for a modular collective protection equipment unit. DAS-3 (D/C) is composed of a data processing center housed in a 35 foot, 10-ton semi-trailer van (XM971), an administrative center housed in a 5-ton expansible van, and a dual generator mobile power plant. DAS-3 (D/C) is composed of the following subsystems: ADP Subsystem, AC Power Subsystem, Environmental Subsystem, Communications Subsystem, Remote Subsystem, semi-trailer van unit, expansible van, and power plant. The hardware configuration is capable of immediately fulfilling the requirements for mobile dedicated automated data processing systems using Standard Multi-Command Management Information Systems (STAMIS) developed and maintained at a central location, but operational at multiple user sites. The initial operational environment of the DAS-3 (D/C) will be [illegible] divisions, separate brigades, COSCOMs, medical and port facilities to support supply, maintenance, personnel, medical, port facilities, ammunition movement management as well as other Military Combat Service Support functions.

HISTORICAL BACKGROUND:

Apr 84 - Initial Operational Capability.
Oct 84 - Honeywell "BOA" under investigation due to suspected overpricing for spare parts.
Jan 86 - Final fielding completed.
Sep 86-Jun 87 - Communication upgrade of DAS-3.
Jul-Aug 87 - Revised DAS-3 Acquisition Plan forwarded from CECOM through AMC to DA.
Oct 87 - Transition of DAS-3(D/C) from TACMIS to Logistics Support Center, ISEC (renamed ISMA), Ft Monmouth.
Jan 88 - CECOM provided comments to draft DOD IG report on Honeywell.
Sep 90 - Service and Maintenance contract awarded to ICT.
Oct 90 - Honeywell contracts terminated.
Dec 91 - Transition of DAS-3 from ISMA to CECOM.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
REDISTRIBUTION	!																											
PHASE OUT (PENDING TRADOC SCHEDULING)	!												!															

REQUIREMENTS DOCUMENT: ROC, Sep 82; ROC revised DAS-3 ROC, 22 Sep 83.

TYPE CLASSIFICATION: Standard approved 27 Aug 84.

DAS-3 (D/C), AN/MYQ-4A ENHANCES THE DAS-3, AN/MYQ-4 BY PROVIDING ADDITIONAL ADP DEVICES.

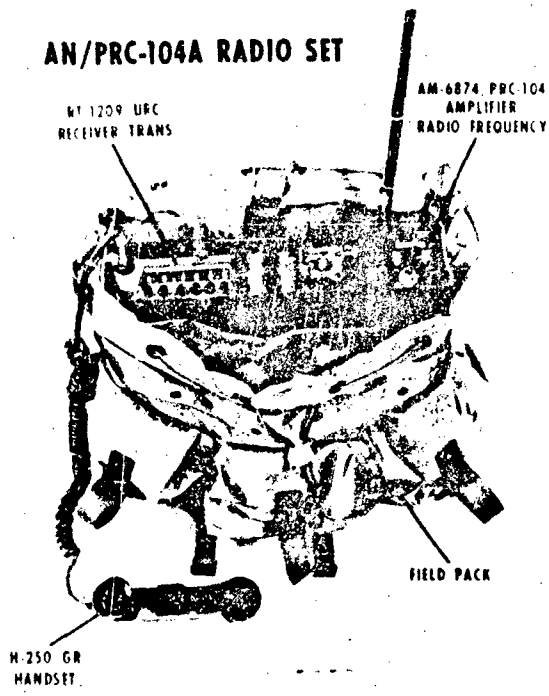
SMD

AN/PRC-104, IMPROVED HIGH FREQUENCY RADIO SET

PROJECT OFFICER: Mr. Mario Ambrosio, DSN 992-8941
COMM 908/544-8941

PE & LINE #: SSN: BG1801

DESCRIPTION: The low power (20 watt) Improved High Frequency Radio Set (IHFR), AN/PRC-104 provides single sideband command and control communications for tactical units in the compatible AM, SSB, CW and Data modes. AN/PRC-104 is user operated and is about as complex to use as the current family of VHF FM radios. The radio utilizes either a non-rechargeable BA-5590 Lithium battery or a rechargeable BB-590 NICAD battery. The radio features automatic antenna tuning, operates in the 2-30 MHz frequency range, maximum bandwidth 3 KHz, 280,000 channels in 100 Hz increments, and built-in test features. All IHFR radios will provide secure voice communications with KY-65 or future COMSEC equipment.



HISTORICAL BACKGROUND:

Jul 81 - USA Program Objective Memorandum established.
Dec 81 - Non-Developmental Item decision approved.
Mar 82 - BOIP/QQPRI approved.
Jun 85 - Follow-On-Evaluation.
Nov 85 - Official transfer of program responsibility to PM, SINCGARS; Materiel Release.
Mar 87 - First Unit Equipped.
Jul 87 - MARB on STAJ.
Sep 87 - STAJ Compatible Production Contract Award.
Aug 90 - First Article Test completed.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
TRANSITION TO SMD FROM PM, SINCGARS			I																									

REQUIREMENTS DOCUMENT: ROC, 30 Nov 81.

TYPE CLASSIFICATION: Standard A approved Jun 83.

AN/PRC-104 IS A LOW POWER, IMPROVED HIGH FREQUENCY RADIO SET TO PROVIDE SINGLE SIDEBAND COMMAND AND CONTROL COMMUNICATIONS FOR TACTICAL UNITS IN THE COMPATIBLE AM, SSB, CW AND DATA MODES.

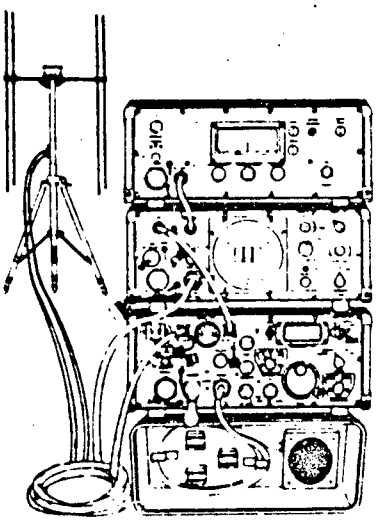
SMD

AN/PRD-11, MINI-FIX

PROJECT OFFICER: Ms. B.K. Swenson, DSN 992-5108
COMM 908/532-5108

PE & LINE #: R36561 SSN: W2340000GWD

DESCRIPTION: The MINI-FIX is a man-portable direction finding system. It is composed of a man-portable vehicular radio receiver and direction finder (DF) processor system, signal monitor, DF processor (the controlling unit in the DF system), and DF antenna. MINI-FIX can be easily transported and maintained in the field, while providing highly accurate intercept and Line-of-Bearing (LOB) information. This system was initially provided to Communications Electronics Warfare Intelligence (CEWI) units via the Intelligence and Security Command (INSCOM) program as an NDI training system.



HISTORIC BACKGROUND:

Dec 79 - Purchased by FORSCOM for readiness training. A total of 75 original system were purchased without ILS.
Jul 84 - CECOM tasked by DA to support FORSCOM in developing ILS.
Aug 86 - Fielding of all ILS by on-site delivery team commenced to Korea Nov 86 and Panama Dec 86.
Aug 87 - Full organic support to all FORSCOM and OCONUS activities.
Jun 88 - Full provisioning parts list purchased.
Mar 89 - System upgraded to include battery charger, high frequency capability, up-converter CV4090.
Sep 89 - Full Life Cycle Support provided.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
TRANSITION FROM FORSCOM TO CECOM					I																							

REQUIREMENTS DOCUMENT: HQDA message authorized procurement, 231742Z Nov 83.

TYPE CLASSIFICATION: Limited Procurement-Urgent approved Jan 89.

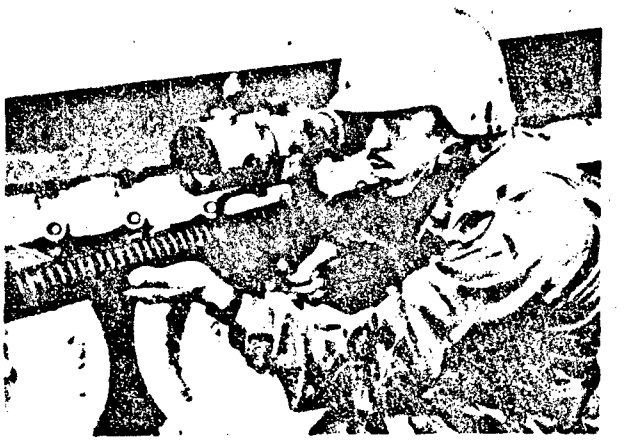
MINI-FIX IS A MAN-PORTABLE DIRECTION FINDING SYSTEM.

SMD

AN/PVS-4, INDIVIDUAL SERVED WEAPON SIGHT

PROJECT LEADER: Mr. Anthony Anania, DSN 992-5271
COMM 908-532-5271

PE & LINE #: SSN: K41500



DESCRIPTION: The AN/PVS-4 provides passive sighting and viewing of targets using second generation image intensifier techniques. When mounted on individual weapons, the scope will provide the capability for delivery of accurately aimed fire during hours of darkness. The system is easily installed and removed from the weapon using suitably designed brackets which require no modification to the weapon. A protective objective daylight cover provides the capability for daylight boresighting of the weapon. AN/PVS-4 is primarily designed for use with the M14 and M16 Rifles, M60 Machine Gun, M249 Squad Automatic Weapon, M72A1 Rocket Launcher and M203 Grenade Launcher. The system is supplied with a suitable shipping case which protects the system. The sight can be used in the hand-held mode for night surveillance. Fielding is two per infantry squad.

HISTORICAL BACKGROUND:

1976 - First Production contract awarded for 47,074 units.
1978 - First Unit Equipped.
1985-1989 - Total of 16,927 devices produced and deployed to Army units.
1990-1992 - OMNIBUS II award of 24,046 devices for deployment to Army units.
4QFY92 - Transition management from PEO IEW, PM NVEO to CECOM, SMD.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
OMNIBUS II PRODUCTION																												
OMNIBUS III PRODUCTION																												

REQUIREMENTS DOCUMENT:

TYPE CLASSIFICATION: Standard approved FY77.

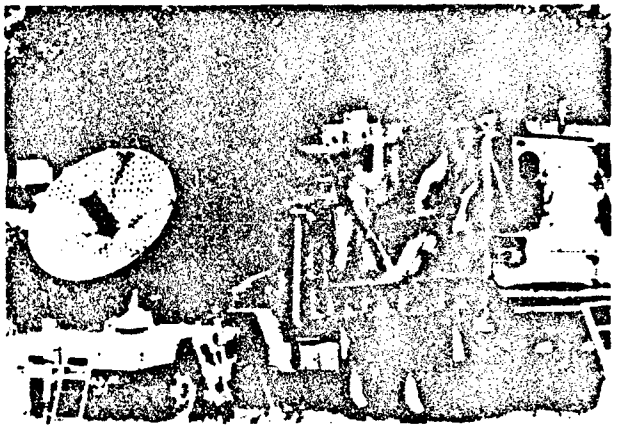
AN/PVS-4 PROVIDES PASSIVE SIGHTING AND VIEWING OF TARGETS DURING HOURS OF DARKNESS USING SECOND GENERATION IMAGE INTENSIFIER TECHNIQUES.

SMD

AN/TMQ-31, METEOROLOGICAL DATA SYSTEM (MDS)

PROJECT OFFICER: Mr. Mario Ambrosio, DSN 992-8941
COMM 908/532-8941

PE & LINE #: SSN: K27800



DESCRIPTION: The MDS is a mobile, automated meteorological data acquisition and processing system. This is a stand alone system that collects meteorological data for artillery fire support. Two MDS are used to support each Division Artillery Headquarters Battery and one MDS supports each separate Brigade. MDS automatically tracks a balloon-borne meteorological radiosonde as it ascends the atmosphere; receives the telemetered signals of temperature, relative humidity, pressure, and navigation data; measures elevation and azimuth angles to the radiosondes; automatically converts and processes the data; and computes meteorological data for immediate transmission to the user via wire or radio. Two modes of operation are provided: Radio Direction Finding (RDF) mode at 1680 megahertz and NAVAID mode at 400 megahertz. A companion system, the Meteorological Measuring Set (AN/TMQ-38) is being procured in a separate program for the light forces and reserve components.

HISTORICAL BACKGROUND:

Mar 79 - AD/ED contract.
Jan 83 - OT II.
Mar 83 - DT II.
Sep 83 - Production Decision approval.
Aug 84 - Production contract award (55 units).
Dec 87 - FAT completed.
Feb 88 - Independent Evaluation Report.
Mar 88 - Fielding to Ft. Sill, OK (NET).
Apr 88 - Training Release.
May 88 - Full Release.
Oct 91-Pres - VECP Kits installation.
Jan 92 - Completed fieldings to Army and Marine Corps.
4QFY92 - Transition management from PEO IEW, PM EW/RSTA to CECOM, SMD.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
TRANSITION TO CECOM			!																									

REQUIREMENTS DOCUMENT: ROC Jun 79, CARDS 0449.

TYPE CLASSIFICATION: Standard approved Sep 83.

AN/TMQ-31 IS A MOBILE, VERSATILE, AUTOMATED METEOROLOGICAL DATA ACQUISITION AND PROCESSING SYSTEM.

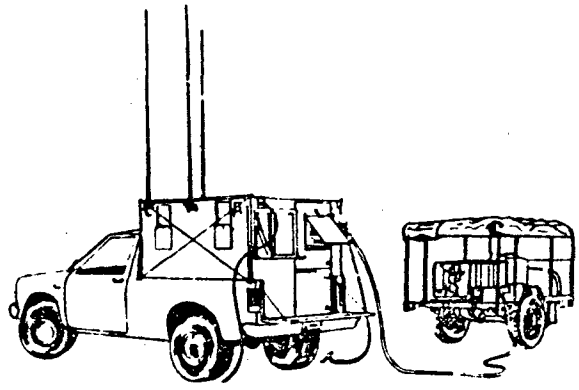
SMD

AN/TRQ-37, TACFIX

PROJECT OFFICER: Ms. B.K. Swenson, DSN 992-5108
COMM 908/532-5108

PE & LINE #: LIN R38883

DESCRIPTION: TACFIX is a shelter mounted direction finder system. It is used by Communications Electronics Warfare Intelligence (CEWI) units. This equipment is designed with two direction finder (DF) receivers, a quick erecting DF antenna/mast assembly, and a DF processor. TACFIX provides Line-of-Bearing data only and must be manually controlled to provide true DF.



HISTORICAL BACKGROUND:

Sep 79 - Purchased by FORSCOM for readiness training. A total of 35 original systems were purchased without life-cycle ILS.
Jan 84 - CECOM tasked by DA to support FORSCOM by developing ILS.
Aug 84 - ILS management team established.
Jun 86 - Spare and repair parts in place.
Dec 86 - Fielding of ILS by on-site delivery team commenced to Panama Dec 86.
Sep 87 - Antenna design change to install in shelter.
Apr 89 - Procurement data package submitted to upgrade system capabilities.
Jun 89 - Full depot support established at TOAD.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
FULL PROVISIONING PARTS LIST DELIVERED			I																									
DELIVERY OF ADDITIONAL SYSTEMS AND SPARES						I																						
TRANSITION TO CECOM LEVEL III MANAGEMENT							I																					

REQUIREMENTS DOCUMENT: HQDA message authorized procurement 231742Z Nov 83.

TYPE CLASSIFICATION: Standard approved Dec 89.

TACFIX IS A SHELTER MOUNTED DIRECTION FINDER SYSTEM.

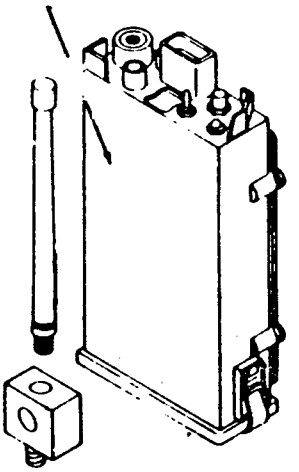
SMD

AN/TRS-2(V), PLATOON EARLY WARNING SYSTEM (PEWS)

PROJECT OFFICER: Ms. Rosemarie LaMacchia, DSN 992-6052
COMM 908/532-6052

PE & LINE #: P06148

DESCRIPTION: An operational AN/TRS-2(V) consists of ten detector anti-intrusion devices, two radio receivers, two interface wire links and other accessories packaged in two carrying bags. The system will operate in a variety of different types of terrain and under extreme temperature and climatic conditions with a very low false alarm rate.



HISTORICAL BACKGROUND:

Apr 76 - Milestone Decision Review.
Jul 78 - Contract award.
Sep 80 - Test.
Dec 80 - First Unit Equipped.
Mar 81 - Initial Operational Capability.
Sep 92 - Transition.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
TRANSITION TO LEVEL III					I																							

REQUIREMENTS DOCUMENT: Initial ROC approved, 26 Nov 62; Final ROC approved, 19 Oct 72.

TYPE CLASSIFICATION: Standard A approved Apr 78.

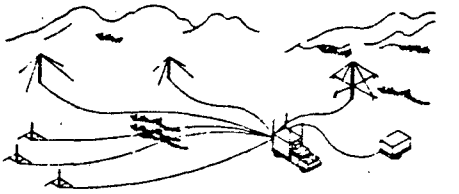
AN/TRS-2(V) IS AN OPERATIONAL SYSTEM CONSISTING OF TEN DETECTORS, TWO RADIO RECEIVERS, TWO INTERFACE WIRE LINKS AND OTHER ACCESSORIES PACKAGED IN TWO CARRYING BAGS.

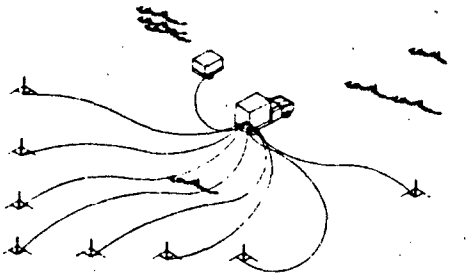
SMD

AN/TSQ-164, DRAGONFIX

PROJECT OFFICER: Mr. Michael Travisano, DSN 992-5108
COMM 908/532-5108

PE & LINE #: LIN Z22323 SSN: W5080000GWA
LIN Z56548 W5070000GWA





DESCRIPTION: DRAGONFIX is a FORSCOM, NDI "GO TO WAR" system that performs high frequency direction finding, intercept and collection. DRAGONFIX system is designed to automatically detect and permit intercept, analysis and reporting of emitter operating in .5-30 megahertz range by means of azimuth triangulation. DRAGONFIX is composed of three sets of shelters, each set consisting of two S-250 shelters (direction finder (DF) collection and analysis communications). Each shelter has two operators. The operators receive taskings. The sheltered equipment detects, collects, and determines azimuth and evaluates angle of target signals; determines height of ionosphere; calculates location, and prepares/issues reports.

HISTORICAL BACKGROUND:

Original contract production of one set was tested, accepted and delivered to the Government. Improvements to the set are ongoing for new delivery date 3QFY93.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
TECHNICAL MANUAL DELIVERY					!																							
DEPOT SUPPORT						!																						
TRANSITION TO LEVEL III									!																			

REQUIREMENTS DOCUMENT: Operational Needs Statement, DA approved.

TYPE CLASSIFICATION:

DRAGONFIX IS A FORSCOM, NDI "GO TO WAR" SYSTEM THAT PERFORMS HIGH FREQUENCY DIRECTION FINDING, INTERCEPT AND COLLECTION.

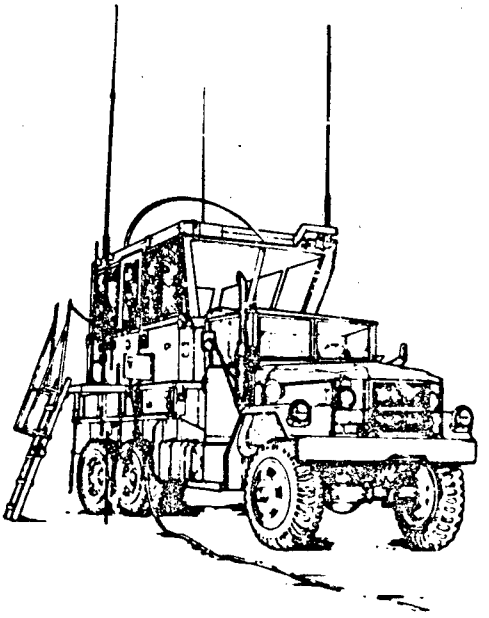
SMD

AN/TSW-7A, AIR TRAFFIC CONTROL CENTRAL

PROJECT MANAGER: Mr. Ma[illegible]ola, DSN 992-5271
COMM 908/532-5271

PE & LINE #: A27624 SSN: P454010

DESCRIPTION: The AN/TSW-7A is a mobile Air Traffic Control facility that can be deployed to tactical air fields for visual control of airborne and ground flight operations. This facility consists of a communications shelter and an ancillary equipment pallet. The communications shelter contains HF/UHF/VHF communications equipment and can accommodate up to three air traffic controllers at one time. Ancillary environmental control and power generating equipment contained on the pallet assembly provides the self-contained capability for operation of this system. Transport of the communications shelter and pallet assembly is accomplished via two each 2-1/2 ton trucks which permits tactical deployment of this facility.



HISTORICAL BACKGROUND:

Sep 79 - Production contract award for 22 systems.
Jun 82 - First Unit Equipped.
Jul 84 - Five additional systems procured by National Guard.
Nov 84 - System transition from AVRADA to CECOM.
Jun 86 - Six additional systems procured by active Army.
May 88 - ECPs approved for communications equipment upgrade.
Dec 89 - Initial fielding of upgraded communications equipment.
Jan 92 - Completion of fielding activities.
Jul 92 - Completion of communications equipment upgrade.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INSTALLATION OF UPGRADED COMMUNICATIONS EQUIPMENT	———	!																										
TRANSITION TO LEVEL III					!																							

REQUIREMENTS DOCUMENT: Statement of Need prepared by USAISC in Nov 78 to modify an existing Air Force system for Army use.

TYPE CLASSIFICATION: Standard approved Oct 80.

AN/TSW-7A AIR TRAFFIC CONTROL CENTRAL IS A TRANSPORTABLE FACILITY THAT CAN BE DEPLOYED AT TACTICAL AIR STRIPS FOR AIRBORNE AND GROUND CONTROL OF AIRCRAFT.

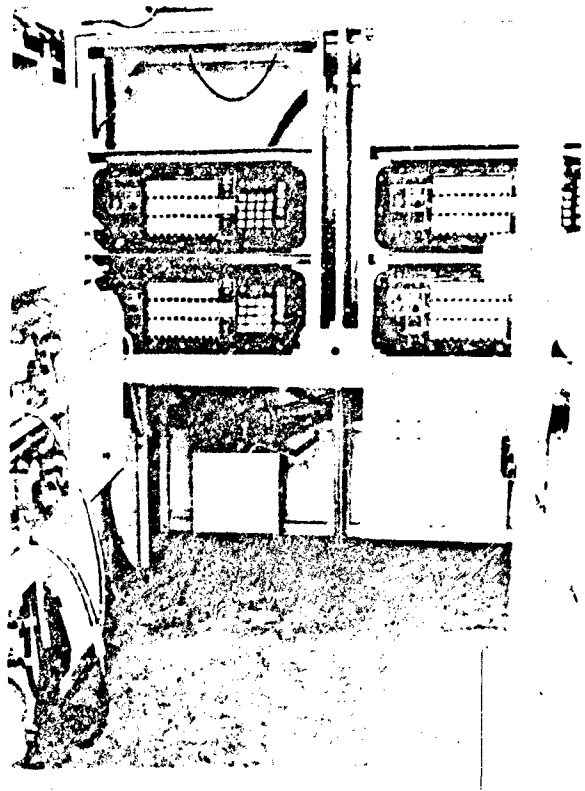
SMD

AN/TTC-41(V), CENTRAL OFFICE, TELEPHONE, AUTOMATIC

PROJECT MANAGER: Mr. Rafael Cananova, DSN 992-8941
COMM 908/532-8941

PE & LINE #: 738017-P1

DESCRIPTION: The AN/TTC-41(V) is an air or vehicular transportable system used to provide rapid automatic switching to tactical units in area-type communications systems. It provides cordless service to 2-wire common battery signaling (CBS) lines; 20 hertz ringdown (RD) lines or trunks; common battery dial pulse or dual tone multi-frequency (DTMF) lines; 4-wire tone signaling trunks; 4-wire DTMF confirmation, tone burst, and converter trunks; 4-wire single frequency signaling AUTOVON access; automatic tandem, and five levels of precedence and preemption. Depending on the number of SB-3614(V)A/TT Switchboards in the AN/TTC-41(V) shelter, the system can provide from 30 to 120 lines of service. AN/TTC-41(V) replaces the AN/MTC-3, AN/MTC-7, and AN/TTC-23. Materiel Change program (MC 1-90-07-0015) provides an arctic heater to the AN/TTC-41(V) shelter for those systems operating in arctic weather.



HISTORICAL BACKGROUND:

Sep 76 - Production contract awarded to SAAD.
Jul 77 - Prototype Testing.
Jun 90 - Arctic heater Materiel Change approved by CCB/SLRB.
Aug 90 - Arctic heater Materiel Change applied to units fielded in arctic weather.
May 90-Pres- Systems being fielded under the Battlefield Communication Review Program (BCR).

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
BCR FIELDINGS					I																							

REQUIREMENTS DOCUMENT: Qualitative Materiel Requirement approved Feb 72, amended Jan 73.

TYPE CLASSIFICATION: AN/TTC-41(V)1 to (V)4, Standard, Jul 77. AN/TTC-41(V)5 to (V)7, Limited Production, Mar 78.

AN/TTC-41(V) PROVIDES RAPID AUTOMATIC SWITCHING TO TACTICAL UNITS IN AN AREA-TYPE COMMUNICATION SYSTEM.

SMD

AN/TVS-5, CREW SERVED WEAPON SIGHT

PROJECT OFFICER: Mr. Anthony Anania, DSN 992-5271
COMM 908-532-5271

PE & LINE #:

DESCRIPTION: The AN/TVS-5 provides sighting and viewing of targets using second generation image intensifier techniques. When mounted on crew served weapons, the scope will provide the capability for delivery of accurately aimed fire during hours of darkness. AN/TVS-5 is primarily designed for use with the M2 and M60 Machine Gun and the 106mm Recoilless Rifle. The system is supplied with a suitable shipping case which protects the system. The sight can be used in the handheld mode for night surveillance by individual soldiers, commanders and reconnaissance elements. Fielding to Army units is complete. The Army is no longer procuring the second generation AN/TVS-5 weapon sight. Supplement/replacement system is the AN/PAS-13, Thermal Weapon Sight (TWS). However, we will continue to produce this device in support of other U.S. requirements, predominantly the Marine Corps.

HISTORICAL BACKGROUND:

1975 - First Production contract award.
1978 - First Unit Equipped.
1985-1989 - OMNIBUS Multi-year contract in effect for Marine Corps requirements (856 units).
1987-1990 - MINIBUS Multi-year contract in effect for other DOD requirements.
Feb 1991 - Contract award for Operation Desert Storm requirements (2138 units).
1QFY91-92 - Desert Storm procurement.
Sep 92 - Transition from PM, NVEO to CECOM Level II Management.

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
FOREIGN MILITARY SALES					I				I																			

REQUIREMENTS DOCUMENT:

TYPE CLASSIFICATION: Standard approved FY77.

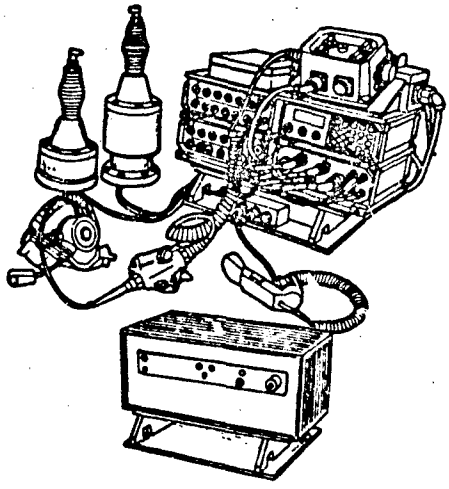
AN/TVS-5 PROVIDES SIGHTING AND VIEWING USING SECOND GENERATION IMAGE INTENSIFIER TECHNIQUES AND PROVIDES THE CAPABILITY OF ACCURATELY AIMED FIRE DURING HOURS OF DARKNESS.

SMD

AN/ULQ-19(V), SIGNAL JAMMER RACJAM

PROJECT OFFICER: Ms. B.K. Swenson, DSN 992-5108
COMM 908/532-5108

PE & LINE #: LIN Z63802 (RACJAM)
LIN Z33365 (HACJ)



DESCRIPTION: AN/ULQ-19(V) RACJAM is a fully automatic, mobile, responsive Very High Frequency (VHF) jammer capable of automatically detecting and jamming signal activity on any one of 16 pre-selected target channels. The system can be programmed to scan several frequencies and while disrupting non-friendly transmissions. AN/ULQ-19(V)3 HAC-J is the helicopter borne version of the jammer.

HISTORICAL BACKGROUND:

Dec 83 - Purchased by FORSCOM for readiness training, total of 20 original systems purchased without lifecycle support.
Jan 84 - CECOM tasked by DA to support FORSCOM by developing ILS.
Sep 84 - ILS management team established.
Mar 86 - Spare and repair parts list submitted to contractor for price quotes.
Mar 90 - Contract for Heliborne Applique Communications-Jammer (HAC-J) established.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
DELIVERY OF FULL PROVISIONING PARTS LIST (SPARES)			I																									
TYPE CLASSIFICATION			I																									
DELIVERY OF HAC-J FULL PROVISIONING PARTS LIST						I																						

REQUIREMENTS DOCUMENT: DA message 032045Z Jan 84.

TYPE CLASSIFICATION:

AN/ULQ-19 RACJAM IS A FULLY AUTOMATIC, MOBILE, RESONSIVE VHF JAMMER CAPABLE OF AUTOMATICALLY DETECTING AND JAMMING SIGNAL ACTIVITY ON ANY 1 OF 16 PRE-SELECTED TARGET CHANNELS.

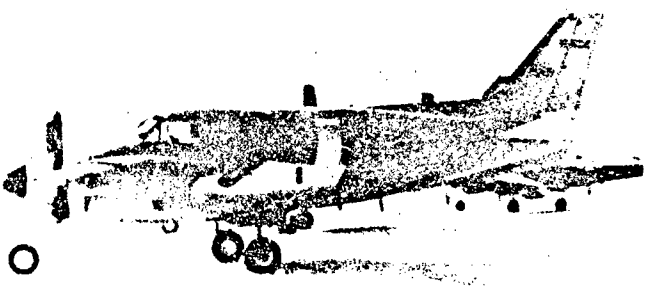
SMD

AN/USD-9, GUARDRAIL V (GRV)

PRODUCT MANAGER: Mr. Rene Acosta, DSN 992-8941
COMM 908/532-8941

PE & LINE #: SSN: AZ2900

DESCRIPTION: GRV is an airborne Communications Intelligence (COMINT) collection and Direction Finding (DF) system. AN/USD-9 is composed of: airborne collection platforms (RU-21H); a ground processing facility; data links; Tactical Commanders Terminals (TCT); and auxiliary ground equipment. GRV systems comprised of six aircraft are deployed in the Aerial Exploitation Battalion (AEB) of Corps MI Brigades. GRV is a fifth generation intelligence collection system using an Ultra High Frequency (UHF) data link to remotely control mission functions on aircraft from the ground-based Information Processing Facility (IPF) where mission analysis and reporting are accomplished. GRV provides near real-time information to Tactical Commanders via the TCT. MIBNLI Corps GRV system has been equipped with a remote relay capability to permit the aircraft to operate overseas while the ground facilities remain in CONUS. Improved GUARDRAIL V (IGR V) was a product improvement with new electronics, microwave data links and modified aircraft. These systems are deployed to V Corps and VII Corps. The GUARDRAIL Common Sensor (GR/CS) will replace both the GRV and IGR V systems. When GR/CS is fielded, GRV systems will be redeployed to other active and reserve component commands or retired.



HISTORICAL BACKGROUND:

Jun 76 - Contract award.
Nov 78 - GRV System 1 fielded to USAREUR.
Feb 79 - GRV System 2 fielded to Korea.
Apr 80 - GRV System 3 fielded to INSCOM.
Sep 81 - GRV System 3 transferred to XVIII Airborne Corps.
Aug 84 - Prototype remote relay fielded.
Jul 85 - GRV System 1 returned to SAAD for refurbishment.
May 86 - GRV System 1 refielded to III Corps.
Jan 89 - GRV System 2 returned to SAAD for refurbishment.
Oct 89 - GRV System fielded to MIBNLI, Orlando, FL.
Feb 91 - Transitioned from PM, EW/RSTA to Level II.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
GRV DISPLACED FROM CORPS BY IGR V					I																							
GRV DISPLACED FROM XVIII CORPS BY GR/CS									I																			

REQUIREMENTS DOCUMENT: GRV requirement approved 1975.

TYPE CLASSIFICATION: Standard A approved 15 Nov 80.

GRV IS AN AIRBORNE COMINT COLLECTION AND DF SYSTEM.

SMD

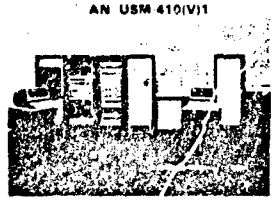
AN/USM-410, ELECTRONIC QUALITY ASSURANCE TEST EQUIPMENT (EQUATE)

PROJECT OFFICER: Ms. Linda Johnston, DSN 992-6052
COMM 908/532-6052

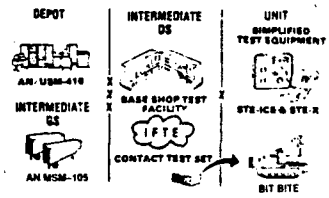
PE & LINE #: T61973, R09696

DESCRIPTION: The AN/USM-410 is a stand-alone, computer controlled Automatic Test system providing diagnostic, analog, digital and hybrid test and repair capability at GS and depot levels to numerous weapons systems (e.g., MLRS; BFVS; TACFIRE; FIREFINDER). AN/USM-410(V)2 is the primary testing resource in the AN/MSM-105(V)1 field, transportable, electronic test and repair system. AN/USM-410(V)4 was developed for use within the Electronic Equipment Test Facility (EETF), providing Aviation Intermediate Maintenance (AVIM) support to the APACHE Attack Helicopter. Non-tactical versions of the AN/USM-410 are used in depot and contractor facilities for Test Program Set development, production and repair.

AN USM 410(V)1



OBJECTIVE ATE SUPPORT SYSTEM



HISTORICAL BACKGROUND:

Jun 71 - Pre-Production contract award to RCA.
Aug 78 - Type Classified Limited Procurement authorization for 41 MSM-105s by Special IPR (SIPR).
May 79 - Additional five AN/MSM-105s authorized by Special IPR under extended Limited Procurement.
Dec 79 - AN/MSM-105 designated by DARCOM to fulfill GS/Depot Automatic Test Equipment (ATE) requirement.
Mar 80 - Letter IPR authorized 17 more AN/MSM-105s.
Jun 83 - Initial Operational Capability (USAREUR).
Apr 90 - Award of ECP-185 Production contract to General Electric.
Jul 91 - EETF Type Classified.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
ECP-185 MATERIEL RELEASE	!																											
PRODUCTION DELIVERIES ECP-185	____!																											
FIELDING ECP-185 (ACTIVE ARMY)	____!																											
FMS EETF/ECP-185 PRODUCTION & FIELDING					!	____	____	____	____	____	____	____	!															

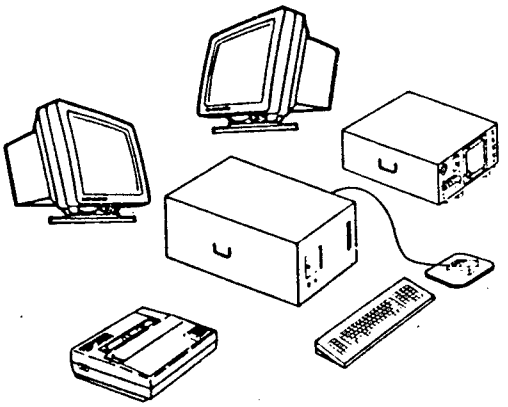
REQUIREMENTS DOCUMENT: Required Operational Capability, 22 Feb 80.

TYPE CLASSIFICATION: Standard approved May 82 for the AN/USM-410(V)1 and AN/USM-410(V)3; Limited Procurement for the AN/USM-410(V)2, OQ-290(V)1/MSM, and OA-8991/MSM approved May 82.

AN/USM-410 IS A GENERAL PURPOSE FAMILY OF COMPUTER CONTROLLED ATE USED FOR TEST, DIAGNOSIS AND REPAIR OF ELECTRONIC LINE REPLACEABLE UNIT, SHOP REPLACABLE UNIT, AND PRINTED CIRCUIT BOARDS CONTAINED IN NUMEROUS WEAPONS SYSTEMS.

SMD

AN/UYK-71A, FORSCOM AUTOMATED INTELLIGENCE SUPPORT SYSTEM (FAISS)



PROJECT OFFICER: Mr. Michael A. Travisano, DSN 992-5108
COMM 908/532-5108

PE & LINE #: LIN Z76367

DESCRIPTION: The FAISS is a stand alone microcomputer designed for use by tactical analysts and supervisors at all echelons to speed the intelligence process. It is a system of interconnected software automation tools, processes, and supporting procedures used to enhance FORSCOM's Intelligence and Electronic Warfare mapping, charting, and meteorological support mission responsiveness. It is fielded as an upgrade to MICROFIX.

HISTORICAL BACKGROUND:

Nov 87 - Joint Army/Air Force procurement.
Sep 88 - First fielding to the Air Force.
Jul 89 - First Army fielding.
Oct 91 - CECOM awarded ILS contract to TAMSCO.

EVENTS SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
TYPE CLASSIFICATION							I																					

REQUIREMENTS DOCUMENT: CINC FORSCOM Initiative, 8 Feb 90.

TYPE CLASSIFICATION:

FAISS IS A MICROCOMPUTER FORSCOM USES TO SPEED INTELLIGENCE PROCESSING.

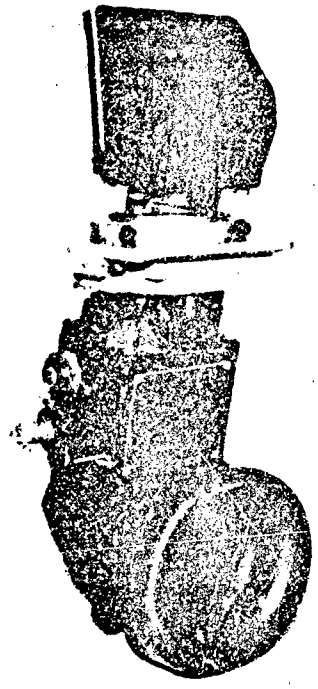
SMD

AN/VVS-2, DRIVERS VIEWER

PROJECT OFFICER: Mr. Anthony Anania, DSN 992-5271
COMM 908-532-5271

PE & LINE #: OPA (Procurement)

DESCRIPTION: The Drivers Viewer enables a closed hatched vehicle to be driven under night conditions without active illumination. The area viewed is presented as a green image display. It is lightweight enough to be installed from within the vehicle and can be manuaily rotated from between 30° to 45° depending on the vehicle in which it is to be mounted. Drivers Viewer is presently being installed in the Bradley M1 and M60 Tanks. Future plans also include purchase of AN/VVS-2 for M113 and M109 vehicles. Fielding is one per tracked vehicle. This system will be replaced or supplemented in the M1A2 and M2/M3 vehicles by the Drivers Thermal Viewer.



HISTORICAL BACKGROUND:

1976 - NVEOC first Production contract award.
1978 - First Unit Equipped.
1985-1989 - Five-year OMNIBUS I contract awarded ITT/Varo.
1990-1992 - Three-year OMNIBUS II contract awarded to IMO/VARO.
Aug 92 - Transistion from PM, NVEO to CECOM Level II Management.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
PRODUCTION/FIELDING																												
OMNIBUS II PRODUCTION																												

REQUIREMENTS DOCUMENT:

TYPE CLASSIFICATION: Standard approved FY77.

AN/VVS-2 ENABLES A CLOSED HATCH VEHICLE TO BE DRIVEN UNDER DARK NIGHT AND STARLIGHT CONDITIONS WITHOUT ACTIVE ILLUMINATION.

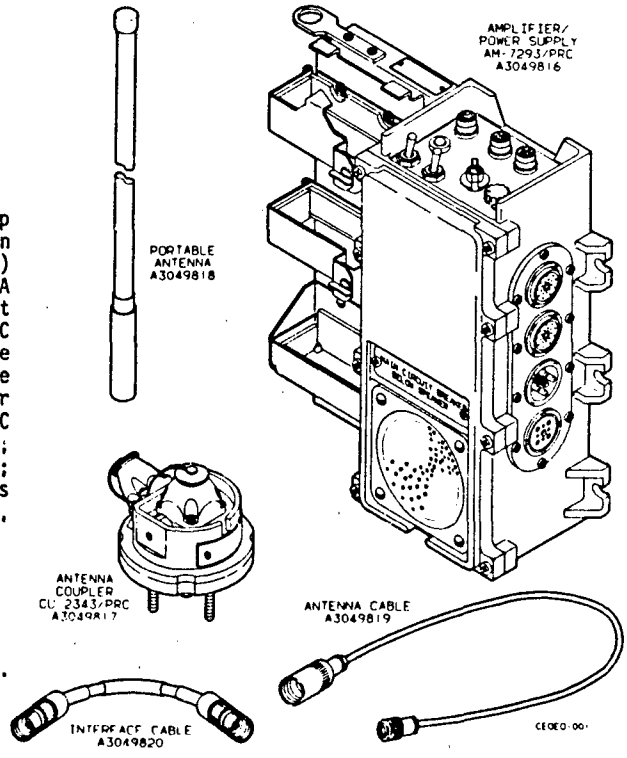
MD

OG-174/VRC, AMPLIFIER POWER SUPPLY

PROJECT OFFICER: Ms. Rosemarie LaMacchia, DSN 992-6052
COMM 908/532-6052

PE & LINE #: A53491

DESCRIPTION: The OG-174/VRC Amplifier Power Supply Group is a vehicle applique that permits the installation of an AN/PRC-68A into Self-Propelled Howitzers (M109 and M110) and M577 Command Tracked Vehicles. When the AN/PRC-68A Radio is mounted in this manner, it will provide short range (less than 3KM) vehicle communications. OG-174/VRC also provides an interface for operation with the AM-1780/VRC Amplifier for intercommunication within the vehicle and the AN/GYK-29 Battery Computer System for communication between firing batteries. OG-174/VRC consists of: Amplifier/Power Supply (vehicle applique); Antenna Coupler; Portable Antenna; Antenna Cable Assembly; and Interface Cable Assembly. The vehicle applique has dimensions of: height - 12.4 inches; width - 11.3 inches, depth - 3.9 inches; and weighs 13 pounds.



HISTORICAL BACKGROUND:

Sep 84 - Contract Award.
Nov 86 - Production Qualification Test/First Article Test.
Apr 90 - First Unit Equipped.
May 90 - Initial Operational Capability.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
COMPLETION OF 35 SET ASSEMBLIES AT DEPOT			!																									
TRANSITION TO LEVEL III					!																							

REQUIREMENTS DOCUMENT: ROC, Apr 79.

TYPE CLASSIFICATION: Limited Procurement approved Dec 82; Extension approved Dec 86; Standard approved Jul 89

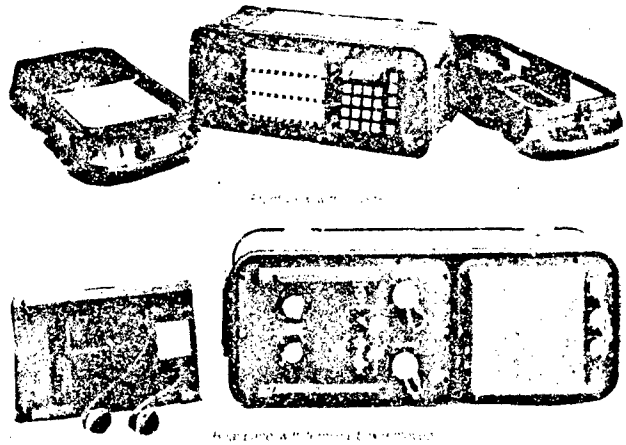
OG-174/VRC CONSISTS OF AN AMPLIFIER/POWER SUPPLY (VEHICLED APPLIQUE), ANTENNA COUPLER, PORTABLE ANTENNA, ANTENNA AMPLIFIER ASSEMBLY AND INTERFACE CABLE ASSEMBLY.

SMD

SB-3614(V)A/TT SWITCHBOARD

PROJECT OFFICER: Mr. Rafael Casanova, DSN 992-8941
COMM 908/532-8941

PE & LINE #: 738017.P1



DESCRIPTION: Two Product Improvement Programs (PIPs) were applied to the SB-3614 following its last production in Apr 79. The first PIP (1-81-07-0021) incorporated Dual Central Office Interface and Software Changes adding the capability to interface with civilian dial central offices and included software changes to correct/modify some functional features of the switchboard. These changes were made through the addition of a DCO card and a Programmable Read Only Memory card for each switchboard. The second PIP (1-83-07-0084) was to add a Tandem AUTOVON Capability (changing the system nomenclature to SB-3614A). The Tandem feature allows the SB-3614A subscriber to reach a destination caller by merely dialing the destination subscriber's appropriate seven to ten digit number. The other user services being provided by this PIP are: automatically primary/alternate trunk routing; TRI-TAC numbering plan capability; five levels of precedence; subscriber initiated conferencing; manual/automatic data base entry and dial central office interface. The Marine Corps are the Primary Inventory Control Activity for the SB-3614A switchboard.

HISTORICAL BACKGROUND:

Sep 83 - DCO contract award.
Mar 84 - Tandem AUTOVON Development contract award.
Sep 85 - Tandem AUTOVON Production contract award.
Sep 86 - DCO kits distributed and applied.
Jun 87-Apr 90 - Tandem AUTOVON Modification Work Order (MWO) applied to units in Germany, CONUS and Korea.
May 90-Pres - System fielded as part of the AN/TTC-41(V) under the Battlefield Communication Review (BCR).

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
BCR FIELDINGS																												

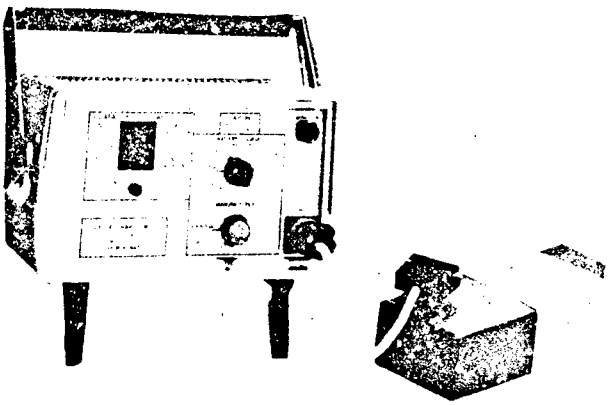
REQUIREMENTS DOCUMENT: Qualitative Materiel Requirement, 1972; amended, 31 January 1973.

TYPE CLASSIFICATION: Standard A approved.

SB-3614(V)A/TT IS A 30-TERMINAL AUTOMATIC SWITCHBOARD WHICH PROVIDES RAPID CORDLESS SERVICE.

SMD

TS-4403/U TEST SET, BATTERY



PROJECT MANAGER: Mr. William Schlosser, DSN 992-8941
COMM 908/532-8941

PE & LINE #:

DESCRIPTION: The TS-4403/U Test Set is a device that measures charge remaining in Lithium/Sulfur dioxide batteries, specifically the BA-5590/U and BA-5598/U high cost, high consumption batteries. An upgrade to include testing of the BA-5588/U will be added. TS-4403/U is a non-developmental item being procured from Chemtronics Limited, Yehuda, Israel. Due to the extensive use of lithium batteries, the test set is able to reduces operating costs and battery requirements of its users. This is a Common Table of Allowance (CTA) item, not Table of Organization and Equipment (TO&E).

HISTORICAL BACKGROUND:

Dec 89 - Contract award for 18 units for evaluation.
Aug 90 - Nine units delivered for evaluation to operating units. Nine diverted to Operation Desert Shield.
Dec 90 - Contract awarded for Operation Desert Shield requirements; Initial four delivered to SWA.
Dec 91 - Letter contract award for a quantity of 51 against requirements contract.
Apr 92 - Delivery of 51 units.
May 92 - Requirements contract modified to include test capability for BA-5588/U.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
DELIVERY	!										!																	

REQUIREMENTS DOCUMENT: FORSCOM Operational Needs Statement, Nov 89.

TYPE CLASSIFICATION: Standard approved 4QFY92.

TS-4403/U TEST SET IS A DEVICE THAT MEASURES CHARGE REMAINING IN LITHIUM/SULFUR DIOXIDE BATTERIES, SPECIFICALLY BA-5590/U, BA-5598/U, AND BA-5588/U.

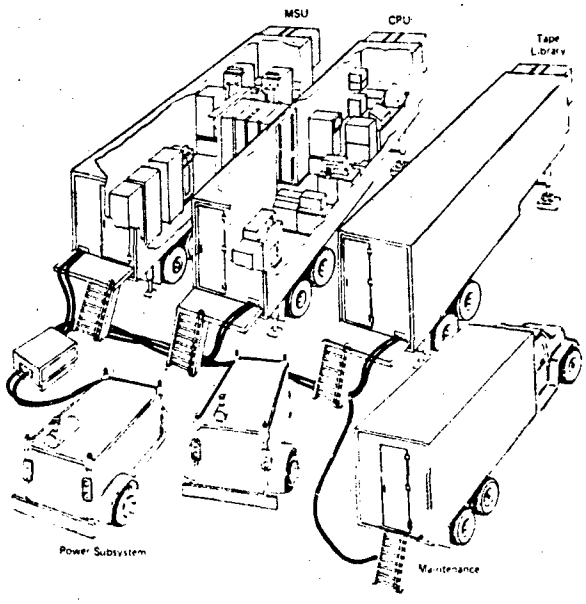
SMD

CORPS/THEATER ACP SERVICE CENTER I (CTASC-I)

PROJECT MANAGER: Ms. Rosemarie LaMacchia, DSN 992-6052
COMM 908/532-6052

PE & LINE #: Z25526, Z62937, Z38296, Z41595, Z50481

DESCRIPTION: The CTASC-I is a mobile Automatic Data Processing (ADP) system supporting Combat Service Support applications at Corps and Theater levels. CTASC I supports Standard Army Management Information systems automating Personnel, Financial and Logistics management functions. CTASC-I is composed of a self-contained complex of three semi-trailer vans housing the central processing unit, mass storage units and tape library facilities. The system is also fielded with a maintenance van and two 100 kilowatt generators.



HISTORICAL BACKGROUND:

Feb 80 - O&O Approved.
May 80 - HQDA Procurement Decision Memorandum.
Nov 82 - Contract awarded to IBM for seven systems.
Sep 83 - First Unit Equiped.
Nov 84 - O&O Annex for Communications Upgrade approved.
Sep 85 - Contract Modification for Communications Upgrade.
Sep 86 - Contract awarded to IBM for five additional systems.
Feb 88 - Five additional systems fielded.

REQUIREMENTS DOCUMENT: DA directed Procurement.

TYPE CLASSIFICATION: Limited Procurement-Urgent approved Jun 82.

CTASC-I IS A MOBILE ADP SYSTEM SUPPORTING COMBAT SERVICE SUPPORT APPLICATIONS AT CORPS AND THEATER LEVELS.

SMD

CORPS/THEATER ADP SERVICE CENTER-II (CTASC-II)

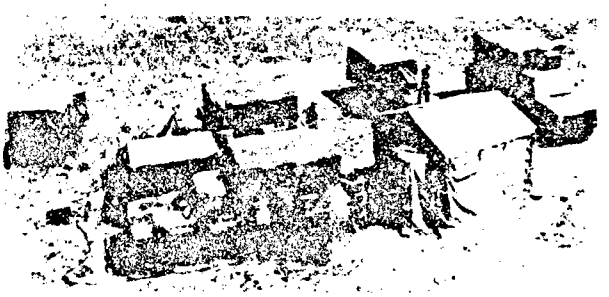
PROJECT MANAGER: COL Charles B. Giasson, DSN 655-4583
COMM 703/805-4583

PRODUCT MANAGER: LTC Albert Arnold, DSN 655-4583
COMM 703/805-4583

PROJECT OFFICER: Mr. Kim Dahabsu, DSN 992-5312
COMM 908/532-5312

PE & LINE #: Z81820

DESCRIPTION: The CTASC-II system provides the Army with transportable ADP information systems employed by major subordinate commands at corps and theater levels. The system provides and processes logistical and medical Standard Army Management Information System (STAMIS) software at corps and echelons above corps (EAC). It is organic to the Materiel Management Center (MMC); Theater Medical Materiel Management Center in the Medical Command (MEDCOM); and, the Medical Supply Optical and Maintenance Battalion (MEDSOM). It also exchanges information with other information systems. CTASC-II consists of commercial off-the-shelf computers and communications equipment housed in rigid-wall shelters transported by three Commercial Utility Cargo Vehicles (CUCVs).



HISTORICAL BACKGROUND:

PHASE I - PROOF OF PRINCIPLE:
3QFY87 - DA Milestone 0.
2-4QFY87 - Prototype Development - mock-up.
1-3QFY88 - Prototype Development - sheltered system.
3QFY88 - Technical Feasibility Test 1.
4QFY88 - Early User Test and Evaluation; DA Major Army Information System Review Council (MAISRC) Milestone I/II).

PHASE II - PRE-PRODUCTION PROVE-OUT:
4Q88-2Q89 - Technical Feasibility Test 2.
1QFY89 - Maintenance Engineering Evaluation.
4QFY89 - Pre-Production Engineering Model.
1QFY90 - Pre-Production Prove-Out Testing.
3QFY90 - First Unit Equipped - Block I Hardware.
4QFY90 - Maintainability Demonstration; TAMMIS Milestone III; Limited Production TAMMIS/ODS.
4QFY91 - Executive Software Acceptance Test; Physical Configuration Audit on Technical Data.
1-2QFY92 - SARSS Software Acceptance Test (post-ODS).
3QFY92 - SARSS/CTASC-II Milestone III.

EVENTS SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
FIELDING												!																
TRANSITION														!														

REQUIREMENTS DOCUMENT: O&O, 19 Dec 89; ROC, 6 Feb 91.

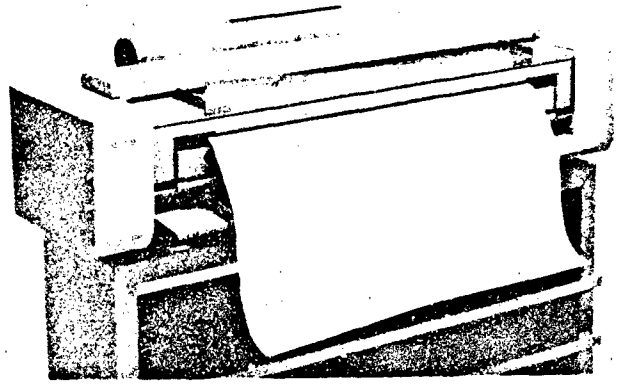
TYPE CLASSIFICATION:

CTASC-II SYSTEM PROVIDES THE ARMY WITH TRANSPORTABLE ADP INFORMATION SYSTEMS TO BE EMPLOYED BY MAJOR SUBORDINATE COMMANDS AT CORPS AND THEATER LEVELS.

SMD

LARGE-SCALE TACTICAL DOCUMENT COPIER

PROJECT MANAGER: Mr. Mark DiPaola, DSN 992-5271
COMM 908/532-5271



PE & LINE #:

DESCRIPTION: The Large-Scale Tactical Document Copier program was initiated as a result of direction from the Battle Command Integration Program General Officer Steering Committee to field an non-developmental item (NDI) copier capable of reproducing large documents up to 36 inches in width. This copier reproduces large documents such as battle maps and mission overlays which are required to coordinate battlefield activities. A ruggedized case is provided to transport the copier and associated support items for field deployment. This item has been approved for Common Table of Allowance (CTA) distribution.

HISTORICAL BACKGROUND:

Jan 88 - III Corps identified a need for a tactical large-scale copier.
Apr 88 - CACDA tasked SIGCEN to identify NDI copier to meet mission needs.
Jan 89 - SIGCEN requested CECOM conduct a market survey for large-scale copier.
Mar 89 - CECOM Technical Assessment Center (TAC) identified Xerox 2510 copier as a candidate for field testing.
Aug 90 - General Officer Steering Committee directs expeditious completion of copier testing and fielding activities.
Mar 91 - CECOM TAC completes testing on Xerox copier.
Feb 92 - Program management responsibilities transferred to SMD to direct copier acquisition and fielding activities.
Apr 92 - Copier approved for inclusion into CTA 50-909.
Jun 92 - GSA contracts awarded for copier and associated support components.

EVENTS SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
COMPLETION OF TECHNICAL MANUAL VALIDATION			▼																									
COPIER PURCHASING PROCEDURES IDENTIFIED TO USERS					▼																							

REQUIREMENTS DOCUMENT:

TYPE CLASSIFICATION:

THE LARGE-SCALE TACTICAL DOCUMENT COPIER IS A COMMERCIAL COPIER CAPABLE OF BEING DEPLOYED TO REPRODUCE BATTLE MAPS AND MISSION OVERLAYS.

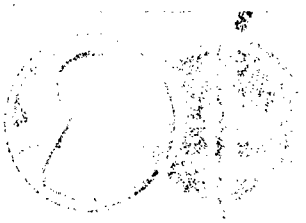
SMD

NIGHT VISION INFRARED COMMON MODULES

SUBJECT OFFICER: Mr. Anthony Anania, DSN 992-5271
COMM 908/532-5271

PE & LINE #:

DESCRIPTION: The Night Vision Common Modules form the basic building blocks for many of the Army's Far Infrared Night Vision Systems such as the AH-64 Apache Target Acquisition Designation Sight/Pilots Night Vision Sensor (TADS/PNVS); MI Abrams, Thermal Imaging System (TIS); M60A3, Tank Thermal Sight (TTS); Bradley Fighting Vehical, Integrated Sight Unit (ISU); and the Manportable Common Thermal Night Sights (MCTNS). There are currently close to 40 different Common Modules fielded which fall into one of the following four major categories: Mechanical, Optical, Signal Conversion, and Electrical. The common modules are procured with Stock Funds Depot Reparable and are removed/replaced at General Support level. Configuration management is maintained by CECOM Night Vision and Electro-Optics Directorate. Most of the technical data packages are fully competitive with some prequalification requirements for certain modules due to the state of the art technology.



HISTORICAL BACKGROUND

1974 - Joint Logistics Commanders agree upon a Tri-Service policy of using Common Modules for Forward Looking Infrared (FLIR) development.
1976 - DT-591/UA Detector/Dewar accepted as a Common Module.
1978 - First Unit Equipped DT-591, DT-617, DT-594.
1981 - First follow-on competitive production spares buy DT-591, DT-617, DT-594.
1982 - First follow-on competitive production spares buy HD-1033B/C cryogenic cooler.
1984 - Initiation of Optical Improvement Program by CECOM Night Vision and Electro-Optics Directorate.
1985 First follow-on competitive production spares buy HD-1132 cryogenic cooler.
1989 - Night Vision and Electro-Optics Directorate approves First Article Test for Optically Improved Detector/Dewars.
1990 - First follow-on competitive production spares buy for HD-1033D.

REQUIREMENTS DOCUMENT: Required Operational Capability established at End Item Application/System.

TYPE CLASSIFICATION: Each Common Module has been Type Classified Standard.Standard.

NIGHT VISION COMMON MODULES FORM THE BASIC BUILDING BLOCKS FOR MANY OF THE ARMY'S FAR INFRARED NIGHT VISION SYSTEMS.

Regency Net Survivable HF

SMD

REGENCY NET SYSTEM (RN)

PROJECT OFFICER: Mr. Ronald W. Durkel, DSN 995-4011
COMM 908/544-4011

PE & LINE #: BB-8422

DESCRIPTION: The RN System is a Tri-Service System. A Non-Developmental Item acquisition that will provide the U.S. Commander in Chief, Europe with an independent, agile, survivable, fully supportable High Frequency (HF) radio communications system with secure data and voice communications capable of operations in a wartime environment. AN/TRC-179(V)1 (Force) Terminal is the primary element of the RN architecture and consists of an assemblage of HF Radio/Transmitter equipment, and computer hardware, modems, power supplies, COMSEC, Input/Output (I/O) devices and environmental control units housed in an S-711/TRC-179(V) shelter. The AN/TRC-179(V)3 version is for split-site use by the Air Force and Navy. Additional major items constituting RN include the AN/GRC-215 (Team) Terminal, the Regency Net/Flaming Arrow Net (RN/FAN) Interface, Broadband Antenna AS-3904/G and the PU-794/G Generator Set. The Regency Net System will replace Cemetary Net in Europe.

HISTORICAL BACKGROUND:

May 79 - ASDC3I expressed urgency of upgrade requirement for CINCEUR communication, directed upgrading, and assigned Army as Lead Service.
Jun 80 - PM, DCS (Army) assigned materiel development/acquisition task by Commander, AMC.
Mar 82 - ASDC3I message directed services to plan, program, and budget for acquisition of equipment to satisfy validated Requirements Document.
Sep 82 - OSD memo assigned F/AD1 to RN Project.
Apr 83 - JCS message validated services terminal requirements for Europe and modified them by message (S) 121519Z May 83.
Dec 83 - Competitive solicitation awarded to Magnavox.
May 87 - PM RN assignment to PEO Communications Systems.
Jan 90 - Training Materiel Release for Ft Gordon approved and signed by DCG, CECOM.
Feb 90 - Final hand-off of all RN equipment and support packages to Ft Gordon completed.
Sep 90 - IOT&E completed.
Nov 91 - CONUS Limited User Test completed; Commence pre-positioning of assets.
Dec 91 - Decision from DISC4 to preceed to fielding without Follow-On Evaluation.
Jun 92 - Deployment of RN to EUCECOM initiated.
Sep 92 - Transition of RN project management from PEO Communications Systems to CECOM.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
OPERATIONAL EXPERIMENT (LIMITED USER TEST)	I																											
FIRST UNIT EQUIPPED		I																										
FIELDING RELEASE		I																										
IPR (TYPE CLASSIFICATION STANDARD)		I																										

REQUIREMENTS DOCUMENT: USCINCEUR RN Baseline Requirements Document approved by JCS, 18 Feb 82.

TYPE CLASSIFICATION: Standard approved 13 Apr 92.

RN SYSTEM IS AN INDEPENDENT, AGILE, SURVIVABLE, FULLY SUPPORTABLE HF RADIO COMMUNICATION SYSTEM.

SMD

TACTICAL ARMY COMBAT SERVICE SUPPORT COMPUTER SYSTEM (TACCS)

PROJECT OFFICER: CPT John Levine, DSN 992-6052
COMM 908/532-6052

PE & LINE #: C72396 C72626
C08565 C72876

DESCRIPTION: The TACCS is an off-the-shelf ruggedized, two-man transportable, user friendly, computer and software system to be used on the battlefield at company level and above. The basic TACCS will include a central processing unit, random access mass storage, printer, visual display, keyboard entry device, communications interface, and the capability to both archive the mass storage and electronically transfer data between work stations. The system is operated by military personnel of various grades and ADP skill levels and by functional people with no computer programmer training. It provides support to personnel, supply, maintenance, medical, ammunition, and transportation functional areas. TACCS will interface with DAS-3, TCS, and TCT.

HISTORICAL BACKGROUND:

Mar 82 - Contract for predecessor program, Division Level Data Entry Device (DLDED) terminated.
Jan 83 - Released Request for Proposal (RFP) for Phase-II (Fly-off testing and award).
Sep 83 - Phase-II contract awarded (three vendors).
Aug 84 - Production contract awarded.
May-Jun 84 - DT-II/OT II.
Sep 84 - Production contract award.
Jan 85 - Changed from B22 to B26 system.
May 85 - First Unit Equipped; First Article Test began.
Sep 86 - Follow-On Evaluation of First Article Test.
Oct 86 - Full production approval by OSD Major Army Information System Review Council (MAISRC).
Dec 86 - Maintenance Change Concept Study to be finalized; Incorporate remote ports and transit case ECPs.
Aug 87 - RFP sent to Federal Prison for the manufacture of TACCS spare cables; VECP submitted by contractor was withdrawn because of no projected savings.
Jun 88 - ECP to upgrade system processor/tape drive rejected by Government. ECP to produce TACCS printer as custom build item submitted.
Jan 88-Oct 89 - Fielded System Review conducted at CONUS and OCONUS sites.
Jul 90 - ECP approved by DA to upgrade the system processor and software (TACCS-E).
Jan 91 - Completed delivery of basic TACCS Box under existing contract.
Mar 91 - Full Materiel Release granted to TACCS Program; Fielding of TACCS-E retrofit began.
Apr 91 - Standard LINS assigned to TACCS configuration.
Sep 92 - TACCS program transitioned from PM TACMIS to CECOM.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
ADDITIONAL FIELDING	———	!																										
TRANSITION FROM PM TACMIS TO CECOM		!																										

REQUIREMENTS DOCUMENT: USA TRADOC ACN ROC, 82.

TYPE CLASSIFICATION: Limited Production, with full production decision by MAISRC approved Oct 86. Standard approved Nov 90.

TACCS IS A TRANSPORTABLE COMPUTER AND SOFTWARE SYSTEM PROVIDING SUPPORT TO THE PERSONNEL, SUPPLY, MAINTENANCE, MEDICAL, AMMUNITION AND TRANSPORTATION FUNCTIONAL AREAS. TACCS-E IS A MODIFIED/UPDATED VERSION OF THE TACCS WHICH UTILIZES THE INTEL 80386 PROCESSOR AND BTOS 2 FOR AN OPERTING SYSTEM.

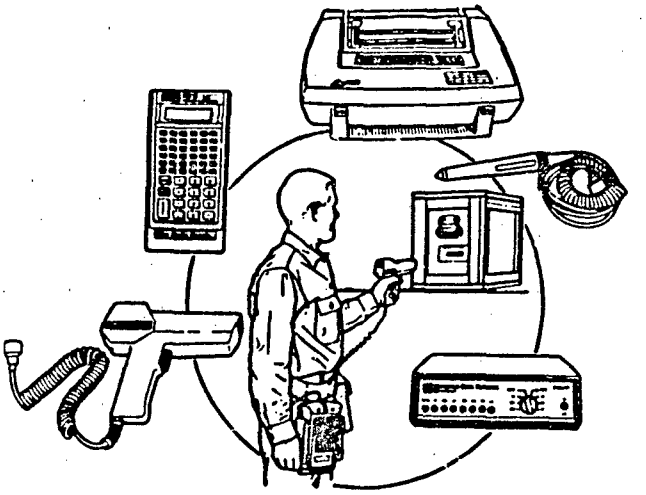
SMD

TACTICAL LOGISTICS APPLICATIONS OF AUTOMATED MARKING AND READING SYMBOLS LOGMARS (T)

PROJECT OFFICER: Mr. Nick Petouses, DSN 992-2969
COMM 908/532-2969

PE & LINE #: Z09000, Z09001, Z09002, Z27679, Z50144

DESCRIPTION: The LOGMARS (T) is a project designed to integrate standard machine readable symbology (three of nine bar code) into the various Army echelons employing Combat Service Support Standard Army Multicommand Management Information Systems hardware and software for the preparation of source data automation of logistics functions. Present plans call for the acquisition of off-the-shelf hardware consisting of the following equipment; portable bar code reader/scanner, bar code printers and modems. Different users will receive different configurations of this equipment. This is a PM TACMIS, item managed by the CECOM Weapons Systems Manager (WSM) for AMC.



HISTORICAL BACKGROUND:

Nov 83 - FY86-90 OPA requirements submission to HQDA began; Draft Market Survey completed.
Jan 84 - Economic Analysis completed.
Jun 84 - Life Cycle Cost Estimate (LCCE) validated submitted to USA LOGCEN.
Sep 86 - Contract award to Syscon Corporation.
Mar-Jun 87 - Initial Key Personnel and sustainment training.
Jan-Jul 87 - First Article Test.
Sep 87 - First Unit Equipped.
Nov 88 - Validated LCCE update.
Mar 90 - ECP for thermal printer approved; Full Materiel Release granted to LOGMARS (T).
Apr 91 - Thermal Transer Printer fielding began.
Jan 92 - LOGMARS III technical description issued to DOD branch services for review.
Apr 92 - LOGMARS III technical description forwarded to CECOM for review and comment.
Jun 92 - CECOM comments on LOGMARS III technical description forwarded to Materiel Developer for review and approval; Technical Data Package for Thermal Transfer Printer submitted to CECOM for review.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
LOGMARS III TECH DESCRIPTION (FINAL)		I																										
CONTRACT AWARD LOGMARS III						I																						
TRANSITION TBD																												

REQUIREMENTS DOCUMENT: Final ROC was approved by DA, Aug 85.

TYPE CLASSIFICATION: Generic Type Class of specification, Standard, Jun 86.

LOGMARS (T) IS AN AUTOMATED SYSTEM TO INTEGRATE STANDARD MACHINE READABLE SYMBOLOGY FOR MARKING AND READING SYMBOLS INTO THE STANDARD ARMY MULTI-COMMAND MANAGEMENT INFORMATION SYSTEMS.

DMM

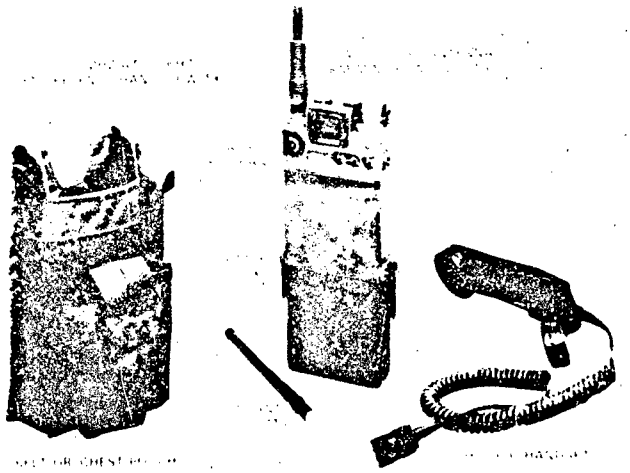
DMM

AN/PRC-126, RADIO SET

ITEM LEADER: Ms. Carmen Korman, DSN 992-3572
COMM 908/532-3572

PE & LINE #: R55336

DESCRIPTION: The AN/PRC-126 is a short range, handheld tactical radio for use primarily at the squad/platoon level. AN/PRC-126 is a lightweight, militarized transceiver providing two-way, voice-communications. The radio covers the frequency range of 30-87.975 megahertz. Its nominal range for reliable communications over rolling, slightly wooded terrain is 3,000 meters. Weighing 52 ounces and measuring 57 cubic inches in size, the radio is capable of interoperating with the AN/VRC-12, AN/VRC-77, and SINCGARS families of radios in the fixed frequency mode. AN/PRC-126 enables small unit leaders to adequately control the activities of subordinate elements in carrying out the unit's mission. AN/PRC-126 is required for the Infantry, Rangers and Special Forces.



HISTORICAL BACKGROUND:

May 85 - VCSA decision to take NDI approach to replace the AN/PRC-68.
Jul 86 - First Production contract awarded to Magnavox Corporation, Ft. Wayne, IN, for a quantity of 4,464.
Jun 88 - Final BOIP approved by TRADOC/DA.
Jan 89 - Option awarded for 2,885 radios.
Sep 89 - Phase I fielding completed.
Oct 89 - Option awarded for 280 radios.
Mar 90 - Option awarded for 1147 radios.
Dec 90 - Phase II fielding begins.
Sep 91 - Contract awarded for 2,574 radios.

REQUIREMENTS DOCUMENT: ROC, 3 Oct 85; Card Reference Number 0851.

TYPE CLASSIFICATION: Standard A approved 30 Jul 86.

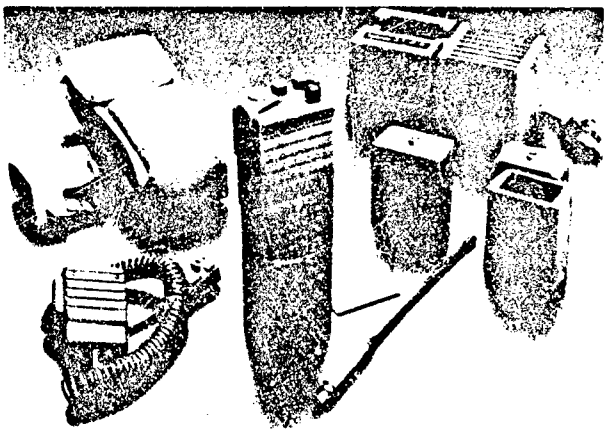
AN/PRC-126 RADIO SET IS A HAND-HELD RECEIVER TRANSMITTER THAT PROVIDES SHORT-RANGE, GROUND-TO-GROUND VOICE COMMUNICATION IN THE 30 MEGAHERTZ to 80 MEGAHERTZ BAND.

DMM

AN/PRC-127, RADIO SET

PROJECT OFFICER: Ms. Carmen Korman, DSN 992-3572
COMM 908/532-3572

PE & LINE #: N17818



DESCRIPTION: The AN/PRC-127 is a short range, hand-held, non-militarized radio for use primarily by support troops. AN/PRC-127, is a small, lightweight, Very High Frequency (VHF) radio capable of providing two-way voice communications at ranges up to three kilometers. The approximate size of the radio is 7.8" by 2.5" by 1.5", weighing approximately 24 ounces. It covers at minimum, the frequency range of 136-160 megahertz. AN/PRC-127 will be employed at the lowest echelon of command to control squad and team- sized elements of Combat Service and Combat Service Support units whose mission requires the use of a radio for control of supply areas, construction areas, convoys, base defense and dismounted rear battle operations. Radio set includes Receiver/Transmitter, Antenna, Speaker/Microphone, Nickel Cadmium Battery Packs, Battery Charger, Non-Rechargeable Battery Cell Holder, and nylon case holders.

HISTORICAL BACKGROUND:

May 85 - VCSA decision on NDI approach to replace AN/PRC-68 radio.
Jan 86 - Market Investigation.
May-Jun 86 - TECOM, USA SIGCEN evaluation of candidates.
Mar 87 - Acqusisition Plan approved; Milestone I/III IPR.
Feb 88 - Contract award - Bendix/King for 7,700 radios.
Feb 89 - Option exercised for 7,700 radios.
Dec 90 - Option exercised for 6,000 radios.
Feb 91 - Option exercised for 4,000 radios.
Sep 91 - Option exercised for 10,000 radios.

EVENT SCHEDULE:

FISCAL YEAR	92				93				94				95				96				97				98			
QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
FOLLOW-ON FIELDING								I																				

REQUIREMENTS DOCUMENT: ROC, 7 Jan 87.

TYPE CLASSIFICATION: Standard approved 29 Jan 88.

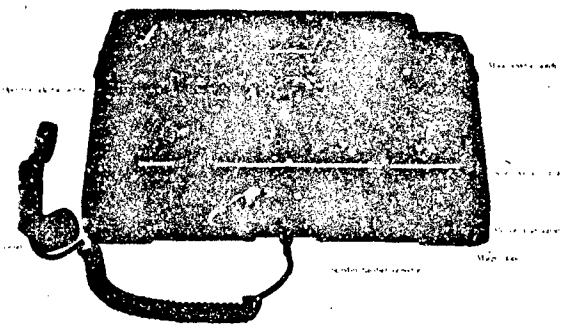
AN/PRC-127 NON-HARDENED SMALL UNIT RADIO IS A COMPACT, LIGHTWEIGHT, HAND-HELD TRANSCEIVER. IT IS CAPABLE OF PROVIDING SMALL UNIT LEVEL COMMUNICATIONS OVER DIVERSE TERRAIN UNDER A WIDE RANGE OF CLIMATIC CONDITIONS.

DMM

AN/UXC-7, LIGHTWEIGHT DIGITAL FACSIMILE (LDF)

ITEM MANAGER: Mrs. Jean Alsmen, DSN 992-3403
COMM 908/532-3403

PE & LINE #: L67964



DESCRIPTION: The AN/UXC-7 is a non-developmental program and provides facsimile graphic/narrative traffic capability over digital switched voice and data networks, combat net radios, and supplements the Single Subscriber Terminal and/or communications centers at maneuver elements from battalion through echelons above corps. LDF is capable of operating over voice bandwidth channels having error rates up to 1 in 1000. It is also capable of operating over tactical cable/wire systems through direct wireline interface and tactical switching systems. LDF is capable of operating both with and without approved COMSEC appliques in all of the above configurations. NATO interoperability conforming to STANAG 5000 is provided. The 55 pound LDF is capable of transmitting/receiving handwritten/typewritten copy, sketches, and overlays up to 8 1/2" by 14" in black and white format. The required on-the-air time is less than 15 seconds at 16 kilobytes per second for an average 8 1/2" by 11" typewritten page.

HISTORICAL BACKGROUND:

Feb 84 - Market survey completed.
May 84 - Management Transition to PM MSCS from PM ATACS .
Jul 84 - Acquisition Plan approved.
Aug 84 - Solicitations received.
Sep 84 - Technical Evaluation completed; Production contract award held pending Congressional reprogramming of funds.
Oct 84 - Production contract award held pending resolution of protests.
Mar 85 - Protest resolved; Production contract awarded to Magnavox Advanced Products and System Company.
May 86 - First Article Test completed/secure lighting modification implemented.
Sep 88 - Follow-on buy for Air Force and Navy.
Jul 89 - Army deliveries completed.
Aug 89-Jun 91 - Options exercised.
Dec 89 - Fielding to 97th and 7th Signal Brigade.
Apr 90 - Fielding to National Guard Bureau.
Jun 91 - Contract Modification for out-of-warranty depot level repair.
Jul 91 - Full Materiel Release.
Jun 92 - Management Transistion to Level III Management for PM MSCS.

REQUIREMENTS DOCUMENT: Joint Operational Requirement MJCS-26-84, 17 Feb 84.

TYPE CLASSIFICATION: Standard approved 12 Sep 84.

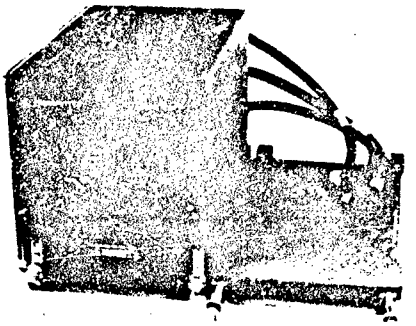
AN/UXC-7 IS A TERMINAL FOR TRANSMISSION/RECEPTION OF FACSIMILE GRAPHIC/NARRATE TRAFFIC OVER DIGITAL SWITCHED VOICE AND DATA NETWORKS, AND COMBAT NET RADIOS, AND SUPPLEMENTS THE SINGLE SUBSCRIBER TERMINAL AND/OR COMMUNCIATIONS CENTERS.

DMM

MK-2488/G, INSTALLATION KIT

PROJECT LEADER: Ms. Carol Magee, DSN 992-4406
COMM 908/532-4406

PE & LINE #: A1-6E50621G04; A1-7E50671G02



DESCRIPTION: The MK-2488/G Installation Kit is used to maintain electrical capability between older high level segral Teletypewritters(TTYs)/modems and newer low level signal security equipment. The Installation Kit consists of an interconnecting box, cables and mounts installed in various Army TTY-Radio Communication Assemblages. Kit permits replacment of Telecommunications Security (TSEC)/ KW-7 by the KG-84 in assemblages with high level signal TTY and modems (TH-5/22, MD-522, TT-4/76/98).

HISTORICAL BACKGROUND:

1983 - Program initiated under PIP #1-83-07-0201; Contract award for 110 Engineering Production Models to Medley Tool and Model Company (8A set aside).
1986 - Competitive contract award to Sechan Electronics for 2,412 Production Units; Contract Option exercised for 1,001 additional Production Units from Sechan Electronics.
1987 - 110 Medley Kits installed at Signal Center Ft. Gordon, GA.
1988 - Sechan production deliveries begin; 82nd and 101st AB issued kits; Korea issued kits.
1989 - Kit installation began in USAREUR, FORSCOM, Korea.
1990 - All delivered completed.

REQUIREMENTS DOCUMENT:

TYPE CLASSIFICATION: Not applicable as units become part of assemblage after kit installation.

MK-2488/G INSTALLATION KIT IS USED TO MAINTAIN ELECTRICAL COMPATIBILITY BETWEEN OLDER HIGH LEVEL SEGRAL TTY/MODEMS AND NEWER LOW LEVEL SIGNAL SECURITY EQUIPMENT.

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