

**USER'S LOGISTICS SUPPORT SUMMARY
FOR THE
ADVANCED FIELD ARTILLERY TACTICAL DATA SYSTEM
AN/GYK-47(V)6/7**

1. Introduction. The Advanced Field Artillery Tactical Data System (AFATDS) is an automated command and control (C2) system comprised of AFATDS software modules, hardware devices, and necessary communications equipment configured to provide automated planning and execution capabilities to fire support Operational Facilities (OPFAC). The AFATDS is intended for use at all echelons, from the Firing Battery to the Force Fires Coordination Center (FFCC) at the Marine Air-Ground Task Force (MAGTF) Command Element (CE).

The AFATDS will be hereinafter referred to by its nomenclature designation, AN/GYK-47(V)6/7. NOTE: the AFATDS Program Office has submitted Nomenclature assignments for the AFATDS in the Joint Electronics Type Designation Automated System under AN/GYK-47(V)6/7. The Communications-Electronics Command (CECOM), Fort Monmouth, NJ, granted final approval for this nomenclature assignment. The concept for employing the AFATDS is as follows.

The AN/GYK-47(V)6/7 is an AFATDS software-driven, automated Fire Support (FS) C2 network system composed of various configurations or nodes interconnected by a Local Area Network (LAN) and/or tactical digital communications. The AN/GYK-47(V)6/7 will interface with other FS C2 peripherals to provide fire planning, tactical fire direction, management of associated digital communication nets, and interoperability with the Army and North Atlantic Treaty Organization fire support systems.

The AN/GYK-47(V)6/7 will be employed at Combat Operation Centers (COC) throughout the operational forces (appendix A provides the distribution of equipment). This includes maneuver Fire Support Coordination Centers (FSCC) from battalion through division; Direct Air Support Center (DASC); Tactical Air Command Center (TACC); Supporting Arms Coordination Center (SACC) aboard ship; Rear Area Operations Center (RAOC); FFCC at the MAGTF CE; and artillery Fire Direction Centers (FDC). The principal operators of the equipment will be company grade officers (fire direction/tactical air request officers, liaison officers, and watch officers), Staff Non-Commissioned Officers (SNCO) (operations chiefs and liaison chiefs), and junior enlisted Marines (chart operators, liaison team members, radio operators, and watch-standers).

The AN/GYK-47(V)6/7 OPFACs will consist of one or more workstations. The AN/GYK-47(V)6/7 continuity of operations will provide Marine OPFACs with the capability to back up other OPFACs and echelon OPFACs (A/B Command Group) and to maintain a common operational picture of the battlefield within OPFACs (Situational Awareness). The AN/GYK(V)6/7 terminal will operate within the existing MAGTF wire, combat net radio, and LAN communication architecture.

a. Source of Requirement. The Marine Corps AFATDS operational requirements were initially identified in the Required Operational Capability for FireFlex, No. SPA 256.1, 1989. Subsequently,

the Marine Corps adopted the Army's approved AFATDS requirements document, Annex E, Fire Support, Operational Requirements Document (ORD) for the Field Artillery Tactical Data System to the ORD for the Family of Army Tactical Command and Control Systems (ATCCS) of 30 August 1993. Specific requirements for each software version are contained in the AFATDS Software Segment Specification for that version. The Requirements Division, Marine Corps Combat Development Command (MCCDC), developed and staffed the Marine Corps Operational and Organizational (O&O) Concept, which was approved by the Assistant Commandant of the Marine Corps (ACMC) on 4 February 1998. The O&O Concept adopts the Army ORD and specifies Marine Corps unique requirements for AFATDS. The O&O Concept includes the Approved Acquisition Objective (AAO) hardware requirements and distribution plan. AFATDS was subjected to a formal Doctrine, Organization, Training and Education, Equipment, and Support (DOTES) survey on 20 June 1997, and MCCDC issued a final DOTES assessment on 15 July 1997 (appendix B provides program milestones). Appendix C provides an acronyms list.

b. Points of Contact (POC). POCs are listed in Tables 1.0 and 1.1. Questions concerning the operation and integration of the AFATDS should be addressed to the On-Site Software Representative (OSSR) identified in Table 1.0. The OSSR will research and address questions through the Chain of Command as required.

Table 1.0 Fielding and Support

| TITLE | COMMAND | TELEPHONE NO. |
|---|---|---|
| PROGRAM MANAGER (PM) | MARINE CORPS SYSTEMS COMMAND (MARCORSYSCOM) (PM GROUND C-2) | (DSN) 278-0707 |
| TEAM LEADER (TL) | MARCORSYSCOM TEAM FIRES | (DSN) 278-0854 |
| PROJECT OFFICER/ OPERATIONS CHEIF | MARCORSYSCOM | (DSN) 278-0860/ (DSN) 278-0855 |
| INTEGRATED LOGISTICS SUPPORT OFFICER (ILSO) | MARCORSYSCOM (ILSO-AFATDS) | (540) 657-4511 EXT 649 |
| LOGISTICS MANAGEMENT SPECIALIST (LMS)/WARRANTY ADMINISTRATOR | MATCOM MARCORLOGBASES ATTN CODE 843-1and 843-3 814 RADFORD BLVD ALBANY GA 31704-1128 | (DSN) 567-6540 |
| GENERAL DYNAMICS (GD) REGIONAL SUPPORT CONTRACTOR (RSC) | TOLL FREE HOTLINE | 1 (877) 247-7711 |
| NEW EQUIPMENT TRAINING TEAM (NETT) | USMC ARTILLERY DETACHMENT FORT SILL OK | (DSN) 639-6385 |
| OSSR | USMC AFATDS HOTLINE | I MEF – (DSN) 365-3142 II MEF – (DSN) 750-8104 III MEF – (OKI) 623-7277 |

Table 1.1 Gaining Commands

| FUNCTIONAL AREA | LOCATION | TELEPHONE NO. |
|--|--|--|
| I MEF FFCC | CAMP PENDLETON CA | (760) 725-9267 |
| II MEF FFCC | CAMP LEJEUNE NC | (DSN) 751-8221 |
| III MEF FFCC | OKINAWA JAPAN KANEHOE BAY HI | (DSN) 623-7277 (DSN) 457-9710 |
| SUPPORT ESTABLISHMENTS OPERATIONS OFFICER | FORT SILL OK (MCFSS OIC) MCCDC EWTGLANT EWTGPAC | (580) 442-4809 (703) 784-5156 (757) 363-4088 (619) 437-2835 |
| RESERVE FORCES OPERATIONS OFFICER | MARFORRES NEW ORLEANS LA | (504) 678-6834 (DSN) 678-6834 |

c. System Description

(1) Functional and Physical Configuration. The AN/GYK-47(V)6/7 is an automated C2 system for fire support operations. The AN/GYK-47(V)6/7 is comprised of hardware devices, AFATDS software, and necessary communication equipment configured to provide command, control, and coordination of all supporting arms, i.e., artillery, mortars, air, and naval surface fire support. The AN/GYK-47(V)6/7 is intended for use at all levels of the FS C2 structure. The AN/GYK-47(V)6/7 will operate within the existing and planned communication architecture over wire or field radios and will assist the commander in the delivery of and coordination of supporting arms. The AN/GYK-47(V)6/7 provides the capability to integrate all fire support assets into the planning and execution of the battle plan, while prioritizing every target in the system to ensure high payoff targets are attacked. Further, the AN/GYK-47(V)6/7 increases the flexibility of the fire support C2 structure and enhances Continuity of Operations (CONOPS) alternatives.

The AN/GYK-47(V)6/7 is the designated hardware platform for the AFATDS operational software package. It primarily consists of a computer with a "QWERTY" keyboard containing a trackball, Random Access Memory (RAM), color display panel, and high-speed communication interface capability. The AN/GYK-47(V)6/7 provides a functional workstation within an OPFAC that performs computations and provides control and storage of system software, application programs, and data. These workstations contain a real-time clock and internal data interface controls for operation with other OPFAC components.

(2) Equipment Descriptions. The fielded AN/GYK-47(V)6/7 is comprised of ruggedized common hardware and software components procured via the Army Common Hardware Suite (CHS)-2 contract. Peripheral flat panel display and projector accessory components for augmenting the equipment capability will be issued to selective units as accessories and are not part of the AN/GYK-47(V)6/7 nomenclature group. The hardware components for the AN/GYK-47(V)6/7 major system and the respective accessory components are each briefly described in the following subparagraphs.

(a) Compact Computer Unit-2 (CCU-2). The CCU-2 provides high end processing power of the Sun AXi engine with an integrated color flat panel display and backup power source in a compact portable workstation. The CCU-2 has the following technical characteristics:

AXi Motherboard

On Board SCSI

6 PCI Slots (33MHz, 32 Bit)

1GB RAM (8 DIMMS Slots, 1GB Max)

Serial Port (2 via DB25, Splitter Cable Required)

Parallel Port (via DB25)

CPU Ultra SPARC Ii (333 or 440 MHz)

Integrated 16" Flat Panel Display (1280 x 1024 Resolution)

Integrated Keyboard (Sun Type 5)

Mass Storage Devices ((4) half-height bays)

18 or 36 GB Ultra Wide SCSI RHDD (2)

2.0 GB Jaz drive

32 or 40X CD-ROM drive

Communication Devices

SP-TCIMS (2)

PCI Cards (6)

Video

Audio

MII LAN Interface

Cardbus Reader (2)

PC Accelerator PCI Card

Power System (110/220 VAC, 50/60Hz, 22-32 VDC, 10 Minute Battery Backup)

Size (10"D x 21"W x 14.5"H)

Weight (60 lbs)

(b) Lightweight Laser Printer (LLP). The LLP has the following key features:

8 pages per minute

600 x 600 dots-per-inch resolution

Energy Star Compliant

Prints on letter and legal size paper, copier bond, and transparencies

Power System (120W average printing, 5W standby or sleep mode, 110VAC/60Hz)

Size (16"H x 17.25"W x 16"D)

Weight (35 lbs with cartridge and cable)

(c) Mobile Workstation, AN/GYK-47(V)6. The mobile workstation is designed to contain the CCU-2, LLP, Auto Sensing Switch, and interconnecting cables. In the operational mode, the workstation will provide a horizontal operating platform/Table for the operator and have the capability to operate on the move. This workstation, when fully configured, is nomenclatured the AN/GYK-47(V)6 and includes the components listed in Table 1.2.

Table 1.2 Mobile Workstation, AN/GYK-47(V)6

| NO. | ITEM | OEM/ SOURCE | QTY | WARRAN TY PERIOD |
|-----|---|------------------|-----|------------------------|
| 1 | V2 CCU-2/LLP/Hub Operational Transit Case | GD | 1 | 4/10/07 |
| 2 | V1 8 Port Switch 10/100 Auto Sensing Switch | GD | 1 | 4/10/07 |
| 3 | V2 Power Converter | GD | 1 | 4/10/07 |
| 4 | Printer, HP-6L LLP | GD | 1 | 4/10/07 |
| 5 | V2 CCU-2 w/1GB RAM | GD | 1 | 4/10/07 |
| 6 | RHDD 36 GB, Ultra/wide | GD | 2 | 4/10/07 |
| 7 | SP-TCIM | LITTON | 2 | 4/10/07 |
| 8 | V1 Trackball | GD | 1 | 4/10/07 |
| 9 | Transit Case Drivers/Media Storage | GD | 1 | 4/10/07 |
| 10 | V2 5ft DC/DC Vehicle Power Adapter Cable | GD | 1 | 4/10/07 |
| 11 | Dual SINCGARS Cable, 5ft | LITTON | 2 | 2 Years |
| 12 | SINCGARS Extension Cable, 15ft | TYAD | 4 | Unlimited |
| 13 | SINCGARS/EPLRS Cable, 5ft | LITTON | 1 | 2 Years |
| 14 | EPLRS Extension Cable, 15ft | TYAD | 1 | Unlimited |
| 15 | SINCGARS/Wireline Adapter, FSK, 5ft | LITTON | 1 | 2 Years |
| 16 | Grounding Kit (Single Rod) | Supply System | 1 | NA |
| 17 | Transit Case, CCU-2 | GD | 1 | 4/10/07 |
| 18 | V1 20ft RJ-45 Shielded Twisted Pair Crossover Cable | GD | 1 | 4/10/07 |
| 19 | V1 20ft RJ-45 Shielded Twisted Pair Cable | GD | 1 | 4/10/07 |
| 20 | Internal Grounding Kit (All Cables) | GD | 1 | 4/10/07 |
| 20a | CCU-2, 6ft | GD | 1 | 4/10/07 |
| 20b | Converter, 10ft | GD | 1 | 4/10/07 |
| 20c | HMMWV, 10ft | GD | 1 | 4/10/07 |
| 20d | 8 Port Switch, 5ft | GD | 1 | 4/10/07 |
| 20e | LLP, 6ft | GD | 1 | 4/10/07 |
| 20f | Flat Panel/Proxima, 25ft | GD | 1 | 4/10/07 |
| 20g | Grounding Bus to Grounding Rod, 25ft | GD | 1 | 4/10/07 |
| 21 | V2 10ft Vehicle to Inverter DC Power Cable | GD | 1 | 4/10/07 |
| 22 | V2 10ft UPS Input-115 VAC w/NEMA Plug | GD | 1 | 4/10/07 |
| 23 | V2 10ft Power STRIP-Locking | GD | 1 | 4/10/07 |

(d) CCU-2 Transit Workstation, AN/GYK-47(V)7. The transit workstation is designed to contain the CCU-2 and interconnecting cables. In the operational mode, the workstation will provide a horizontal operating platform/Table for the operator. This workstation, when fully configured, is nomenclatured the AN/GYK-47(V)7 and includes items listed in Table 1.3.

Table 1.3 Transit Workstation, AN/GYK-47(V)7

| NO. | ITEM | OEM/ SOURCE | QTY | WARRANTY PERIOD |
|-----|---|----------------|-----|--------------------|
| 1 | V2 CCU-2 Operational Transit Case | GD | 1 | 4/10/07 |
| 2 | V2 CCU-2 w/1GB RAM | GD | 1 | 4/10/07 |
| 3 | RHDD 36 GB, Ultra/wide | GD | 2 | 4/10/07 |
| 4 | SP-TCIM | LITTON | 2 | 2 Years |
| 5 | V1 Trackball | GD | 1 | 4/10/07 |
| 6 | Transit Case Drives/Media Storage | GD | 1 | 4/10/07 |
| 7 | V2 5ft DC-DC Vehicle Power Adapter Cable | GD | 1 | 4/10/07 |
| 8 | Dual SINGARS Cable, 5ft | LITTON | 2 | 2 Years |
| 9 | SINGARS Extension Cable, 15ft | TYAD | 4 | Unlimited |
| 10 | SINGARS/EPLRS Cable, 5ft | LITTON | 1 | 2 Years |
| 11 | EPLRS Extension Cable, 15ft | TYAD | 1 | Unlimited |
| 12 | SINGARS/Wire Line Adapter, FSK, 5ft | LITTON | 1 | 2 Years |
| 13 | Grounding Kit (Single Rod) | Supply System | 1 | NA |
| 14 | V1 20ft RJ-45 Shielded Twisted Pair Crossover Cable | GD | 1 | 4/10/07 |
| 15 | V1 20ft RJ-45 Shielded Twisted Pair Cable | GD | 1 | 4/10/07 |
| 16 | Grounding Cable, 25ft | GD | 1 | 4/10/07 |

(e) 20-inch Color Flat Panel Display (CFPD). The CFPD is accessory equipment for the AN/GYK-47(V) and will provide the capability to remotely view the CCU-2 integrated display. The CFPD has a 20.1-inch viewing area and supports resolutions up to 1280 X 1024. The CFPD is comprised of the items listed in Table 1.4.

Table 1.4 CFPD

| NO. | ITEM | OEM/ SOURCE | QTY | WARRANTY PERIOD |
|-----|--|----------------|-----|--------------------|
| 1 | 20-inch Flat Panel Display | GD | 1 | 4/10/07 |
| 2 | V2 25ft Video Graphics Cable (13W3/15) | GD | 1 | 4/10/07 |

| | | | | |
|---|--|----|---|---------|
| | Pin HD) | | | |
| 3 | Flat Panel Case (V2 20-inch CFPD Transit Case) | GD | 1 | 4/10/07 |
| 4 | Keyboard Extension Cable, 25ft | GD | 1 | 4/10/07 |
| 5 | V2 25ft Equipment Power Cable-Standard | GD | 1 | 4/10/07 |

(f) Media Projector. This lightweight, portable media projector is an accessory item for the AN/GYK-47(V) and will provide the capability to project and greatly increase the image size of the CCU-2 integrated display for multi-person viewing. The projector provides 1000 American National Standards Institute lumens (typical) light projection for easy viewing in less than ideal lighting conditions. The media projector includes the items listed in Table 1.5.

Table 1.5 Media Projector

| NO. | ITEM | OEM/SOURCE | QTY | WARRANTY PERIOD |
|-----|---|------------|-----|-----------------|
| 1 | V1 HRLSD (EPSON PowerLite 7200) | GD | 1 | 4/10/07 |
| 2 | V1 HRLSD 13W3-VGA Video Cable | GD | 1 | 4/10/07 |
| 3 | V1 HRLSD (PowerLite 7200/7300) Hard-shell Carrying Case | GD | 1 | 4/10/07 |
| 4 | 25ft 15-15 Pin Proxima Video Cable | GD | 1 | 4/10/07 |
| 5 | 25ft Proxima AC IN Cable | GD | 1 | 4/10/07 |

d. Operational Characteristics. The AN/GYK-47(V)6/7 is comprised of equipment components. This hardware will meet the MAGTF Command, Control, Communications, Computers, and Intelligence (C4I) ruggedization requirements and is intended for use in field and tactical environments. The AN/GYK-47(V)6/7 and its components can be employed using a shelterized configuration or an integrated command vehicle configuration.

e. Replaced Weapon Systems and Equipment. The AN/GYK-47(V)6/7 will replace the FSCC, AN/UYK-102(V)1, National Stock Number (NSN) 5895-01-395-4252, Table of Authorized Material Control Number (TAMCN) A0011VIIG.

2. Administrative Information. The information in Tables 2.0, 2.1, and 2.2 applies only to the nomenclatured equipment component groups of the AFATDS (AN/GYK-47(V)6/7). The display and projector accessory items are intentionally not included.

Table 2.0 Administrative Information

| | | |
|---------------|-----------------------------------|------------------------------------|
| NOMENCLATURE: | MOBILE WORKSTATION, AN/GYK-47(V)6 | TRANSIT WORKSTATION, AN/GYK-47(V)7 |
|---------------|-----------------------------------|------------------------------------|

| | | |
|--|--|--|
| NOMENCLATURE: | MOBILE WORKSTATION, AN/GYK-47(V)6 | TRANSIT WORKSTATION, AN/GYK-47(V)7 |
| TAMCN: | A25427GP | A25457GP |
| STORES ACCOUNT CODE: | 3 | 3 |
| NSN: | 1220-01-470-6584 | 1220-01-470-5969 |
| ITEM DESIGNATOR: | 10690A | 10691A |
| UNIT OF ISSUE: | Each | Each |
| UNIT COST: | \$71,049.61 | \$60,815.93 |
| SUPPORT COSTS: - CONSUMABLE - NON WARRANTY | ANNUALLY \$ 280.00 \$ 1,805.00 See paragraph 5a (8) page 34 | ANNUALLY \$ 120.00 \$ 1,730.00 See paragraph 5a (8) page 34 |
| PHYSICAL CHARACTERISTICS: | See Table 2.1 | See Table 2.2 |
| PETROLEUM, OIL, AND LUBRICANTS: | Not Applicable | Not Applicable |
| EQUIPMENT DENSITY: | Normal Density | Normal Density |
| READINESS REPORTING: | See Note 1 below | See Note 1 below |
| POWER REQUIREMENTS: | No additional power requirements from operating units | No additional power requirements from operating units |
| ASSOCIATED WEAPON SYSTEMS AND EQUIPMENT: | See Note 2 below | See Note 2 below |

NOTES:

1. Readiness Reporting. The AN/GYK-47(V)6/7 reports under the Marine Corps Ground Equipment Resource Reporting (MCGERR) system in accordance with Marine Corps Order (MCO) 3000.11C.
2. Associated Weapon Systems and Equipment. The AN/GYK-47 (V) 6/7 is interoperable with those systems directly engaged in the execution of the fire support mission, as well as other control systems which form the ATCCS, and MAGTF C4I, in accordance with the Marine Corps O&O Concept for AFATDS.

The AN/GYK-47 (V) 6/7 is interoperable with the following systems:

Theater Battle Management Core System (TBMCS)
Data Automated Communications Terminal (DACT)
Digital Communications Terminal (DCT)
Enhanced Position Location Reporting System (EPLRS)
Firefinder Radar
Initial Fire Support Automated System (IFSAS)
Intelligence Operations Workstation (IOW)

Intelligence Operations Server (IOS)
 Target Location, Designation and Hand-off System (TLDHS)

System interoperability, capabilities, interfaces, and information exchange requirements are identified in Revision E, System Segment Specification (SSS) for the AFATDS Version 6.3.0 (formerly A99), Contract Data Requirements List (CDRL) Sequence No. H509, 21 December 2001. The AFATDS SSS and the Marine Corps O&O Concept for the AFATDS (No. SPA 256.1.1) are available upon request from the AFATDS Project Officer at MARCORSSYSCOM, DSN 278-0860 (reference Table 1.0)

Table 2.1 Mobile Workstation, AN/GYK-47(V)6
 Operational, Storage, and Shipping Configurations

| DIMENSION | OPERATIONAL CONFIGURATION | STORAGE AND SHIPPING CONFIGURATION |
|-----------|---------------------------|------------------------------------|
| Length | Inches 34 | Inches 34 |
| Width | Inches 27 | Inches 27 |
| Height | Inches 44 | Inches 27 |
| Square | Square feet 6.4 | Square feet 6.4 |
| Cube | Cubic feet 23.2 | Cubic feet 14.3 |
| Weight | Pounds 200 | Pounds 200 |

Table 2.2 CCU-2 Transit Workstation, AN/GYK-47(V)7
 Operational, Storage, and Shipping Configurations

| DIMENSION | OPERATIONAL CONFIGURATION | STORAGE AND SHIPPING CONFIGURATION |
|-----------|---------------------------|------------------------------------|
| Length | Inches 28 | Inches 28 |
| Width | Inches 17 | Inches 17 |
| Height | Inches 44 | Inches 27 |
| Square | Square feet 3.3 | Square feet 3.3 |
| Cube | Cubic feet 12.1 | Cubic feet 7.4 |
| Weight | Pounds 129 | Pounds 129 |

3. Fielding Methodology

a. General Fielding Plan. The Marine Corps will field the AN/GYK-47(V)6/7 in a three-phased approach between Fiscal Year (FY) FY00 and FY03. Phase I will take place in FY00 through FY01, and will involve fielding for I Marine Expeditionary Force (MEF), II MEF, III MEF, and Reserve units, with the exception of Artillery Battery FDCs and maneuver units. The supporting establishments will be fielded during phase I. Phase II will include fielding for Artillery Battery FDCs in FY02 through FY03. Phase III will field to all maneuver units in FY03. The Total Package Fielding approach for the AN/GYK-47 will consist of all hardware components, initial issue spares, and technical manuals.

b. Method of Fielding. The fielding concept for the AN/GYK-47 is to hand-off a complete package of end items, support equipment, and materiel to each gaining unit with the assistance of a Materiel Fielding Team (MFT). The MFT will consist of personnel from the MARCORSYSCOM, Program Management, Intelligence and Effects (PMIE), OSSR, GD, and Marine Corps Logistics Bases (MARCORLOGBASES), Albany.

The MFT will assist the gaining units in establishing their accountable records and will prepare discrepancy reports on site. The MFT will conduct operational checks and a joint inventory of the total package. This inventory will be performed at the hand-off site, which is an area designated at the gaining unit location. This will ensure that an operational and logistically supportable AFATDS is provided to the user. The fielding site will include the necessary processing equipment and facilities plus storage and administration space.

c. Fielding Responsibilities

(1) Gaining Commands

(a) Provide a single POC with authority to resolve problems encountered during the fielding process.

(b) Provide a secure space that is large enough to unpack, inventory, inspect, perform operational checks, and store items. The electrical power to operate the system must also be available. No unique power requirements exist.

(c) Provide classroom to perform training.

(d) Provide access to an office area equipped with a telephone (class A) service for the MFT and NETT.

(e) Identify personnel to receive AFATDS NETT.

(2) MARCORSYSCOM

(a) Provide a MFT to conduct joint inventory materiel hand-off and operational checks.

(b) Designate an individual as the MFT Leader.

(c) Provide funding to accommodate billeting and transportation requirements for the MFT.

(d) Coordinate with the gaining command(s) regarding the time, facility, and personnel required to complete the fielding /NETT effort.

(3) PMIE Identify participant(s) to the MFT and provide information regarding security clearances to MARCORSYSCOM 45 days prior to fielding events.

(4) MARCORLOGBASES, Albany Assign participant(s) to the MFT, provide information regarding security clearances to MARCORSYSCOM 45 days prior to fielding events.

(5) On-Site Software Representative (OSSR) Assist the AFATDS Fielding Integration Team in coordinating and setting up support for the training.

(6) General Dynamics (GD) Assign participant(s) to the MFT, assist in repairing failed or damaged equipment received through shipment.

4. Logistics Support

a. Maintenance Support

(1) Maintenance Concept. The AFATDS maintenance concept has been developed to maximize logistics support for the commercially and non-developmentally designed AN/GYK-47(V)6/7 hardware. The CHS-2 life of contract warranty prohibits piece-part repair by organic maintenance personnel. The AN/GYK-47(V)6/7 system does not contain maintenance diagnostic expanded (MDX) software. Diagnostics consist of equipment self-tests using the boot device screen and logical troubleshooting procedures to identify defective line replaceable units (LRU). These specific procedures are provided in this section of this document. At the Organizational maintenance level, the 1st echelon personnel (operator) will identify the defective LRUs. The defective LRU fault will be verified, if necessary, by the 2nd echelon and removed by either the 1st or 2nd echelon personnel, whichever is designated by the unit (designated supporting electronic technician). The defective LRU will then be evacuated to the Repairable Issue Point (RIP) for an exchange of a serviceable item (communication-electronic spares will be held in the RIP maintenance float within the Force Service Support Group (FSSG) supporting each MEF). The designated RIP personnel will evacuate the failed LRU to the Depot for contractor repair under contract warranty. Depot level (5th echelon) maintenance is conducted at the contractor Regional Support Center (RSC) under a life of contract warranty. The LRUs will be repaired or replaced within 72-hours from date of receipt to the RSC. The repaired LRU will be returned to the RIP from the RSC for spare replenishment stockage levels.

(a) Organizational Maintenance Responsibilities

1 Operator (1st Echelon). It is the responsibility of the equipment operator to maintain a clean, complete, and fully operational system. In the event of a malfunction, operator troubleshooting consists of ensuring that components of the computer system are properly connected, that power cables are plugged into the correct operable power source outlets, and that power switches on components are set to the ON position. If a software problem is suspected, the Marine Corps On-Site Raytheon representative must be notified for assistance (see appendix D for OSSR duties). The Raytheon representative will assist the operating unit to determine the exact nature of the software problem. The representative will coordinate with the prime software developer (Raytheon) as

required for resolution. If a hardware problem is suspected, the condition should be reported to the designated organizational 2nd echelon maintenance personnel supporting the operational unit. The maintenance personnel will assist the operator with LRU fault verification. At this time, the defective LRU will be evacuated to the RIP for a serviceable spare item. Operator responsibilities include the following:

- Inspect computer and accessories prior to installation.
- Monitor results of equipment power-on self-tests via the boot device screen.
- Verify proper operation of the system.
- Clean chassis exterior, including connectors.
- Clean keyboard assembly.
- Check screws and fasteners for looseness.
- Clean screen surface.
- Clean exterior of peripheral devices, including connectors and cables.
- Isolate faulty LRUs using logical troubleshooting procedures.

2 Electronic Technician (2nd Echelon). It is the responsibility of the electronic technician or designated representative to assist the operator with LRU fault verification. These include Military Occupational Specialty (MOS) 2818, Personal Computer Repairer, and MOS 2821, Personal Computer Technician. Fault verification is required to ensure that serviceable assets are not evacuated back to the Depot for unnecessary repair. The maintenance personnel will assist the operator if necessary to verify faulty LRUs. After fault verification is conducted, the failed LRU will be evacuated to the RIP for exchange of a serviceable spare item. The electronic technician will return the spare LRU back to the operational unit for installation and conduct system operational checks as required. If a spare is not available, the RIP will notify the 1st and 2nd echelon personnel upon receipt of serviceable LRU from the RSC for unit installation. Electronic technician responsibilities include the following:

- Assist operator with LRU fault isolation (via diagnostics and troubleshooting procedures).
- Remove faulty LRU and evacuate to the RIP.
- Obtain serviceable spare LRU from the RIP.
- Return unserviceable LRU back to operational unit for repair.
- Ensure repaired system is operational.

Diagnostics and Troubleshooting Procedures:

The AFATDS does not contain MDX software; however, diagnostics and troubleshooting procedures for the identified LRUs are as provided below. This information is formally taught during the Marine Corps NETT Operator's Course (AFATDS Equipment Block of Instruction).

NOTE: Upon applying power to the system, the Removable Hard Disk Drive (RHDD) is accessed to boot the operating system.

RHDD:

If there is no activity on the RHDD, there could be a problem. Start with the obvious problems first:

1. RHDD is not seated. Cycle power prior to checking the seating of the RHDD. Ensure the hard drive is firmly seated and the thumbscrews are tightened, and the hard drive is locked into place with the thumb locking screw.
2. Ensure Small Computer Systems Interface (SCSI) address assignments are correct.
3. The RHDD is not working (Interchange with a known good RHDD). Is power being accessed at all? Check the power indicators.
4. Check the power source. There may be too big of a demand on the power source, depending on the number of systems and peripherals operating off the same circuit. Additionally, it is possible that the RHDD is being accessed, but the monitor is not operating.

Monitor:

Unlike the RHDD, there are only two possible problems.

1. Ensure the EPROMs are set properly. The Diag_switch? True setting may be set to False.
2. The video card is bad. The system must be turned in for a spare and the bad one sent to the RSC.

LAN Card:

While the operating system is being booted, connectivity on the system's LAN cards is checked. AFATDS has two LAN cards, Permanent/Primary and Secondary LAN.

Permanent/Primary LAN:

The external LAN (hme0) In A98 this was the bottom Ethernet port. In A99 and 6.3, the bottom Ethernet port is the Permanent/Primary Lan. (hme0) is on the motherboard and is checked first. The operating system displays a warning when it finds no connectivity on its permanent/primary LAN. This warning reads, "SUNW, hme0: Link Down-cable problem?" If the normal LAN cable is attached and the hub/switch is powered, there is a problem with the permanent/primary LAN.

Secondary LAN:

The internal LAN (hme1) In A98 this was the top Ethernet port. In A6.3 (A99), the top Ethernet port is the Secondary LAN. (hme1) is checked next. The operating system also displays a warning when it finds no connectivity on its secondary LAN. This warning is the same and also reads "SUNW, hme1: Link Down-cable problem?" If the normal LAN cable is attached and the hub/switch is powered, then there is a problem with the secondary LAN.

Troubleshooting Procedures:

Although a problem has been indicated by the above warnings, the source of the problem has not been identified. The problem source must be identified by the process of elimination. For example, the warning indicates a problem on the Permanent/Primary LAN; however, is the problem the LAN card, the cat 5 cable, or the hub/switch? The problem source is identified by changing out known good equipment with suspected equipment until the problem is found. Additionally SP-TCIM, RHDDs, compact disc drives, and Jaz drives may be checked on the unit configuration window, once the AFATDS application has finished loading. These areas are covered during the initialization class. The actual range and depth of LRU spares have been determined by Code 843-3, MARCORLOGBASES, Albany, and are identified below.

LRU Spares

I MEF

| Nomenclature | Qty |
|----------------------|------------|
| CCU-2 | 9 |
| LLP | 4 |
| RHDD 18GB | 14 |
| SP-TCIM | 10 |
| 8 Port Switch 10/100 | 4 |
| V2 Power Converter | 4 |
| V1 Trackball | 10 |

II MEF

| Nomenclature | Qty |
|----------------------|------------|
| CCU-2 | 9 |
| LLP | 4 |
| RHDD 18GB | 14 |
| SP-TCIM | 10 |
| 8 Port Switch 10/100 | 4 |
| V2 Power Converter | 4 |
| V1 Trackball | 10 |

III MEF (Okinawa)

| Nomenclature | Qty |
|----------------------|------------|
| CCU-2 | 5 |
| LLP | 3 |
| RHDD 18GB | 13 |
| SP-TCIM | 8 |
| 8 Port Switch 10/100 | 3 |
| V2 Power Converter | 3 |
| V1 Trackball | 8 |

III MEF (Hawaii)

| Nomenclature | Qty |
|---------------------|------------|
| CCU-2 | 2 |
| LLP | 1 |
| RHDD 18GB | 5 |
| SP-TCIM | 2 |

| | |
|----------------------|---|
| 8 Port Switch 10/100 | 1 |
| V2 Power Converter | 1 |
| V1 Trackball | 2 |

Marine Forces Reserves (MARFORRES)

| Nomenclature | Qty |
|----------------------|------------|
| CCU-2 | 5 |
| LLP | 4 |
| RHDD 18GB | 12 |
| SP-TCIM | 10 |
| 8 Port Switch 10/100 | 4 |
| V2 Power Converter | 4 |
| V1 Trackball | 10 |

Fort Sill, OK

| Nomenclature | Qty |
|----------------------|------------|
| CCU-2 | 1 |
| LLP | 1 |
| RHDD 18GB | 4 |
| SP-TCIM | 2 |
| 8 Port Switch 10/100 | 1 |
| V2 Power Converter | 1 |
| V1 Trackball | 2 |

**Marine Corps Tactical Software Systems Activity
(MCTSSA)**

| Nomenclature | Qty |
|----------------------|------------|
| CCU-2 | 0 |
| LLP | 0 |
| RHDD 18GB | 2 |
| SP-TCIM | 1 |
| 8 Port Switch 10/100 | 0 |
| V2 Power Converter | 0 |
| V1 Trackball | 1 |

**Marine Corps Communication-Electronics School
(MCCES)**

| Nomenclature | Qty |
|---------------------|------------|
| CCU-2 | 1 |
| LLP | 1 |
| RHDD 18GB | 4 |

| Nomenclature | Qty |
|----------------------|-----|
| SP-TCIM | 2 |
| 8 Port Switch 10/100 | 1 |
| V2 Power Converter | 1 |
| V1 Trackball | 2 |

ATTENTION

Security Considerations – The AN/GYK-47(V)6/7 may operate up to the SECRET classification level, necessitating some unique maintenance administration procedures.

- In the event the AFATDS computer requires evacuation, the RHDD will be removed and retained by the using unit.
- If an unclassified RHDD fails, it will be treated as an LRU and evacuated accordingly.
- If a classified RHDD fails and the classified information cannot be removed and the RHDD cannot be declassified, the RHDD will be handled in accordance with the procedures identified in the System Security Architecture Report for AFATDS 99, MX-25-372, 12 November 1999.

See Appendix E for additional Clearing, Purging, Declassifying, and Destroying of Magnetic Media.

(b) Intermediate Maintenance (3rd and 4th Echelons). The AFATDS is covered under a life of contract warranty. Intermediate organic maintenance is prohibited. Designated RIP personnel will issue serviceable spare LRUs to the 2nd echelon personnel in exchange for an unserviceable item. The RIP will maintain spare accountability, track stockage levels, and initiate shipment actions of faulty LRUs to the RSC for Depot level maintenance. The RIP will also receipt for returned LRUs from the contractor RSC. The designated RIP duties are identified as follows:

- Issue serviceable LRU spares from inventory in exchange for the unserviceable LRU.
- Receipt of unserviceable LRUs from 2nd echelon personnel.
- Contact (Depot) RSC for appropriate shipping instructions.
- Maintain stockage accountability in accordance with Standard Operating Procedures.
- Forward LRUs to the Transportation Maintenance Office (TMO) for shipment to RSC.
- Initiate warranty services and procedures, and coordinate with warranty administrator and using units as required.
- Receive repaired LRUs from the RSC.

(c) Depot Maintenance (5th Echelon). Organic depot maintenance will not be established for the AN/GYK-47(V)6/7 equipment. GD, Litton, and Tobyhanna Army Depot (TYAD) will perform depot maintenance on the AN/GYK-47(V)6/7 system LRUs that fall under their cognizance.

While the AN/GYK-47(V) 6/7 items are still under warranty, repair actions will be accomplished under the provisions of the applicable warranty. AN/GYK-47(V)6/7 items that fail due to circumstances not covered by the applicable warranty, or which are beyond the warranty period, must be repaired or replaced, as required, at the expense of the Government. Coordination procedures between the RIP and the Depot to perform warranty and non-warranty maintenance on defective LRUs are described in this document under warranty support (paragraph 4b).

1 Designated Support Depots The location and telephone numbers of GD, Litton, and TYAD Contractor Depot Support Centers providing Depot level maintenance are identified in Tables 3.0, 3.1, and 3.2.

Table 3.0 GD Regional Support Centers

| ADDRESS | PHONE NO. |
|---|---|
| HOTLINE | 1-877-247-7711 |
| GD GOVERNMENT SYSTEMS RSC BLDG 3820, 3800 TERMINAL AVE FT HOOD TX 76544 | COMM: 254-532-2927 (DSN) 738-3863 |
| GD GOVERNMENT SYSTEMS RSC BERLINER RING #26 64625 BENSHEIM GERMANY | PHONE: 011-49-6251-64071 (DSN) 380-4053/4054 (DSN) 375-7384 (GOVERNMENT LOGISTICS ASSISTANT REPRESENTATIVE) |
| GD GOVERNMENT SYSTEMS RSC BLDG 9564 BLEMONT & I STREETS FT LEWIS WA 98433 | COMM: 253-964-5160 (DSN) 357-7853 (DSN) 357-7675 (GOVERNMENT LOGISTICS ASSISTANT REPRESENTATIVE) |
| GD GOVERNMENT SYSTEMS RSC BLDG A-2746 COLE & KERO STREETS FT BRAGG NC 28307 | COMM: 910-497-7900 (DSN) 236-3547 (DSN) 907-2057 (GOVERNMENT LOGISTICS ASSISTANT REPRESENTATIVE) |
| SOUTH KOREA (SATELLITE) | (DSN) 730-2819 |
| BOSNIA (SATELLITE) SIG BN HDQTRS BLDG. 28 TULZA MAIN | (DSN) 762-5610 |

Table 3.1 Litton Regional Support Centers

| LOCATION | PHONE NO. |
|---|----------------|
| HOTLINE 10770 WATERIDGE CIRCLE SAN DIEGO CA 92191 | 1-800-992-2528 |

Table 3.2 U.S. Army Depot, Tobyhanna

| LOCATION | PHONE NO. |
|--|---|
| HOTLINE | 1-800-429-4495 |
| TOBYHANNA ARMY DEPOT W90CGG AZARS RECEIVING AMSEL-TY-BU-Q 11 HAP ARNOLD BLVD TOBYHANNA PA 18466-5072 | (DSN) 795-7900 COMM (570) 895-7900 1-800-429-4495 |

2 Calibration Requirements. Calibration of the AN/GYK-47 equipment is not required.

3 Procedures for Turn-in of Broken Classified Hard Disk Drives. The AN/GYK-47 may operate up to the SECRET classification level, necessitating some unique maintenance administration procedures. In the event the AN/GYK-47 computer requires evacuation, the RHDD will be removed and retained by the using unit. If an unclassified RHDD fails, it will be treated as an LRU and evacuated accordingly. If a classified RHDD fails and the classified information cannot be removed and the RHDD cannot be declassified, the RHDD will be handled in accordance with the procedures identified in Appendix E (Chapter 4.5 of the Security Standing Operating Procedures (SSOP) for the AFATDS 98).

b. Contractor Support Requirements

(1) Interim Contractor Support. No interim contractor support is planned for the AN/GYK-47(V)(6)(7).

(2) Depot Support. The designated contractor depot support activities for the AN/GYK-47 are GD, Litton, and TYAD. The specific items warranted by each of these activities are listed in Tables 1.2, 1.3, 1.4, and 1.5. The following sections address the level and conditions of warranty support provided by each contractor activity.

(a) GD

1 Warranty Support. GD provides "life-of-the-contract" warranty and non-warranty maintenance support for all hardware purchased through the Army CHS-2 contract. This support expires with the contract, which has been extended to 10 April 2007. Maintenance support is performed at the GD RSCs and is limited to a mail-back or carry-in type of service. Coordination procedures are between the RIP and the Depot to perform warranty and non-warranty maintenance on defective LRUs. Once the faulty item is received at the RSC, the vendor has a 72-hour repair or replace requirement for warranty repairs. The failed item will be repaired, or a replacement LRU will be shipped within 72-hours of receipt of the faulty LRU. This timeframe excludes weekends and legal holidays. The Government pays for shipment to the RSC, and GD pays for return shipment (using the same or faster mode of shipment). Mail-back service permits the delivery of failed items directly to the vendor via any means available to the Government, including the U.S. mail. The

carry-in service may be used if one of the vendor's service centers is convenient to the user command. For equipment under warranty, repair is provided at no additional cost to the Government.

2 Non-Warranty Support. The hardware warranty may be voided for failures deemed to have been attributed to "other-than-fair wear and tear " of the hardware. In this event, the user will be required to fund for repair on the Army CHS-2 contract. Evidence that equipment has been mishandled (e.g., unauthorized attempted repair of LRUs, cables forcibly removed, and connectors broken) are examples of reasons for voiding the warranty. The GD RSC will coordinate other-than-fair wear and tear determinations with the user, PM ATCCS, and COMMARCORLOGBASES, Albany (Code 843-3) via a letter of notification. In the letter, the user will be advised of the cost of repair, which has been verified by a Government representative. PM ATCCS will create a cover page and send it to the owning unit indicating the cost and the address to send the funding document.

If the owning unit wants the item repaired, coordination will be necessary through GD via telephone, (877) 247-7711. Payment for equipment will be handled through appropriate IMPACT credit card billing or a Military Interdepartmental Purchase Request (MIPR). Contract modifications will be initiated for repair actions as required. Lead-time for payment from GD is 30 days. Repair lead-time is the same for items purchased by the operating unit. If the other-than-wear and tear notice is challenged by the user, or if the user requires assistance to resolve the matter, contact must be made with COMMARCORLOGBASES, Code 843-3, Albany. As necessary, depending on the number and type of incidents, COMMARCORLOGBASES, Code 843-3, Albany, will publish guidance via a supply instruction or appropriate medium.

3 Warranty Support Disputes. Personnel at the GD RSC are responsible for coordinating any misuse and abuse determinations with appropriate Government representatives. This coordination will be conducted prior to generating the letter of notification (noted above) to the user. Upon receiving concurrence from the Government Logistics Assistance Representative (LAR) with an "other-than-fair wear and tear" determination, GD will notify the user in writing of the determination and at the same time provide a price proposal to repair the unit and return it to a serviceable condition. A Return Material Authorization (RMA) number is assigned for tracking purposes, the location of equipment is identified, and the user is given a 30-day suspense date to either provide for disposition of the equipment for repair or for "return as is." A copy of the letter is sent to PM ATCCS and COMMARCORLOGBASES, Code 843-3, Albany, for tracking purposes. A Naval message should also be sent to COMMARCORLOGBASES, Code 843-3, Albany, notifying that this action has been initiated.

Upon receipt of notification of the "other-than-fair wear and tear" determination from GD, the user may call GD at (877) 247-7711 for questions concerning the basis of the determination or the repair proposal. If the user disagrees with the determination, the user should contact PM ATCCS Logistics and request a review of the determination. PM ATCCS will contact GD to review the basis of the initial determination. PM ATCCS may elect to contact the user for additional information. After completing its review of the initial determination and supporting facts, PM ATCCS will issue a final determination and notify the user and GD of the decision by electronic mail (e-mail).

Upon receipt of PM ATCCS' final decision, the user is given a 30-day suspense date for either disposition of the equipment for repair or "return as is." If the LAR disagrees with GD's "other-than-fair wear and tear," GD may request that the PM ATCCS Logistics review the case and render a final decision. GD's request must be forwarded in writing to PM ATCCS within five business days of the LAR's decision, with copies provided to both PM ATCCS and the user. PM ATCCS will review the basis of the initial "other-than-fair wear and tear" determination and supporting facts and issue a decision, which will be provided to the user and GD by e-mail. In the event the damage is determined to be covered under warranty, GD shall immediately proceed with the repair at no cost to the Government. In the event the damage is determined to be "other-than-fair wear and tear," the user is given a 30-day suspense date for either disposition of the equipment for repair or "return as is."

(b) Litton

1 Warranty Support. Litton provides maintenance support for a two-year period that commences from the time of initial delivery (DD250 acceptance) to the Government. All warranty services are provided at no additional cost to the Government. Maintenance support is performed at the Litton RSCs and is limited to a mail-back or carry-in type service. Coordination procedures are between the RIP and the Depot to perform warranty and non-warranty maintenance on defective LRUs. The Litton RSC must repair and return the faulty item within 72 hours of receipt.

2 Non-Warranty Support and Disputes. The warranty may be voided for failures deemed to have been attributed to "misuse and/or abuse" of the hardware. The equipment owner must pay for non-warranty support. Notification that the failure was caused by misuse and abuse will be provided to the unit in writing. The notification will also include a price proposal to repair the item back to serviceable condition. A Return Incident Number (RIN) is assigned for tracking purposes, the location of equipment is identified, and the user is given a 30-day suspense date to provide disposition of the equipment for repair or "return as is." A copy of this notification letter should be mailed to PM ATCCS and COMMARCORLOGBASES, Code 843-3, Albany, for tracking purposes.

A Naval message should also be sent to COMMARCORLOGBASES, Code 843-3, Albany, notifying that this action has been initiated. Upon receiving this notification, the unit may call PM ATCCS regarding any questions concerning the basis of the determination or the repair proposal condition. Upon request, PM ATCCS will contact Litton to review the basis of the initial determination. PM ATCCS may elect to contact the user for additional information if deemed necessary; however, Litton has final decision authority regarding the warranty. If the unit wants Litton to make the repair, they fund the repair with a MIPR through PM ATCCS. In the event the damage is determined to be covered under warranty, Litton will immediately proceed with the repair at no cost to the Government.

3 Warranty Expiration Support. Litton will repair an item after the warranty has expired. The RIP shall contact the RSC for a RIN and then forward the item to the Depot as directed. Litton will then prepare a repair estimate and forward it to the unit for review. Once approved, the customer must MIPR the estimated repair dollars to PM ATCCS to be placed on

contract. Once Litton receives a contract letter notifying that the funds have been approved, maintenance will be initiated.

(c) TYAD

1 Warranty Support. TYAD provides a customer satisfaction “unlimited” (until normal wear-out and expected failure) warranty maintenance support for all hardware items purchased through the Army CHS-2 contract; however, the items must have been used under “normal and reasonable circumstances.” All warranty services are provided at no additional cost to the Government. Maintenance support service is performed at the TYAD. TYAD will repair or replace the faulty item within 14 days after receipt. The warranty may be voided by "misuse and/or abuse" of the hardware. The equipment owner must pay for non-warranty support. Coordination procedures are between the RIP and the Depot to perform warranty and non-warranty maintenance on defective LRUs. All items repaired, overhauled, or fabricated by TYAD are warranted under “normal and reasonable circumstances.” All warranty returns and Quality Deficiency Report exhibits are reviewed by a Quality Assurance Specialist for warranty applicability. The following “test” is applied to every claim:

- Is there any obvious physical damage or misuse, which would cause the defect?
- Is there any evidence of unauthorized customer repair or tampering?
- Is there evidence that the item was used for a long period, indicating that the defect is considered normal wear-out (expected failure)?

If all three “test” questions are answered no, then the defect will be repaired under the depot’s warranty. The only exception to the coverage would be when a customer waives a requirement in a Statement of Work, Memorandum of Agreement, or other document, which affects the claim. Warranty eligibility is determined using the Technical Reference Order, COMSEC Interservice Depot Overhaul Standard (CIDOS), or drawing package as the specification. This policy is equally applicable to on-site warranty claims. In some cases, expediency dictates depot field visits to confirm warranty eligibility and effect repair. When warranty eligibility is not clear, TYAD errs in favor of the customer. When a warranty call is received, Quality Management Division (QMD) will first confirm the reported problem and, in conjunction with the responsible shop, attempt to talk the user through a fix. If the telephonic fix is unsuccessful, QMD will give the user shipping instructions to return the item to the depot. The item will be repaired and returned, if eligible, or returned to the user with full explanation if the warranty is not applicable. If an urgent need exists for the repair, QMD will coordinate with the Item Manager for release of an “A” stock item to the field. The depot then repairs the field warranty return and replaces it in “A” stock.

c. Manpower, Personnel and Training

(1) Personnel Requirements

(a) Operators. All Marines operating AFATDS will require formal training. Operators will attend a 160-hour course of instruction. Marines designated as AFATDS supervisors will require an 80-hour course of instruction in addition to the operator’s course. The principal operators

of this system will be company grade officers (fire direction/tactical air request operators, liaison officers, watch officers), staff noncommissioned officers (operations chiefs, liaison chiefs), and junior enlisted Marines (chart operators, liaison chiefs, and watch standers). Standards Branch, Training and Education (T&E) Division, MCCDC, will review current individual training standards (ITS) for each MOS to ensure their validity. Personnel assigned the following MOSs are the principal operators of AFATDS and will receive new equipment training:

- 0302 Infantry Officer - assigned duties within the FSCC
- 0369 Infantry Unit Leader - assigned duties with the FSCC
- 0802 Field Artillery Officer
- 0803 Survey, Meteorological, and Radar Officer
- 0844 Field Artillery Fire Control Man
- 0848 Field Artillery Operations Chief
- 0861 Fire Support Man
- 1110 Naval Gunfire Liaison Officer
- 2531 Radio Operator – assigned duties with the Artillery Battery Liaison Sections
- 7208 Air Support Control Officer
- 7242 Air Support Operations Operator
- 7502 Forward Air Controller/Air Officer
- 4066 Small Computer Systems Specialist
- Any Personnel assigned TACC/RAOC, AFATDS operator/supervisor duty, FFCCs, FSCCs, SACCs, and DASCs

Supervisors and operators will receive standards-based instruction within the MOS 0802 and MOS 0844 standards, respectively. Until such time that Standards Branch, T&E Division, MCCDC, conducts its periodic ITS reviews for the Occupational Fields listed above, all MOSs should adhere to the recommended MOS 0802/0844 standards.

(b) Maintainers. The maintenance concept stipulates that personnel at current skill level training will conduct each level of maintenance. This allows for the AN/GYK-47 implementation with no additional requirements for maintenance specialists. The second echelon maintenance personnel will use internal diagnostic fault-detection and logical troubleshooting techniques to confirm the LRU fault. After fault isolation, the second echelon maintainer will remove the LRU and evacuate it to the RIP for a spare. The RIP will then forward the faulty LRU to the appropriate RSC for repair. Currently, there is no requirement for a new MOS or formal school for system maintenance.

The maintenance concept does not require any modification of existing Tables of Organization (T/O). The AN/GYK-47 will rely on logical troubleshooting techniques to fault isolate to the LRU level. MOSs and job titles that are required for current T/O billet positions will remain the same.

(c) Other Support Personnel. There is no requirement for an increase or decrease of support personnel. AFATDS will operate within the existing T/O authorizations with no system degradation. Software support engineers from Fort Sill, OK, will conduct Post Deployment Support.

(d) NETT. The NETT will conduct initial training at the sites listed in the section (2)(c) Training Sites. They will be responsible for training the AFATDS operator and supervisor. The operator course will provide 160 hours, and supervisors will require an additional 80-hours of instruction. New equipment training will require a coordination meeting between the gaining commands and the NETT six months prior to initial fielding at each site. During this meeting, the NETT will develop a training schedule to include the number of classes and students for each course. There will be a refinement of this schedule as the actual delivery dates approach. The NETT is also responsible for the integration of the AFATDS software to include development of doctrine and Tactics, Techniques, and Procedures. The NETT will have total responsibility to train Marines during the fielding of AFATDS; however, after fielding, unit commanders will have the responsibility to train as often as necessary to maintain proficiency.

Marines assigned to the NETT must have an affiliation with a MARCORSYSCOM T/O. These personnel, sourced by Headquarters, Marine Corps, will be assigned to MCC M08 at Fort Sill, OK. Table 3.3 contains the NETT structure.

Table 3.3 NETT Structure

| NUMBER | POSITION | RANK | MOS | SOURCE |
|--------|----------------------|-------|------|--------|
| 1 | OIC/Instructor | Capt | 0802 | HQMC |
| 1 | SNCOIC Instructor | MSgt | 0848 | HQMC |
| 1 | Instructor | MSgt | 0861 | HQMC |
| 1 | Instructor | GySgt | 0861 | HQMC |
| 1 | Instructor | GySgt | 0848 | HQMC |

(2) Training Requirements

(a) Introductory Training. Formal MOS training for AFATDS operators will take place at the United States Army Field Artillery School (USAFAS), Command and Control Systems School (CCSS), Expeditionary Warfare Training Groups Atlantic (EWTGLANT), Pacific (EWTGPAC) and MCCES. Table 3.4 is a list of the AFATDS School Training Requirements.

Table 3.4 AFATDS School Training Requirements

| MOS/TITLE | TYPE TRAINING | BILLET |
|--|---------------|--------------------------|
| 0302/Inf Officer | Core Plus | Assigned to FSCC Billets |
| 0369/Inf Operations Chief | Core Plus | Assigned to FSCC Billets |
| 0602/Comm Officer | Core | N/A |
| 0802/Field Artillery Officer | Core | N/A |
| 0803/Survey, Meteorological, and Radar Officer | Core | N/A |
| 0844/Field Artillery Control | Core Plus | Bty Level or Higher |

| MOS/TITLE | TYPE TRAINING | BILLET |
|--|---------------|--------------------------|
| 0848/Field Artillery Operations Chief | Core | N/A |
| 0861/Fire Support | Core Plus | Assigned to FSCC Billets |
| 1110/Naval Gunfire Liaison Officer | Core Plus | Assigned to FSCC Billets |
| 2531/Radio Operator | Core Plus | Assigned to Air/LN Sec |
| 7208/Air Support Control Officer | Core | N/A |
| 7242/Air Support Operations Operator | Core | N/A |
| 7502/Forward Air Controller/ Air Officer | Core Plus | Air Off Inf Bn/Higher |
| Non 08XX MOS Personnel assigned AFATDS Operational Duties RAOC, INFBN FSCC, DASC, TACC, SACC | Core Plus | As Required |
| Non 08XX MOS Personnel assigned AFATDS Supervisor Duties RAOC, INFBN FSCC, DASC, TACC, SACC | Core Plus | As Required |

NOTE: Core Plus = Additional training to existing MOS level.

(b) Skill Progression Training. There is no formal skill progression training for these MOSs.

1 Computer Based Interactive Courseware. Computer based interactive courseware for AFATDS software is currently being issued with the AFATDS software.

2 Professional Military Education (PME). PME courses will teach and reinforce the principles of fire control and are being revised to include a working knowledge of AFATDS.

(c) Training Sites. The AFATDS NETT will provide training at the following sites:

- USAFAS, Fort Sill, OK
- Marine Corps Base, Camp Pendleton, CA
- Marine Corps Base, Camp Lejeune, NC
- Marine Corps Base, Okinawa, Japan
- Marine Corps Base, Hawaii

1 Formal Schools. Table 3.5 lists the location of the formal schools providing AFATDS training.

2 ExporTable Training. Each gaining command will receive copies of the training packages and materials used by the NETT.

3 Correspondence. Currently, there are no plans for correspondence courses.

(d) Training Events

1 Unit. Marine Corps orders require commanders to conduct timely and effective sustainment training. After the NETT has completed initial training on AFATDS, it will be incumbent upon the commanders to maintain the proficiency of AFATDS operators.

2 Formal School. Formal schools will develop training schedules, with the assistance of the NETT, timed to introduce the updated syllabus and ensure sufficient lead time to have trained operators on hand in advance of the AFATDS fielding.

(e) Applicable Other Service Training. The courses that are noted in Table 3.5 will incorporate the AFATDS into the applicable curriculum.

Table 3.5 Applicable Other Service Training

| TITLE | MOS | COURSE TITLE/TRAINING LOCATION |
|---|------|--|
| Field Artillery Officer | 0802 | Field Artillery Officer Basic, USAFAS |
| Field Artillery Officer | 0802 | Field Artillery Captains Career Course, USAFAS |
| Field Artillery Officer | 0802 | Field Artillery Officer Pre-Command, USAFAS |
| Field Artillery Officer | 0802 | Professional Artillery Refresher Training (USMC), USAFAS |
| Field Artillery Officer | 0802 | Reserve Officer Artillery Conversion Course, USAFAS |
| Survey, Meteorological, and Radar Officer | 0803 | Target Acquisition Radar Technician WO Basic, USAFAS |
| Survey, Meteorological, and Radar Officer | 0803 | Target Acquisition Warrant Officer Advanced Course, USAFAS |
| Field Artillery Radar Man | 0842 | Field Artillery Operations Chief, USAFAS |
| Field Artillery Control Man | 0844 | Field Artillery Fire Controlman, USAFAS |
| Field Artillery Operations Chief | 0848 | Field Artillery Operations Chief, USAFAS |
| Fire Support Man | 0861 | Artillery Scout Observer, USAFAS |
| Fire Support Man | 0861 | Fire Support Man, EWTGPAC/EWTGLANT |
| Any MOS Personnel assigned AFATDS Operational Duties RAOC, FSCC, DASC, TACC, SACC | Any | AFATDS Operator/Supervisor, USAFAS/EWTGPAC/EWTGLANT |
| Infantry, Air, NGLO | Any | EWTGPAC/EWTGLANT |

(f) Relevant Training in the Marine Corps. Maintenance training for data and communications equipment is at MCCES, Twenty-nine Palms, CA.

1 Course Titles. Personal Computer /Tactical Office Machine Repairer (MOS 2818) and Computer Technician (MOS 2821).

2 Name of School. Electronics Maintenance School, MCCES.

3 Prerequisites. The following are the current prerequisites for the maintainers:

a MOS 2818, Microcomputer Repair Course

Rank: Private through Sergeant

EL Score: 115

U.S. Citizen

SECRET Clearance

Attend Basic Electronics Course

b MOS 2821, Computer Technician Course

Primary MOS of 2818

Rank: Sergeant through Gunnery Sergeant

1-year field experience

SECRET Clearance

Attend Technician Theory Course

Minimum 3-years obligated service remaining

(g) Sustainment Training. Unit commanders are responsible for ensuring their personnel sustain the proper level of proficiency. Available options to assist the unit commander for sustainment training include; USAFAS at Fort Sill, OK; EWTGLANT/PAC; and a Web-Based Training (WBT) compact disk-read only memory (CD-ROM). Table 3.6 lists the class dates and quotas available for USAFAS at Fort Sill, OK.

Table 3.6 Available Class Dates and Quotas

| CLASS NO | DATES | SEATS AVAILABL E | CLASS NO | DATES | SEATS AVAILABL E |
|----------|----------------------|------------------|----------|----------------------|------------------|
| 001 | 10/02/02 to 11/21/02 | 7 | 008 | 05/12/03 to 06/17/03 | 12 |
| 002 | 10/24/02 to 12/13/02 | 7 | 009 | 06/10/03 to 07/16/03 | 11 |
| 003 | 11/19/02 to 01/22/03 | 7 | 010 | 07/06/03 to 08/07/03 | 12 |
| 004 | 01/19/03 to 02/25/03 | 12 | 011 | 07/28/03 to 09/02/03 | 12 |
| 005 | 02/11/03 to 03/19/03 | 12 | 012 | 08/18/03 to 09/23/03 | 11 |
| 006 | 03/06/03 to 04/10/03 | 11 | 013 | 09/08/03 to 10/15/03 | 10 |
| 007 | 03/30/03 to 05/02/03 | 12 | | | |

*Classes will be held at the U.S. Army Field Artillery School, Fort Sill, OK. To obtain current seat availability, go to the training web link for updates and changes:

Instructions for accessing the AFATDS Class Schedule/ Quotas:

1. Type in <https://tims.tecom.usmc.mil/pls/public/trrms.main.html>

2. Click on the TQM Schedule tab
3. Click on View Allocation
4. Type in the Course ID (A20ANW1)
5. Click Submit

Unit commanders can also obtain training quotas for all AFATDS operators regardless of Military Occupational Specialty (MOS) by contacting the 08 MOS at (DSN) 222-4301. Marines may receive AFATDS training at the formal schools in route to their next assignment. Coordination with their MOS monitor is requested for obtaining a seat as listed above. The WBT disc have been added to the software-fielding package, which started with Initial Operational Capability (IOC), 2nd Quarter FY02. This is designed to complement the initial training and provides the AFATDS operator an ability to maintain proficiency and familiarity with the system.

(h) Requirements to Modify Existing Training. Existing courses of instruction for applicable MOSs and formal schools will require modification to include instructions for the AFATDS. Additionally, Mission Performance Standards for the Marine Corps Combat Readiness Evaluation System (MCCRES) and ITSs may require revision for inclusion of program tasks. The courses (with applicable course number) noted in Table 3.7 will require modification and revision to incorporate instruction and practical application on the operation and preventive maintenance of AFATDS:

Table 3.7 Courses Requiring Modification and Revision

| COURSE TITLE | COURSE NUMBER |
|---|------------------------|
| Fire Support in MAGTF Operations | N03APJ1 |
| Field Artillery Officer Basic | A200HW1 |
| Field Artillery Officer | A20RGL1 |
| Field Artillery Officer Pre-Command | A200GZ1 |
| Professional Artillery Refresher Training (USMC) | A2044C1 |
| Reserve Officer Artillery Conversion Course | A20AQF1 |
| Target Acquisition Radar Technician WO Basic | A200H01 |
| Field Artillery Fire Controlman (USMC) | A200811 |
| Field Artillery Operations Chief (USMC) | A204801 |
| Artillery Scout Observer | A200H61 |
| Fire Support Man | N3013U1 |
| Naval Gunfire Liaison Officer Basic/Not in USMC TIP | Navy Course K-2G-20040 |
| Air Support Control Officer | M09T0A1 |
| Air Support Operations Operator Course | M0967L1 |
| Tactical Air Control Party Basic | N036741 |

(i) Requirements to Develop New Training. The NETT develops new lessons and forwards them to the formal school at Fort Sill, OK for incorporation into the curriculum.

(3) Training Support Items

(a) Training Hardware Requirements. Installation of AFATDS will be on the CHS. Students will train using operational equipment. Units are responsible for providing their own AFATDS hardware for the new equipment training conducted at the ATS. WBT can be installed on any International Business Machines Corporation (IBM) compatible personal computer with a Windows 95 operating system. Recommended hardware requirements are 16 MB RAM, 200-MB hard drive, sound card, 16-bit monitor with 256 or better color, and a CD-ROM. The CCU can be used for WBT with the fielding of 6.3.0 software.

(b) Training Devices and Aids. AFATDS courses will require overhead projectors with a computer interface capability for training. The Army PMIE Office is developing the following training systems:

- Fire Support Digital Training System (FSDTS)
- Simulation/Stimulation (SI/STIM)

d. Supply Support. The FSSGs will submit a Recoverable Item Report (WIR) for repairable assets to MARCORLOGBASES, Code 843-1, Albany. MARCORLOGBASES, Albany, Weapon System Inventory Manager will provide disposition Code J. All using unit acquisitions will be submitted via the FSSGs to MARCORLOGBASES, Albany, via Autovon or message and will contain valid Signal and Fund Codes. Customer funds are required. The replenishment requirement will be passed to the Primary Inventory Control Activity (PICA). Replenishment assets will be provided at the standard unit price. MARCORLOGBASES Material Performance Branch (MPB) Weapon System Inventory Manager will provide passing order supply status. The PICA will provide the FSSGs with the estimated shipping date for requisitions via Autovon.

e. Support Equipment

(1) Special Tools. None

(2) Common Tools

| <u>NOMENCLATURE</u> | <u>TAMCN</u> | <u>NSN</u> | <u>ID#</u> |
|--------------------------------|--------------|------------------|------------|
| Tool Kit, Electronic Equipment | A7900 | 5180-01-244-1290 | 09015A |

(3) Special Purpose Test Equipment None (4) General Purpose Test Equipment None

| <u>NOMENCLATURE</u> | <u>TAMCN</u> | <u>NSN</u> | <u>ID#</u> |
|---|--------------|------------------|------------|
| Multimeter, Digital, Handheld Fluke 77/BN | H7030 | 6625-01-336-3372 | 09869A |
| Test Set, Local Area Network | A7084 | 6625-01-395-0403 | 10405A |
| TS-4516, Computer Repair Kit | H7924 | 7025-01-443-3383 | None |
| Ohmmeter, Ground Tester | A7057 | 6625-01-377-8030 | 10096A |

(5) Application Program Sets and Test Program Sets. None

(6) Other Support Equipment. None

f. Technical Publications. Each AN/GYK-47(V)6/7 and peripheral equipment will include over-packed (commercial grade) hardware/software manuals for support. The distribution of technical manuals has been loaded to the Marine Corps' technical manual system. Additional distribution to using and supporting units will be accomplished automatically. Tables 3.8 and 3.9, respectively, list the full complement of applicable hardware and software technical manuals. The hardware manuals will be issued with the fielding of the AN/GYK-47(V)6/7, and the software manuals will be provided during NET.

Table 3.8 Hardware Technical Manual List

| TITLE | TECHNICAL MANUAL NUMBER | PCN |
|---|-------------------------|---------------|
| Advanced Field Artillery Tactical Data System Mobile & Transit Workstation Integration Interactive Electronic Technical Manual (IETM) | TM 10690A-CD-1 | 176106900 00 |
| Stock List (SL-3) AN/GYK-47(V)6 | 10690A | 123 106900 00 |
| Stock List (SL-3) AN/GYK-47(V)7 | 10691A | 123 106910 00 |

Table 3.9 Software Technical Manual List

| TITLE | TECHNICAL MANUAL NUMBER | PCN |
|--------------------|-----------------------------|-------------------------------------|
| Operators Manual | UM 10690A-10/1 through 10/4 | 188 106901 00 through 188 106904 00 |
| Operators Notebook | UM 10690A-10/5 | 188 106905 00 |

- (1) Address questions on distribution or requisitioning of hardware technical manuals to MARCORSYSCOM Technical Publications Branch, (DSN) 278-4570, and commercial (703) 784-4570. Address questions on distribution or requisitioning of software manuals to the Software Support Activity (SSA) (see paragraph g, Computer Resources Support, following).
- (2) Program information as well as publications may be found in Quickplace. QuickPlace is used by teams to maintain all resources (files, thoughts, schedules, etc.), related to a project in a common place, where everyone can be assured that they can find and respond to the latest information.
- (3) Units are responsible for acquiring those manuals not over-packed or otherwise not on hand to support the AN/GYK-47(V)6/7.

g. Computer Resources Support. The SSA for AFATDS is Raytheon until completion of all software development upgrades. Subsequent to development and Full Operational Capability (FOC),

the SSA responsibility will be transitioned to the Software Engineering Directorate at Fort Sill, OK; however, all software problems shall be referred to the OSSR prior to FOC.

(1) Software Documentation. The supplied software will include documentation prepared in accordance with the best commercial practices. All available documentation will be provided during NET.

h. Facilities

(1) Existing Facilities. The existing facilities accommodate the operational, maintenance, supply, and storage of the AFATDS. Modifications to training facilities will be evaluated by the Program Office during a site survey. If modifications are required, they will be funded by the Program Office.

(2) New Facilities. There is no requirement for new facilities.

(4) Interim Facilities. There is no requirement for interim facilities.

i. Packaging, Handling, Storage, and Transportation

(1) Packaging. When transport cases are not used, all items must have preservation and packaging performed in accordance with Military Standard (MIL-STD)-2073-1C, DoD Standard Practice for Military Packaging. Marking for shipment and storage will be in accordance with MIL-STD-129N, DoD Standard Practice for Military Marking. Item identification will be in accordance with MIL-STD-130J, Identification Marking for U.S. Military Property.

(2) Handling. No special handling procedures are required for receiving or issuing equipment.

(3) Storage. Equipment must be stored indoors, in an environment adequate to protect electronic equipment.

(4) Transportation. Individual components of the system are man-transportable. There are no restrictions on methods of transportation and no special in-transit security requirements. Transit cases will be issued with the equipment for transportation to the RSCs. The CCU-2 must be shipped in the CCU-2 Transit Case (part # 99-2577054-49). AFATDS workstations must be transported in the upright position and properly secured with workstation straps.

(5) Weather Protection. AFATDS is considered commercial off-the-shelf equipment and is not 100 percent waterproof. Appropriate caution is required to protect the system from weather elements.

j. Warranties

(1) Warranty Type. A design, performance, materials, and workmanship warranty covers all AN/GYK-47(V)6/7 hardware items and accessories.

(2) Covered Items. For the duration of the warranty, all hardware items are warranted against failure to conform to the requirements of product specifications, failure as a result of materials or workmanship, and failure to conform to the essential performance requirements of the contract. The contractor will replace any failed warranted item found to be beyond economical repair. The replacement item will have the same warranty expiration date as the failed item.

(3) Warranty Administrator and Coordinators

(a) COMMARCORLOGBASES. COMMARCORLOGBASES, Code 843-3, Albany, is the Marine Corps warranty administrator for AN/GYK-47(V) and Army CHS-2 products. This warranty administrator is responsible for coordinating warranty issues and matters with the contractor. Additionally, the warranty administrator will ensure that user community warranty coordinators are provided with current information relative to warranty procedures/matters.

(b) User Community. Major commands using the AN/GYK-47(V)6/7 and Army CHS-2 products shall assign a command warranty coordinator. This command warranty coordinator will ensure that warranty coordinators are appointed at all units performing third echelon maintenance (RIP). The unit warranty coordinators are authorized to conduct warranty actions with the contractor; however, warranty issues will be reported to the command warranty coordinator for resolution. The command warranty coordinator will inform the Marine Corps warranty administrator of any issues under discussion with the contractor and report details of any issues that cannot be resolved at the major command level.

NOTE: MARFORRES units geographically separated from the supporting intermediate maintenance activity, but with organizational maintenance capability, are authorized to make warranty transactions directly with the vendor. MARFORRES units not authorized organizational maintenance capability must obtain warranty service through the supporting maintenance activity.

(4) Warranty Procedures

(a) Customer (User) Responsibilities

1 All initial asset recipients (gaining commands) will complete and return the self-addressed warranty cards/forms over-packed with each shipment. A copy of the warranty card must be forwarded to COMMARCORLOGBASES, Code 843-3, Albany.

2 Maintenance support activities (RIP) will use the specified applicable HOTLINE telephone number listed in Tables 3.0, 3.1, and 3.2 to report equipment failures and initiate warranty claims. The contractor will attempt to resolve the problem during the mandatory HOTLINE contact. If a warranted item must be returned, the item will be assigned an RMA or Return Incident Number (RIN), as applicable, for tracking and accountability purposes. The contractor will provide return

instructions. Warranted items will not be submitted to the contractor for repair prior to the HOTLINE contact described above.

3 Failed equipment submitted for warranty repair must be accompanied by an Equipment Repair Order (ERO), Form NAVMC 10245, and an Inspection/Repair Tag, Form NAVMC 1018. Symptoms of the failure presented in a clear, concise manner on the ERO will facilitate repair of the equipment. The RMA/RIN must be cited on the ERO and the Inspection/Repair Tag. The contractor will not commence warranty repair actions until an ERO on the failed equipment is received at the contractor's repair facility. The contractor will enter information on work performed as maintenance actions and return the ERO to the originator. The originator of the ERO will complete and close the ERO in accordance with current instructions.

4 Submit a Recoverable Item Report "WIR" in accordance with established procedures and include the RMA/RIN. There is no requirement to wait for disposition instructions. Ship the faulty LRU per the instructions provided by the vendor during the HOTLINE call.

5 Faulty LRUs will be forwarded to the TMO for packing and shipping to the contractor in accordance with disposition instructions provided by the vendor during the HOTLINE call (the ERO is included with the shipped item). Owning units will bear the cost of the transportation to return the failed item to the contractor's facility. The contractor will bear return shipping charges. The contractor will match or exceed the mode of shipment back to the units.

6 The defective LRU is shipped from the TMO to one of the contractor repair sites listed in Tables 3.0, 3.1, and 3.2 for repair and return to the military unit that submitted the item for repair.

7 Once the repaired component is returned from the contractor, MARCORLOGBASES, Code 843-3, Albany, is notified by e-mail message.

(b) Contractor Responsibilities

1 The contractors (GD, Litton, and TYAD) will repair, replace, or correct the design or construction of those items that are returned to the contractor for repair during the warranty period. Repair/replacement will be accomplished within a contract specified period once a failed item is received at the contractor's facility. Weekends and U.S. national holidays are excluded from the specified time period.

2 To meet the turn-around-period repair requirement, the contractor may provide a replacement item from stock. The replacement item will have the same warranty expiration date and identical configuration as the failed warranted item, but will have a new serial/warranty tracking number.

3 The contractor will repair or replace all failed warranted items during the warranty period at no additional cost to the Government.

4 The contractor will effect all repairs necessary to return the failed equipment to full operational condition and record those actions on the ERO. The ERO will be returned to the originator with the repaired equipment.

5 When items covered under the warranty are sent to the contractor for repair and return, the contractor will bear the transportation costs for return of the items.

6 The contractor is required to maintain repair facilities to support warranty repairs.

k. System Safety and Hazardous Material. A System Safety Program, in accordance with MIL-STD-882B, has been implemented to ensure that safety, consistent with mission requirements, is designed into CHS equipment in a timely, cost-effective manner. All known hazards associated with the AFATDS equipment have been identified, evaluated, eliminated, and/or effectively controlled resulting in minimum risk. Additionally, there are no hazardous materials or impact on the environment associated with the operation of AFATDS.

l. Waivers and Plan of Action and Milestones. Not applicable.

5. Actions Required to Place Equipment in Service

a. Gaining Commands. In accordance with Marine Forces Atlantic (MARFORLANT) and Marine Forces Pacific (MARFORPAC) guidance, ensure the following support elements are in place. Request permission to place the AN/GYK-47(V)6/7 in service from the appropriate commander.

(1) Acceptance Inventory. An acceptance inventory will be conducted jointly between the gaining unit and a MFT representative. Inventory sheets will be provided by the MFT.

(2) Notification. In accordance with MCO 4400.79F, notify MARCORLOGBASES (Code 843-3) and Commander, MARCORSYSCOM, when the AN/GYK-47(V)6/7 is placed in service.

(3) Obtaining Additional Equipment. No additional equipment is required to support the fielding of the AN/GYK-47(V)6/7.

(4) Accounting for New Assets. Accounting for new assets will be performed in accordance with the requirements of MCO P4400.150E and MCO P4400.82F.

(5) Post-Fielding Evaluation Reporting. Post-fielding evaluation reports are to be submitted in accordance with the requirements of MCO 4105.4 and Technical Manual 4420.15/1.

(6) Materiel Defects Reporting. Quality and material deficiencies will be reported using the procedures identified in MCO 4855.10B. Particular attention must be given to requesting and following the disposal instructions for the defective equipment.

(7) Retrograde of Existing Equipment. The MARCORLOGBASES (WSM Code 843-3), Albany, will provide instructions on disposal of the FSCC, AN/UYK-102(V)1.

(8) Obtaining Supporting Consumables. Initial funding for consumable items will be provided to the Gaining Commands by MARCORSYSCOM for a maximum of two operational years. The MEFs and Support Establishments are responsible for budgeting operational and maintenance support costs for the remaining system life cycle.

The following items include projected annual support costs for planning purposes. This information was based on data received from the operational AFATDS Test Bed at I MEF, Camp Pendleton, CA:

Mobile Workstation AN/GYK-47(V)6

Consumable Projected Annual Costs = \$280.00 per year

| ITEM | QTY/ UI | UNIT PRICE | COST |
|--------------------------|---------|------------|-----------|
| Printer Toner Cartridges | 2 EA | \$ 64.00 | \$ 128.00 |
| Paper | 1 BOX | \$ 32.00 | \$ 32.00 |
| Jaz Disc | 1 EA | \$ 100.00 | \$ 100.00 |
| 3.5 Floppy Disc | 10 EA | \$ 2.00 | \$ 20.00 |

Transit Workstation AN/GYK-47(V)7

Consumable Projected Annual Costs = \$120.00 per year

| ITEM | QTY/ UI | UNIT PRICE | COST |
|-----------------|---------|------------|-----------|
| Jaz Disc | 1 EA | \$ 100.00 | \$ 100.00 |
| 3.5 Floppy Disc | 10 EA | \$ 2.00 | \$ 20.00 |

(9) Security Requirements. When processing or storing classified information, the AN/GYK-47(V)6/7 must be safeguarded in accordance with security-associated directives and orders. Appendix A of OPNAVINST 5510.1H lists security related publications. These publications should be consulted, requirements noted, and facilities surveyed to determine compliance with security guidelines. All corrective actions must be taken before any classified data is handled by the AN/GYK-47(V)6/7. Additionally, appropriate action must be taken to ensure facilities meet security requirements as set forth in OPNAVINST 5510.1H and other pertinent directives and orders.

(10) Controlled Item Reporting. The AN/GYK-47(V)6/7 is a controlled item and is combat essential. Upon placement into service, report the item in accordance with MCO P4400.82F.

(11) Marine Corps Ground Equipment Resource Reporting. The AN/GYK-47(V)6/7 is a candidate for future MCGERR.

b. MARCORLOGBASES, Albany

(1) Administrative Control. MARCORLOGBASES, Albany, must establish and implement the following administrative control mechanisms:

(a) Assign a Warranty Administrator to ensure all warranty claims are appropriately processed, and to resolve warranty issues referred by the gaining commands in accordance with MCO 4400.32D.

(b) Ensure that gaining commands have received their initial spare packages.

(c) Prepare and publish a Marine Corps Stocklist (SL)-3. Update the SL-3 as required.

(2) Table of Equipment (T/E) Deficiencies. MARCORLOGBASES, Albany, will be responsible for resolving T/E deficiencies of end items generated by units subsequent to fielding. Units will submit requisitions for T/E deficiencies to MARCORLOGBASES, Albany, in accordance with MCO P4400.82F.

(3) Disposition Instructions. Upon fielding of the AN/GYK-47(V)6/7, MARCORLOGBASES, Albany, will provide units with disposition instructions for the disposal of the FSCCs, AN/UYK-102(V)1.

(4) Fielding Level. MARCORLOGBASES, Albany, must notify Headquarters, Marine Corps (LPP-1) when the AN/GYK-47(V)6/7 has reached 85 percent fielding of its planned Marine Corps allowances. Headquarters, Marine Corps (LPP-1) will then update Marine Corps Bulletin 3000.

(5) Initial Issue Provisioning. MARCORLOGBASES, Albany, will issue the AN/GYK-47(V)6/7 Initial Issue Provisioning packages subsequent to unit fielding. These spares will be physically located at the FSSG within the RIP.

(6) Warranties

(a) MARCORLOGBASES, Albany, will serve as warranty administrator for CHS and non-CHS items.

(b) MARCORLOGBASES, Albany, will assign Warranty Administrators once the MEF coordinate with MARFORLANT and MARFORPAC.

c. MARCORSYSCOM

(1) Initial Fielding Funding. MARCORSYSCOM will provide program funds and budget to support the initial fielding of the AN/GYK-47(V)6/7 for two years after initial receipt.

(2) Operational Checks. MARCORSYSCOM will conduct operational systems checks prior to materiel hand-off to ensure hardware and software functionality.

(3) Equipment Allowance File (EAF). MARCORSYSCOM will ensure that any actions initiated to reflect allowance data in the EAF coincide with the project in-service date for the AN/GYK-47(V)6/7.

(4) Technical and Logistics Assistance. MARCORSYSCOM will provide the following assistance to the gaining command in support of the AN/GYK-47(V)6/7:

- (a) Provide MFT to conduct materiel fielding.
- (b) Provide NETT to conduct initial training.
- (c) Provide gaining commands with system technical manuals during materiel fielding.
- (d) Conduct New Equipment Material Fielding Brief in preparation for fielding and training.
- (e) Provide customer service to each MEF via an On-Site Software Representative (Reference Appendix D).
- (f) Publish the User's Logistics Support Summary.

(5) Life Cycle Management. MARCORSYSCOM will maintain life cycle management of the AN/GYK-47(V)6/7 in accordance with the requirements of MCO 4105.4 and Technical Manual 4420-15/1, as required.

APPENDIX A.

| List of AN/GYK-47(V)6 Allowances and Delivery Schedule (As of 11/15/02) | | | | | | | | | | | | | | |
|---|--|------------------------|-------|------|----------------|----------------|-----------------------|---|---|---|-----------------------|---|---|---|
| T/E No. | Unit Name | Unit Planned Allowance | Mltpr | Tot. | FY00 Allowance | FY01 Allowance | FY02 Allowance By QTR | | | | FY03 Allowance By QTR | | | |
| | | | | | | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| | FIRST PHASE FIELDING | | | | | | | | | | | | | |
| N2101 | HQBTRY, ARTYREGT, 1ST MARDIV | 5 | 1 | 5 | 5 | | | | | | | | | |
| N2108 | 155MMBTRY, ARTYBN (M198), ARTYREGT, 1ST MARDIV | 1 | 12 | 12 | 12 | | | | | | | | | |
| N2109 | HQBTRY, ARTYBN (M198), ARTYREGT, 1ST MARDIV | 3 | 4 | 12 | 12 | | | | | | | | | |
| N3111 | HQCO, H&SBN, 1ST FSSG | 2 | 1 | 2 | 2 | | | | | | | | | |
| N3132 | ELECT MAINTCO, MAINTBN, 1ST FSSG | 1 | 1 | 1 | 1 | | | | | | | | | |
| N4601 | COMD ELEMENT I MEF MHG (HQ) | 2 | 1 | 2 | 2 | | | | | | | | | |
| N4915 | HQ, MARINE EXPEDITIONARY UNIT, I MEF | 1 | 3 | 3 | 3 | | | | | | | | | |
| N8615 | MARTACAIRCMSQDN, MACG, MAW (I MEF) | 2 | 1 | 2 | 2 | | | | | | | | | |
| N8660 | MASS, MACG, MAW (I MEF) | 2 | 1 | 2 | 2 | | | | | | | | | |
| 5981 | MAD, EXPEDITIONARY WARFARE TRNG GRP, PAC | 2 | 1 | 2 | 2 | | | | | | | | | |
| 7442 | MCTSSA (MCSYSCOM), CAMPEN, CA | 1 | 1 | 1 | 1 | | | | | | | | | |
| 7220 | MC COMM-ELEC SCHOOL, MCAGCC, 29 PALMS, CA | 8 | 1 | 8 | 8 | | | | | | | | | |
| B2308 | 155MMBTRY, ARTYBN(198), ARTYREGT, 3D MD (HI) | 1 | 2 | 2 | | 2 | | | | | | | | |
| B2309 | HQBTRY, ARTYBN(M198), ARTYREGT, 3D MD (HI) | 3 | 1 | 3 | | 3 | | | | | | | | |
| N2201 | HQBRTY, ARTYREGT, 2D MARDIV | 5 | 1 | 5 | | 5 | | | | | | | | |
| N2208 | 155MMBTRY, ARTYBN(M198), ARTYREGT, 2D MARDIV | 1 | 12 | 12 | | 12 | | | | | | | | |
| N2209 | HQBTRY, ARTYBN(M198), ARTYREGT, 2D MARDIV | 3 | 4 | 12 | | 12 | | | | | | | | |
| N2301 | HQBTRY(-), ARTYREGT, 3D MARDIV | 5 | 1 | 5 | | 5 | | | | | | | | |
| N2308 | 155MMBTRY, ARTYBN(M198), ARTYREGT, 3D MARDIV | 1 | 4 | 4 | | 4 | | | | | | | | |
| N2309 | HQBTRY, ARTYBN(M198), ARTYREGT, 3D MARDIV | 3 | 1 | 3 | | 3 | | | | | | | | |
| N2401 | HQBTRY, ARTYREGT, 4 TH MARDIV | 5 | 1 | 5 | 5 | | | | | | | | | |
| N2409 | HQBTRY, ARTYBN, ARTYREGT, 4TH MARDIV | 3 | 1 | 3 | 3 | | | | | | | | | |

| | | | | | | | | | | | | | | | | | |
|--------|--|----|----|----|----|----|--|--|--|----|--|--|--|----|--|--|--|
| N3311 | HQCO, H&SBN, 3D FSSG | 2 | 1 | 2 | | 2 | | | | | | | | | | | |
| N3332 | ELECT MAINTCO, MAINTBN, 3D FSSG | 1 | 1 | 1 | | 1 | | | | | | | | | | | |
| N4801 | COMD ELEMENT MHG, III MEF (HQ) | 2 | 1 | 2 | | 2 | | | | | | | | | | | |
| N4918 | HQ, MARINE EXPEDITIONARY UNIT, III MEF | 1 | 1 | 1 | | 1 | | | | | | | | | | | |
| N8615 | MARTACAIRCMSQDN, MACG, MAW (III MEF) | 2 | 1 | 2 | | 2 | | | | | | | | | | | |
| N8660 | MASS, MACG, MAW (III MEF) | 2 | 1 | 2 | | 2 | | | | | | | | | | | |
| 5980 | MAD, EXPEDITIONARY WARFARE TRNG GRP, LANT | 2 | 1 | 2 | | 2 | | | | | | | | | | | |
| 7434 | MAR COR UNIV EDU COMMAND QUANTICO, VA | 1 | 1 | 1 | | 1 | | | | | | | | | | | |
| 035060 | MARCOR ADMIN DET, ARTY SCHOOL, FT SILL, OK | 20 | 1 | 20 | 20 | | | | | | | | | | | | |
| N2408 | 155MMBTRY, ARTYBN, ARTYREGT, 4TH MARDIV | 1 | 15 | 15 | | 15 | | | | | | | | | | | |
| N2409 | HQBTRY, ARTYBN, ARTYREGT, 4TH MARDIV | 3 | 4 | 12 | | 12 | | | | | | | | | | | |
| N3211 | HQCO, H&SBN, 2D FSSG | 2 | 1 | 2 | | 2 | | | | | | | | | | | |
| N3232 | ELECT MAINTCO, MAINTBN, 2D FSSG | 1 | 1 | 1 | | 1 | | | | | | | | | | | |
| N3411 | HQCO, H&SBN, 4TH FSSG | 2 | 1 | 2 | | | | | | 2 | | | | | | | |
| N3432 | ELECT MAINTCO, MAINTBN, 4TH FSSG | 1 | 1 | 1 | | 1 | | | | | | | | | | | |
| N4701 | COMD ELEMENT MHG II MEF (HQ) | 2 | 1 | 2 | | 2 | | | | | | | | | | | |
| N4916 | HQ, MARINE EXPEDITIONARY UNIT, II MEF | 1 | 3 | 3 | | 3 | | | | | | | | | | | |
| 048615 | MARTACAIRCMSQDN, MACG, MAW (RES) | 2 | 1 | 2 | | 2 | | | | | | | | | | | |
| 028615 | MARTACAIRCMSQDN, MACG, MAW (II MEF) | 2 | 1 | 2 | | 2 | | | | | | | | | | | |
| 048660 | MASS, MACG, MAW (RES) | 2 | 1 | 2 | | 2 | | | | | | | | | | | |
| 028660 | MASS, MACG, MAW (II MEF) | 2 | 1 | 2 | | 2 | | | | | | | | | | | |
| 7411 | HQ, MCB, MCCDC, QUANTICO, VA (BSTF) | 1 | 1 | 1 | 1 | | | | | | | | | | | | |
| | SECOND PHASE FIELDING | | | | | | | | | | | | | | | | |
| N2108 | 155MMBTRY, ARTYBN (M198), ARTYREGT, 1ST MARDIV | 1 | 12 | 12 | | | | | | 12 | | | | | | | |
| B2308 | 155MMBTRY, ARTYBN (M198), ARTYREGT, 3D MARDIV (HI) | 1 | 2 | 2 | | | | | | 2 | | | | | | | |
| N2308 | 155MMBTRY, ARTYBN (M198), ARTYREGT, 3D MARDIV | 1 | 4 | 4 | | | | | | 4 | | | | | | | |
| N2208 | 155MMBTRY, ARTYBN (M198), ARTYREGT, 2D MARDIV | 1 | 12 | 12 | | | | | | | | | | 12 | | | |

| | | | | | | | | | | | | | | |
|-------|--|---|----|-----|----|-----|---|----|---|---|----|----|---|----|
| N2408 | I55MMBTRY, ARTYBN, ARTYREGT, 4TH MARDIV | 1 | 15 | 15 | | | | 15 | | | | | | |
| 7450 | TBS, MCSCHLS, MAGT&E CTR, MCCDC, QUANTICO, VA | 1 | 1 | 1 | | | | 1 | | | | | | |
| | THIRD PHASE FIELDING | | | | | | | | | | | | | |
| N1141 | HQCO, INFREGT, 4 TH MARDIV | 1 | 3 | 3 | | | | | | | | | | 3 |
| N1192 | H&SCO, INFBN, INFREGT, 4 TH MARDIV | 1 | 9 | 9 | | | | | | | | | | 9 |
| N1541 | H&SCO, 4TH TANKBN, 4TH MARDIV | 1 | 1 | 1 | | | | | | | | | | 1 |
| N1581 | H&SCO, 8TH TNKBN, 4TH MARDIV | 1 | 1 | 1 | | | | | | | | | | 1 |
| N1781 | H&SCO, 4TH RECONBN (LA), 4TH MARDIV | 1 | 1 | 1 | | | | | | | | | | 1 |
| N1121 | HQCO, INFREGT, 2 ND MARDIV | 1 | 3 | 3 | | | | | | | | | | 3 |
| N1172 | H&SCO, INFBN, INFREGT, 2D MARDIV | 1 | 9 | 9 | | | | | | | | | | 9 |
| N1182 | H&SCO, INFN, INFREGT, 3D MARDIV (OKI) | 1 | 2 | 2 | | | | | | | | | 2 | |
| N1131 | HQCO, INFREGT, 3D MARDIV (OKI) | 1 | 2 | 2 | | | | | | | | | 2 | |
| B1182 | H&SCO, INFN, INFREGT, 3D MARDIV (HI) | 1 | 4 | 4 | | | | | | | | | 4 | |
| B1131 | HQCO, INFREGT, 3D MARDIV (HI) | 1 | 4 | 4 | | | | | | | | | 4 | |
| N1111 | HQCO, INFREGT, 1 ST MARDIV | 1 | 3 | 3 | | | | | | | | 3 | | |
| N1162 | H&SCO, INFBN, INFREGT, 1ST MARDIV | 1 | 9 | 9 | | | | | | | | 9 | | |
| N1511 | H&SCO, 1ST TANKBN, 1ST MARDIV | 1 | 1 | 1 | | | | | | | | 1 | | |
| N1751 | H&SCO, 1ST RECONBN (LA), 1ST MARDIV | 1 | 1 | 1 | | | | | | | | 1 | | |
| N1771 | H&SCO, 3D RECONBN (LA) 1ST MARDIV | 1 | 1 | 1 | | | | | | | | 1 | | |
| N1231 | H&SCO, COMBAT ASLTBN, 3D MARDIV | 1 | 1 | 1 | | | | | | | | | | 1 |
| N1521 | H&SCO, 2D TANKBN, 2D MARDIV | 1 | 1 | 1 | | | | | | | | | | 1 |
| N1761 | H&SCO, 2D RECONBN (LA), 2D MARDIV | 1 | 1 | 1 | | | | | | | | | | 1 |
| | TOTAL AN/GYK-47(V)6 ALLOWANCES BY QUARTER | 0 | 0 | 285 | 81 | 103 | 0 | 28 | 8 | 0 | 12 | 15 | 8 | 30 |
| | TOTAL AFATDS ALLOWANCES | | | 619 | | | | | | | | | | |

| List of AN/GYK-47(V)7 Allowances and Delivery Schedule (As of 11/15/02) | | | | | | | | | | | | | | |
|---|--|------------------------|-------|------|----------------|----------------|-----------------------|---|---|---|-----------------------|---|---|---|
| T/E No. | Unit Name | Unit Planned Allowance | Mltpr | Tot. | FY00 Allowance | FY01 Allowance | FY02 Allowance By QTR | | | | FY03 Allowance By QTR | | | |
| | | | | | | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| | FIRST PHASE FIELDING | | | | | | | | | | | | | |
| N2101 | HQBTRY, ARTY REGT, 1ST MARDIV | 10 | 1 | 10 | 10 | | | | | | | | | |
| N2108 | 155MMBTRY, ARTYBN (M198), ARTYREGT, 1ST MARDIV | 1 | 12 | 12 | 12 | | | | | | | | | |
| N2109 | HQBTRY, ARTYBN (M198), ARTYREGT, 1ST MARDIV | 3 | 4 | 12 | 12 | | | | | | | | | |
| N3111 | HQCO, H&SBN, 1ST FSSG | 2 | 1 | 2 | 2 | | | | | | | | | |
| N3132 | ELECT MAINTCO, MAINTBN, 1ST FSSG | 1 | 1 | 1 | 1 | | | | | | | | | |
| N4601 | COMD ELEMENT I MEF MHG (HQ) | 4 | 1 | 4 | 4 | | | | | | | | | |
| N4915 | HQ, MARINE EXPEDITIONARY UNIT, I MEF | 1 | 3 | 3 | 3 | | | | | | | | | |
| N8615 | MARTACAIRCMDSQDN, MACG, MAW (I MEF) | 2 | 1 | 2 | 2 | | | | | | | | | |
| N8660 | MASS, MACG, MAW (I MEF) | 2 | 1 | 2 | 2 | | | | | | | | | |
| 5981 | MAD, EXPEDITIONARY WARFARE TRNG GRP, PAC | 2 | 1 | 2 | 2 | | | | | | | | | |
| 7442 | MCTSSA (MCSYSCOM), CAMPEN, CA | 1 | 1 | 1 | 1 | | | | | | | | | |
| 7720 | MC COMM-ELEC SCHOOL, MCAGCC, 29 PALMS, CA | 2 | 1 | 2 | 2 | | | | | | | | | |
| B2308 | 155MMBTRY, ARTYBN (198), ARTYREGT, 3D MD (HI) | 1 | 2 | 2 | | 2 | | | | | | | | |
| B2309 | HQBTRY, ARTYBN (M198), ARTYREGT, 3D MD (HI) | 3 | 1 | 3 | | 3 | | | | | | | | |
| N2201 | HQBRTY, ARTYREGT, 2D MARDIV | 10 | 1 | 10 | | 10 | | | | | | | | |
| N2208 | 155MMBTRY, ARTYBN (M198), ARTYREGT, 2D MARDIV | 1 | 12 | 12 | | 12 | | | | | | | | |
| N2209 | HQBTRY, ARTYBN (M198), ARTYREGT, 2D MARDIV | 3 | 4 | 12 | | 12 | | | | | | | | |
| N2301 | HQBTRY (-), ARTYREGT, 3D MARDIV | 10 | 1 | 10 | | 10 | | | | | | | | |
| N2308 | 155MMBTRY, ARTYBN (M198), ARTYREGT, 3D MARDIV | 1 | 4 | 4 | | 4 | | | | | | | | |
| N2309 | HQBTRY, ARTYBN (M198), ARTYREGT, 3D MARDIV | 3 | 1 | 3 | | 3 | | | | | | | | |
| N2401 | HQBTRY, ARTYREGT, 4 TH MARDIV | 10 | 1 | 10 | 10 | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | |
|--------|--|---|----|----|---|----|--|--|----|--|--|--|--|----|--|--|--|--|--|
| N2409 | HQBTRY, ARTYBN, ARTYREGT, 4TH MARDIV | 3 | 1 | 3 | 3 | | | | | | | | | | | | | | |
| N3311 | HQCO, H&SBN, 3D FSSG | 2 | 1 | 2 | | 2 | | | | | | | | | | | | | |
| N3332 | ELECT MAINTCO, MAINTBN, 3D FSSG | 1 | 1 | 1 | | 1 | | | | | | | | | | | | | |
| N4801 | COMD ELEMENT MHG III MEF (HQ) | 4 | 1 | 4 | | 4 | | | | | | | | | | | | | |
| N4918 | HQ, MARINE EXPEDITIONARY UNIT, III MEF | 1 | 1 | 1 | | 1 | | | | | | | | | | | | | |
| N8615 | MARTACAIRCMDSQDN, MACG, MAW (III MEF) | 2 | 1 | 2 | | 2 | | | | | | | | | | | | | |
| N8660 | MASS, MACG, MAW (III MEF) | 2 | 1 | 2 | | 2 | | | | | | | | | | | | | |
| 5980 | MAD, EXPEDITIONARY WARFARE TRNG GRP, LANT | 2 | 1 | 2 | | 2 | | | | | | | | | | | | | |
| 7434 | MAR COR UNIV EDU COMMAND QUANTICO, VA | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | |
| 035060 | MARCOR ADMIN DET, ARTY SCHOOL, FT SILL, OK | 4 | 1 | 4 | 4 | | | | | | | | | | | | | | |
| N2408 | 155MMBTRY, ARTYBN, ARTYREGT, 4TH MARDIV | 1 | 15 | 15 | | 15 | | | | | | | | | | | | | |
| N2409 | HQBTRY, ARTYBN, ARTYREGT, 4TH MARDIV | 3 | 4 | 12 | | 12 | | | | | | | | | | | | | |
| N3211 | HQCO, H&SBN, 2D FSSG | 2 | 1 | 2 | | 2 | | | | | | | | | | | | | |
| N3232 | ELECT MAINTCO, MAINTBN, 2D FSSG | 1 | 1 | 1 | | 1 | | | | | | | | | | | | | |
| N3411 | HQCO, H&SBN, 4TH FSSG | 2 | 1 | 2 | | | | | 2 | | | | | | | | | | |
| N3432 | ELECT MAINTCO, MAINTBN, 4TH FSSG | 1 | 1 | 1 | | 1 | | | | | | | | | | | | | |
| N4701 | COMD ELEMENT MHG II MEF (HQ) | 4 | 1 | 4 | | 4 | | | | | | | | | | | | | |
| N4916 | HQ, MARINE EXPEDITIONARY UNIT, II MEF | 1 | 3 | 3 | | 3 | | | | | | | | | | | | | |
| 048615 | MARTACAIRCMDSQDN, MACG, MAW (RES) | 2 | 1 | 2 | | 2 | | | | | | | | | | | | | |
| 028615 | MARTACAIRCMDSQDN, MACG, MAW (II MEF) | 2 | 1 | 2 | | 2 | | | | | | | | | | | | | |
| 048660 | MASS, MACG, MAW (RES) | 2 | 1 | 2 | | 2 | | | | | | | | | | | | | |
| 028660 | MASS, MACG, MAW (II MEF) | 2 | 1 | 2 | | 2 | | | | | | | | | | | | | |
| 7411 | HQ, MCB, MCCDC, QUANTICO, VA (BSTF) | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | |
| | SECOND PHASE FIELDING | | | | | | | | | | | | | | | | | | |
| N2108 | 155MMBTRY, ARTYBN (M198), ARTYREGT, 1ST MARDIV | 2 | 12 | 24 | | | | | 24 | | | | | | | | | | |
| B2308 | 155MMBTRY, ARTYBN (M198), ARTYREGT, 3D MARDIV (HI) | 1 | 4 | 4 | | | | | 4 | | | | | | | | | | |
| N2308 | 155MMBTRY, ARTYBN (M198), ARTYREGT, 3D MARDIV | 2 | 4 | 8 | | | | | 8 | | | | | | | | | | |
| N2208 | 155MMBTRY, ARTYBN (M198), ARTYREGT, 2D MARDIV | 2 | 12 | 24 | | | | | | | | | | 24 | | | | | |
| N2408 | 155MMBTRY, ARTYBN, ARTYREGT, 4TH MARDIV | 2 | 15 | 30 | | | | | 30 | | | | | | | | | | |

| | | | | | | | | | | | | | | | |
|-------|---|---|---|-----|----|-----|---|----|----|---|----|----|---|----|---|
| 7450 | TBS, MCSCHLS, MAGT&E CTR, MCCDC, QUANTICO, VA | 1 | 1 | 1 | | | | | 1 | | | | | | |
| | THIRD PHASE FIELDING | | | | | | | | | | | | | | |
| N1141 | HQCO, INFREGT, 4 TH MARDIV | 1 | 3 | 3 | | | | | | | | | | | 3 |
| N1192 | H&SCO, INFBN, INFREGT, 4 TH MARDIV | 1 | 9 | 9 | | | | | | | | | | | 9 |
| N1541 | H&SCO, 4TH TANKBN, 4TH MARDIV | 1 | 1 | 1 | | | | | | | | | | | 1 |
| N1581 | H&SCO, 8TH TNKBN, 4TH MARDIV | 1 | 1 | 1 | | | | | | | | | | | 1 |
| N1781 | H&SCO, 4TH RECONBN (LA), 4TH MARDIV | 1 | 1 | 1 | | | | | | | | | | | 1 |
| N1121 | HQCO, INFREGT, 2 ND MARDIV | 1 | 3 | 3 | | | | | | | | | | | 3 |
| N1172 | H&SCO, INFBN, INFREGT, 2D MARDIV | 1 | 9 | 9 | | | | | | | | | | | 9 |
| N1182 | H&SCO, INFN, INFREGT, 3D MARDIV (OKI) | 1 | 2 | 2 | | | | | | | | | | 2 | |
| N1131 | HQCO, INFREGT, 3D MARDIV (OKI) | 1 | 2 | 2 | | | | | | | | | | 2 | |
| B1182 | H&SCO, INFN, INFREGT, 3D MARDIV (HI) | 1 | 2 | 2 | | | | | | | | | | 2 | |
| B1131 | HQCO, INFREGT, 3D MARDIV (HI) | 1 | 2 | 2 | | | | | | | | | | 2 | |
| N1111 | HQCO, INFREGT, 1 ST MARDIV | 1 | 3 | 3 | | | | | | | | | 3 | | |
| N1162 | H&SCO, INFBN, INFREGT, 1ST MARDIV | 1 | 9 | 9 | | | | | | | | | 9 | | |
| N1511 | H&SCO, 1ST TANKBN, 1ST MARDIV | 1 | 1 | 1 | | | | | | | | | 1 | | |
| N1751 | H&SCO, 1ST RECONBN (LA), 1ST MARDIV | 1 | 1 | 1 | | | | | | | | | 1 | | |
| N1771 | H&SCO, 3D RECONBN (LA) 1ST MARDIV | 1 | 1 | 1 | | | | | | | | | 1 | | |
| N1231 | H&SCO, COMBAT ASLTBN, 3D MARDIV | 1 | 1 | 1 | | | | | | | | | | | 1 |
| N1521 | H&SCO, 2D TANKBN, 2D MARDIV | 1 | 1 | 1 | | | | | | | | | | | 1 |
| N1761 | H&SCO, 2D RECONBN (LA), 2D MARDIV | 1 | 1 | 1 | | | | | | | | | | | 1 |
| | TOTAL AN/GYK-47(V)7 ALLOWANCES BY QUARTER | 0 | 0 | 334 | 72 | 116 | 0 | 55 | 14 | 0 | 24 | 15 | 8 | 30 | |
| | TOTAL AFATDS ALLOWANCES | | | 619 | | | | | | | | | | | |

Note: The information provided above is accurate as of the date of publication of the User’s Logistics Support Summary. Subsequent changes to unit allowances or deliveries are reflected through modification of quantities in the Equipment Allowance File.

APPENDIX B.

AFATDS PROGRAM SCHEDULE

| EVENT | DATE |
|--|--------------------------|
| Milestone I/II Decision | Oct 89 |
| Milestone III Decision (Joint Army/Marine Corps) | Dec 95 |
| AFATDS 97 Limited User Test (LUT) | 1 st Qtr FY98 |
| Marine Corps AFATDS 97/CHS Operational Assessment | 2 nd Qtr FY98 |
| AFATDS 97 Software Release (Army) | 4 th Qtr FY98 |
| AFATDS 98 Package 10 LUT | 1 st Qtr FY99 |
| Marine Corps A98/CHS Procurement Decision | 3 rd Qtr FY99 |
| A98/CHS Operational Test and Evaluation Complete (LUT III) | 3 rd Qtr FY99 |
| AFATDS 98/CHS Package 11 LUT | 4 th Qtr FY99 |
| AFATDS Fielding Decision | 1 st Qtr FY00 |
| A98 Software Release (Joint Army/Marine Corps) | 1 st Qtr FY00 |
| AFATDS CHS Fielding | 1 st Qtr FY00 |
| Initial Operational Capability | 3 rd Qtr FY00 |
| AFATDS 99 LUT | 2 nd Qtr FY01 |
| AFATDS 99 FLUT | 4 th Qtr FY01 |
| AFATDS 6.3 Software Release (Joint Army/Marine Corps) | 2 nd Qtr FY02 |
| AFATDS 6.3.1 Software Release (Joint Army/Marine Corps) | 3 rd Qtr FY02 |
| AFATDS V6.3.1 Software Release (Joint Army/Marine Corps) | 1 st Qtr FY03 |
| Full Operational Capability | 4 th Qtr FY03 |
| AFATDS 6.3.2 Software Release (Joint Army/Marine Corps) | 1 st Qtr FY04 |
| AFATDS CHS Fielding Complete | 4 th Qtr FY04 |
| AFATDS V7 Software Release (Joint Army/Marine Corps) | 1 st Qtr FY05 |
| AFATDS Hardware Refresh | 1 st Qtr FY05 |

Note: The information provided above is accurate as of the date of publication of the User's Logistics Support Summary. Subsequent changes to unit allowances or deliveries are reflected through modification of quantities in the Equipment Allowance File.

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APPENDIX C
ACRONYM LIST

| | |
|-------------------|---|
| AAO | APPROVED ACQUISITION OBJECTIVE |
| ACMC | ASSISTANT COMMANDANT OF THE MARINE CORPS |
| AFATDS | ADVANCED FIELD ARTILLERY TACTICAL DATA SYSTEM |
| ATCCS | ARMY TACTICAL COMMAND AND CONTROL SYSTEMS |
| C2 | COMMAND AND CONTROL |
| C4I | COMMAND, CONTROL, COMMUNICATIONS, COMPUTERS, AND INTELLIGENCE |
| CCSS | COMMAND AND CONTROL SYSTEMS SCHOOL |
| CCU | COMPACT COMPUTER UNIT |
| CDRL | CONTRACT DATA REQUIREMENTS LIST |
| CD-ROM | COMPACT DISK-READ ONLY MEMORY |
| CE | COMMAND ELEMENT |
| CECOM | COMMUNICATIONS-ELECTRONICS COMMAND |
| CFPD | COLOR FLAT PANEL DISPLAY |
| CHS | COMMON HARDWARE SUITE |
| CIDOS | COMSEC INTERSERVICE DEPOT OVERHAUL STANDARD |
| COC | COMBAT OPERATION CENTERS |
| COMMARCORLOGBASES | COMMANDER, MARINE CORPS LOGISTICS BASES |
| CONOPS | CONTINUITY OF OPERATIONS |
| DACT | DATA AUTOMATED COMMUNICATIONS TERMINAL |
| DASC | DIRECT AIR SUPPORT CENTER |
| DCT | DIGITAL COMMUNICATIONS TERMINAL |
| DoD | DEPARTMENT OF DEFENSE |
| DOTES | DOCTRINE, ORGANIZATION, TRAINING AND EDUCATION, EQUIPMENT, AND SUPPORT |
| DSN | DOMAIN NAME SYSTEM/SERVICE/SERVER |
| E-MAIL | ELECTRONIC MAIL |
| EAF | EQUIPMENT ALLOWANCE FILE |
| EPLRS | ENHANCED POSITION LOCATION REPORTING SYSTEM |
| ERO | EQUIPMENT REPAIR ORDER |
| EWTGLANT | EXPEDITIONARY WARFARE TRAINING GROUPS ATLANTIC |
| EWTGPAC | EXPEDITIONARY WARFARE TRAINING GROUPS PACIFIC |
| FATDS | FIELD ARTILLERY TACTICAL DATA SYSTEM |
| FDC | FIRE DIRECTION CENTERS |
| FFCC | FIRING BATTERY TO THE FORCE FIRES COORDINATION CENTER |
| FOC | FULL OPERATIONAL CAPABILITY |
| FSCC | FIRE SUPPORT COORDINATION CENTERS |

| | |
|----------------|---|
| FSDTS | FIRE SUPPORT DIGITAL TRAINING SYSTEM |
| FSSG | FORCE SERVICE SUPPORT GROUP |
| FY | FISCAL YEAR |
| GD | GENERAL DYNAMICS |
| HMMWV | HIGH MOBILITY MULTI-WHEELED VEHICLE |
| HQMC | HEADQUARTERS MARINE CORPS |
| IBM | INTERNATIONAL BUSINESS MACHINES CORPORATION |
| ID | IDENTIFICATION |
| IETM | INTERACTIVE ELECTRONIC TECHNICAL MANUAL |
| IFSAS | INITIAL FIRE SUPPORT AUTOMATED SYSTEM |
| ILS | INTEGRATED LOGISTICS SUPPORT |
| ILSO | INTEGRATED LOGISTICS SUPPORT OFFICER |
| IOC | INITIAL OPERATIONAL CAPABILITY |
| IOS | INTELLIGENCE OPERATIONS SERVER |
| IOW | INTELLIGENCE OPERATIONS WORKSTATION |
| IT | INFORMATION TECHNOLOGY |
| ITS | INDIVIDUAL TRAINING STANDARDS |
| LAN | LOCAL AREA NETWORK |
| LAR | LOGISTICS ASSISTANCE REPRESENTATIVE |
| LLP | LIGHTWEIGHT LASER PRINTER |
| LRU | LINE REPLACEABLE UNITS |
| LUT | LIMITED USER'S TEST |
| MAGTF | MARINE AIR-GROUND TASK FORCE |
| MARCORLOGBASES | MARINE CORPS LOGISTICS BASE |
| MARCORSYSCOM | MARINE CORPS SYSTEMS COMMAND |
| MARFORLANT | MARINE FORCES ATLANTIC |
| MARFORPAC | MARINE FORCES PACIFIC |
| MARFORRES | MARINE FORCES RESERVES |
| MATCOM | MATERIAL COMMAND, MCB ALBANY |
| MCCDC | MARINE CORPS COMBAT DEVELOPMENT COMMAND |
| MCCES | MARINE CORPS COMMUNICATION-ELECTRONICS SCHOOL |
| MCCRES | MARINE CORPS COMBAT READINESS EVALUATION SYSTEM |
| MCO | MARINE CORPS ORDER |
| MCGERR | MARINE CORPS GROUND EQUIPMENT RESOURCE REPORTING |
| MCTSSA | MARINE CORPS TACTICAL SOFTWARE SYSTEMS SUPPORT |
| MDX | MAINTENANCE DIAGNOSTIC EXPANDED |
| MEF | MARINE EXPEDITIONARY FORCE |
| MFT | MATERIEL FIELDING TEAM |
| MIL-STD | MILITARY STANDARD |

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ULSS 009698-15X

| | |
|-----------|---|
| MIPR | MILITARY INTERDEPARTMENTAL PROCUREMENT REQUEST |
| MOS | MILITARY OCCUPATIONAL SPECIALTY |
| MPB | MATERIAL PERFORMANCE BRANCH |
| MRL | MATERIEL REQUIREMENTS LIST |
| N/A | NOT APPLICABLE |
| NAVMC | NAVY-MARINE CORPS |
| NETT | NEW EQUIPMENT TRAINING TEAM |
| NSN | NATIONAL STOCK NUMBER |
| O&O | OPERATIONAL AND ORGANIZATIONAL |
| OEM | ORIGINAL EQUIPMENT MANUFACTURER |
| OPFAC | OPERATIONAL FACILITIES |
| OPNAVINST | CHIEF OF NAVY OPERATIONS INSTRUCTION |
| ORD | OPERATIONAL REQUIREMENT DOCUMENT |
| OSSR | ON-SITE SOFTWARE REPRESENTATIVE |
| PCN | PUBLICATION CONTROL NUMBER |
| PICA | PRIMARY INVENTORY CONTROL ACTIVITY |
| PM | PROGRAM MANAGER |
| PME | PROFESSIONAL MILITARY EDUCATION |
| PMIE | PROGRAM MANAGEMENT, INTELLIGENCE AND EFFECTS |
| PM IS | PROGRAM MANAGER INFORMATION SYSTEMS |
| PO | PROJECT OFFICER |
| POC | POINTS OF CONTACT |
| QMD | QUALITY MANAGEMENT DIVISION |
| QTY | QUANTITY |
| RAM | RANDOM ACCESS MEMORY |
| RAOC | REAR AREA OPERATIONS CENTER |
| RHDD | REMOVAL HARD DISK DRIVE |
| RIN | RETURN INCIDENT NUMBER |
| RIP | REPAIRABLE ISSUE POINT |
| RMA | RETURN MATERIAL AUTHORIZATION |
| RSC | REGIONAL SUPPORT CENTER |
| SACC | SUPPORTING ARMS COORDINATION CENTER |
| SATCOM | SATELLITE COMMUNICATIONS |
| SCSI | SMALL COMPUTER SYSTEMS INTERFACE |
| SINGARS | SINGLE CHANNEL GROUND AND AIRBORNE RADIO SYSTEM |
| SI/STIM | SIMULATION/STIMULATION |
| SNCO | STAFF NON-COMMISSIONED OFFICERS |
| SP-TCIM | SERIAL PORT TACTICAL COMMUNICATIONS INTERFACE MODULE |

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| | |
|--------|--|
| SSA | SOFTWARE SUPPORT ACTIVITY |
| SSOP | SECURITY STANDING OPERATING PROCEDURES |
| SSS | SYSTEM SEGMENT SPECIFICATION |
| T&E | TRAINING AND EDUCATION |
| T/E | TABLE OF EQUIPMENT |
| T/O | TABLE OF ORGANIZATION |
| TACC | TACTICAL AIR COMMAND CENTER |
| TAMCN | TABLE OF AUTHORIZED MATERIAL CONTROL NUMBER |
| TBD | TO BE DETERMINED |
| TBMCS | THEATER BATTLE MANAGEMENT CORE SYSTEM |
| TLDHS | TARGET LOCATION, DESIGNATION AND HAND-OFF SYSTEM |
| TMO | TRANSPORTATION MAINTENANCE OFFICE |
| TYAD | TOBYHANNA ARMY DEPOT |
| UCU | ULTRA COMPUTER UNIT |
| UI | UNIT OF ISSUE |
| USAFAS | UNITED STATES ARMY FIELD ARTILLERY SCHOOL |
| USMC | UNITED STATES MARINE CORPS |
| WBT | WEB-BASED TRAINING |
| WIR | RECOVERABLE ITEM REPORT |
| WSM | WEAPON SYSTEMS MANAGER |

APPENDIX D

STATEMENT OF WORK FOR USMC ON-SITE FIRE SUPPORT AND FIELD INTEGRATION

A. Raytheon will provide an on-site representative at Camp Pendleton, CA, with the following duties:

1. Support the entire MEF, and be fully versed in AFATDS software, and understand the USMC fire support process;
2. Provide AFATDS training/classroom instruction;
3. Develop class lesson plans;
4. Provide exercise support;
5. Be the West Coast hotline representative in matters relating to AFATDS software to include interfaces with MAGTF C4I Systems;
6. On occasion, travel in support of the AFATDS USMC Program Management Office (U/PMO);
7. Assist the ATS in matters relating to AFATDS;
8. Take technical direction from the AFATDS U/PMO;
9. Be knowledgeable on all AFATDS software versions, past and future;
10. Provide user feedback to the AFATDS U/PMO on fielded software and future requirements; and
11. Assist the AFATDS U/PMO in fielding as part of the AFATDS Fielding Integration Team.

B. Raytheon will provide an on-site representative at Okinawa, Japan, with the following duties:

1. Support the entire MEF, and be fully versed in AFATDS software, and understand the USMC fire support process;
2. Provide AFATDS training/class room instruction;
3. Develop class lesson plans;
4. Provide exercise support;
5. Be the Overseas hotline representative in matters relating to AFATDS software to include interfaces with MAGTF C4I Systems;
6. On occasion travel in support of the AFATDS U/PMO;
7. Assist the ATS in matters relating to AFATDS;
8. Take technical direction from the AFATDS U/PMO;
9. Be knowledgeable on all AFATDS software versions, past and future;
10. Provide user feedback to the AFATDS U/PMO on fielded software and future requirements;
11. Travel to Hawaii for training/classroom instruction as directed by the AFATDS U/PMO;
12. Travel to Hawaii for exercise support as directed by AFATDS U/PMO; and
13. Assist the AFATDS U/PMO in fielding as part of the AFATDS Fielding Integration Team.

C. Raytheon will provide an on-site representative at Camp Lejeune, NC with the following duties:

1. Support the entire MEF, and be fully versed in AFATDS software, and understand the USMC fire support process;
2. Provide AFATDS training/classroom instruction;

3. Develop class lesson plans;
4. Provide exercise support;
5. Be the East Coast hotline representative in matters relating to AFATDS software to include interfaces with MAGTF C4I Systems;
6. On occasion travel in support of the AFATDS U/PMO;
7. Assist the ATS in matters relating to AFATDS;
8. Take technical direction from the AFATDS U/PMO;
9. Be knowledgeable on all AFATDS software versions, past and future;
10. Provide user feedback to the AFATDS U/PMO on fielded software and future requirements;
and
11. Assist the AFATDS U/PMO in fielding as part of the AFATDS Fielding Integration Team.

D. Unless specified otherwise, technical data deliverables will be in contractor format and submitted electronically, as often as possible.

The USMC AFATDS U/PMO is:

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Marine Corps Systems Command C4I IS
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The USMC AFATDS PMO is authorized to provide technical direction, clarification, and prioritization of efforts performed under this SOW. Any issues relating to contractual compliance must be raised to the COR or PCO.

APPENDIX E

CHAPTER 4.5 OF THE SECURITY STANDING OPERATING PROCEDURES (SSOP) FOR
THE AFATDS (DTD 27 OCTOBER 1999)

4.5 Clearing, Purging, Declassifying, and Destroying of Magnetic Media

- a. AFATDS workstations, when loaded with their operational software and technical data, will process up to and including SECRET information. In order for an AFATDS workstation to be stored or left unattended, all classified information must be removed from the workstation.
- b. AFATDS workstations will have information stored in several locations. The first is Random Access Memory (RAM). RAM is very perishable and usually not accessible to the operator once power has been removed from the workstation. However, purge procedures found below will be followed to ensure all classified information is removed from the workstation so it can be stored in an unclassified state. The second location of classified information is workstation components, which have permanent storage capability. The memory of these components is not normally affected by the removal of power. Procedures found below will be followed to ensure classified data is properly protected.

c. AFATDS Devices with Memory

Components Containing Random Access Memory (RAM)

Ultra Computer Unit (UCU)

Compact Computer Unit (CCU)

Tactical Communications Interface Module (TCIM)

Ruggedized Printer

Components Used for Permanent Storage

Removable Hard Disk Unit (HDU)

Magneto-optical Disk

Floppy Disks

Removable Jaz media

Compact Disk-Read Only Memory (CD-ROM)

- d. Clearing of media means erasing or overwriting all information on the media, but without the totality and finality of purging. Removable media that have simply been cleared will continue to be controlled at their prior classification or sensitivity levels.

- e. Purging of media means to erase or overwrite totally and unequivocally any information stored on the media.

- f. Declassifying of media refers to the administrative action taken after it has been purged.

- g. Destruction of media refers to those actions that prevent any access to information on the media, such as burning, shredding, pulping, melting, mutilation, chemical decomposition, or pulverizing.

4.5.1 Random Access Memory (RAM): To purge RAM, without using the emergency purge, from the workstation, TCIM, and printer, operators will perform three on/off cycles. To purge the workstation and TCIM RAM the operator will take the following actions. Properly shut down AFATDS. After the workstation has shut down, remove the hard disk and all other magnetic media. When all magnetic media has been removed from AFATDS, turn the workstation back on, allow it to conduct its memory tests, and then turn it off. Then perform two additional on/off cycles.

4.5.2 The AFATDS LLP components containing light-sensitive elements (for example, drums, belts, and complete cartridges) will be purged before release from control. The AFATDS laser printer can be considered purged after printing three printer font test pages. Each printed page will be treated as the highest classification level of the last printed page prior to clearing. The operator will then turn the printer off and on twice to ensure all information has been removed.

4.5.3 Permanent Storage

a. There are no approved procedures to purge magneto-optical disks, the commercial Jaz disks, or CD-ROMs.

WARNING: Unless properly purged, all AFATDS removable magnetic storage will be treated as SECRET.

b. To clear the magneto-optical disk, the operator selects *Purge of Optical Disk* from the menu. As a reminder, this procedure only clears the optical disk. The optical disk; it will continue to be controlled as SECRET information.

NOTE: The AFATDS Emergency Purge function will not be used to purge or declassify the removable hard drive.

c. Reformatting a floppy disk does not satisfy the requirement of purging; therefore, they will be destroyed or protected as SECRET. When destroying floppy disks, remove the magnetic Mylar from the outside container and dispose of the outside container in a regular trash receptacle. Cut the magnetic media into pieces (a crosscut chipper/ shredder may be used to cut the media into pieces) and then burn all pieces in a secure burn facility. If the environmental laws do permit burning of a magnetic recording item, it will be degaussed, cut into pieces (a chipper/ shredder preferred) and disposed of in a regular trash receptacle. Magnetic storage media, such as floppy disks, will be destroyed by mechanical methods of cutting, incineration, or melting at temperatures above 600 degrees Fahrenheit. Caution will be exercised around melting or smoldering plastics due to possible toxic fumes.

d. Unless purged, declassified or destroyed, hard disks, magneto-optical disks, commercial Jaz disks, CD-ROMs, and floppy disks will be removed from AFATDS and stored in a GSA-approved security container for storing SECRET material or class B vault. Paragraph 4.2 of this Security SOP and AR 380-5 list specific storage sites for classified media.