

USER'S LOGISTICS SUPPORT SUMMARY

DIGITAL TECHNICAL CONTROL (DTC) FACILITY
NSN: 5895-01-467-7213



MARINE CORPS SYSTEMS COMMAND
QUANTICO, VA 22134-5010

THIS PUBLICATION IS REQUIRED FOR OFFICIAL USE OR ADMINISTRATION OR OPERATIONAL PURPOSES. DISTRIBUTION IS LIMITED TO U.S. GOVERNMENT AGENCIES ONLY. OTHER REQUESTS FOR THIS DOCUMENT MUST BE REFERRED TO: COMMANDANT OF THE MARINE CORPS (ARD), WASHINGTON, DC 20380-0001

DESTRUCTION NOTICE: FOR UNCLASSIFIED, LIMITED DOCUMENTS, DESTROY BY ANY METHOD THAT WILL PREVENT DISCLOSURE OF CONTENTS OR RECONSTRUCTION OF THE DOCUMENTS.

FOR OFFICIAL USE ONLY

JUNE 2001
PCN 132 XXXXXX XX

DEPARTMENT OF THE NAVY
Headquarters, U.S. Marine Corps
Washington, DC 20380-0001

June 2001

1. This User's Logistics Support Summary (ULSS), authenticated for Marine Corps use and effective upon receipt, advises the Fleet Marine Force and other selected commands of the plan to field and logistically support the Digital Technical Control (DTC) Facility, AN/TSQ-XXX, 5895-01-467-7213.
2. Submit notice of discrepancies or suggested changes to this ULSS to: Commander, MARCORSYSCOM, Attn: Program Manager, (C4ISRCOMM), 2033 Barnett Avenue, Suite 315, Quantico, Virginia 22134-5010. In addition, forward an information copy to Program Support (PSL) at the same address.
3. This ULSS supersedes LAP 60-94 of 26 Apr 1999.
4. This ULSS is applicable to the Marine Corps Reserve.

BY DIRECTION OF THE COMMANDER MARINE CORPS SYSTEMS COMMAND

OFFICIAL:

Wayne E. Briggs
Lieutenant Colonel, USMC
Program Manager, Communications Systems
Marine Corps Systems Command

DISTRIBUTION: PCN 132 XXXX XXXX

1. Introduction. The Digital Technical Control (DTC) Facility will supplement the AN/TSQ-84 while the DTC Facility is being fielded to the operational forces. The AN/TSQ-84 has been in service since the 1970s and was designed to manage an analog communications system. The AN/TSQ-84 possesses no equipment that can perform the essential technical control functions and procedures over a digital communications network. Once the DTC Facility is fully fielded, the AN/TSQ-84 will be retired from service. The DTC Facility provides the Marine Corps with the capability to control the technical aspects of communications networks, both analog and digital, in the tactical environment. The DTC Facility supports the Marine Air-Ground Task Force (MAGTF) command and control communications mission objectives by providing user access, circuit switching, circuit multiplexing, transmission multiplexing, network management, electronic data security, manual and electronic patching, and digital voice order-wire capability for deployed Marine forces. The Commercial-off-the-Shelf (COTS), Government-off-the-Shelf (GOTS), and non-developmental items (NDI) making up the components of the DTC Facility are housed in an S-280C/G shelter mounted on a five-ton tactical vehicle. The DTC Facility, along with the AN/MSQ-63A, AN/TTC-42, AN/TRC-170, AN/TSC-85/93, STAR-T/SMART-T, and the Tactical Data Network (TDN), will form the backbone of the Marine Corps digital communications network.

a. Source of Requirement. United States Marine Corps (USMC) Operational Requirements Document (ORD) dated 9 Nov 1995, change 1, dated 9 May 1996, change 2, dated 7 Oct 1996, and change 3, dated 2 Apr 1998, describes the operational requirements for a DTC Facility.

b. Points of Contact

<u>TITLE</u>	<u>COMMAND</u>
Program Manager	MARINE CORPS SYSTEMS COMMAND (C4I COMM) 2033 BARNETT AVE, SUITE 315 QUANTICO, VA 22134-5010 DSN: 278-0705 COML: (703) 784-0705
Project Officer	MARINE CORPS SYSTEMS COMMAND (C4I COMM-S) 2033 BARNETT AVE, SUITE 315 QUANTICO, VA 22134-5010 DSN: 278-0946 COML: (703) 784-0939
Integrated Logistics Support Officer	MARINE CORPS SYSTEMS COMMAND (C4I COMM-R) 2033 BARNETT AVE, SUITE 315 QUANTICO, VA 22134-5010 DSN: 278-0943 COML: (703) 784-0943

Weapons System Manager/
Warranty Coordinator

MARINE CORPS LOGISTICS BASES
ATTN: 847-3
814 RADFORD BLVD
ALBANY, GA 31704-5000
DSN: 567-5402
COML: (229) 639-6524/5

Weapon Systems
Support Activity

MARINE CORPS TACTICAL SYSTEMS
SUPPORT ACTIVITY
BOX 555171
CAMP PENDLETON, CA 92055-5171
DSN: 365-9513
COML: (760) 725-9513

c. System Description. The DTC Facility provides a technical control function for the MAGTF Commander. The DTC Facility performs control and management functions over expanding digital communications systems integrating the communications assets of a node into an efficient system that provides the MAGTF commander with seamless communications while making efficient use of limited bandwidth and equipment. The DTC Facility is the central management facility, terminating all terrestrial links and switch circuits for major commands. Data circuits and miscellaneous subscriber circuits are interconnected, as required. The DTC Facility consists of an S-280 shelter that is modified to accommodate COTS, GOTS, and NDI technical control and ancillary equipment. The shelter houses patch panels, multiplexers, modems, circuit switches, a facility management terminal, test equipment, communications security (COMSEC) equipment, and miscellaneous support items. A dedicated five-ton truck transports the DTC Facility. Two shelter mounted environmental control units (ECUs) provide heating/cooling for the shelter. When set up in the operational configuration (truck mounted), a tent is collocated with the shelter and houses call service attendant positions with associated equipment, as well as a circuit switch management workstation.

d. Transport Mode. The DTC Facility has been designed for transport by the MK 23, Medium Tactical Vehicle Replacement (MTVR), 7-ton cargo truck. The DTC Facility will be fielded without the MTVR. Units will utilize the 5-ton truck currently associated with the AN/TSQ-84, Communication Technical Control Center, to transport the DTC Facility until the fielding of the MTVR. Anticipated fielding of the MVTR is in July 2001. Allowances for MTVRs to transport the DTC Facility have been built into the Table of Equipment (T/E) allowances of units receiving DTC Facility. MTVRs for the DTC Facility will be force-fed to gaining units. For identification data on the MVTR, refer to Appendix G.

e. Operational Characteristics. The DTC Facility facilitates the management of digital and analog links, trunks, and circuits. It provides the means through which the communications resources at a node are monitored, controlled, and managed for users of the tactical communications system. These resources consist of a hybrid mixture of analog digital communications equipment. The DTC Facility is capable of interoperating with other services'

and agencies' equipment throughout the Department of Defense (DOD) within the scope of its mission.

f. Replaced Weapons System and Equipment. The DTC Facility will replace the current Technical Control (TECHCON) Facility, AN/TSQ-84, Control, Central Communications Technical, NSN 5895-01-007-4788, TAMCN A0311. Upon receiving the DTC Facility, gaining commands will generate a Recoverable Items Report (Document Identifier Code WIR) requesting disposition instructions for the AN/TSQ-84 to the Commander, Marine Corps Logistics Bases (COMMARCORLOGBASES), Weapon System Manager (WSM) (Attn: 847-3), Albany, GA.

2. Administrative Information

a. Nomenclature. AN/TSQ-XXX

b. TAMCN. A04997GP

c. SAC. 3

d. NSN. 5895-01-467-7213

e. ID. 10664A

f. UI. EA

g. UC. \$1,213,000.00

h. Support Costs. The estimated annual support cost is \$113,450.15 in Operations and Maintenance Marine Corps (O&MMC) per system.

i. Physical Characteristics

	OPERATIONAL CONFIGURATION	STORAGE AND SHIPPING CONFIGURATION
Length	180 in.	180 in.
Width	87.50 in.	87.50 in.
Height	87.20 in.	87.20 in.
Square	109.38 sq. ft.	109.38 sq. ft.
Cube	794.79 cu. ft.	794.79 cu. ft.
Weight	9,662 lbs.	9,662 lbs.
Stowage	794.79 cu. ft.	794.79 cu. ft.

j. POL. N/A

k. Equipment Density. Low Density

l. Resource Reporting. The DTC Facility will be a candidate for Marine Corps Ground Equipment Resource Reporting (MCGERR) once the system is fully fielded, per the current edition of Marine Corps Bulletin (MCBul) 3000.

m. Power Requirements. The DTC System requires a 120/208 VAC, 3-phase, five-wire, 50/60-hertz (Hz) commercial power source or a 30-kilowatt (kW) mobile tactical generator. The system is designed to accept power via an existing camp power grid as part of a mobile electronic power distribution system.

n. Associated Weapons System and Equipment. The associated equipment utilized with the DTC Facility and provided to units with the fielding of the DTC Facility is identified in Table 1. A complete listing of the communication systems and equipment the DTC Facility interfaces with is located in Appendix C.

Table 1. Associated Equipment utilized with the DTC Facility

NOMENCLATURE	NSN/ PART NUMBER	QTY	TAMCN
Handset, H250	5965-00-043-3463	1	N/A
Transition Unit Nest Assembly, HGF-93	5810-01-212-8129	2	A8088
Loop Key Generator, TSEC/KG-82	5810-01-082-8403	16	A8059
Loop Encryption Device (LED), KIV-7HS w/Wireline Adapter, WLA-7	5810-01-431-8264	4	A8084
Trunk Encryption Device, TSEC/KIV-19	5810-01-449-7179	24	A8085
Automatic Key Distribution Center, TSEC/KGX-93	5810-01-212-8128	2	A8069
Speech Security Equipment, TSEC/KY-57	5810-00-434-3644	1	A8031
Vehicular Power Adapter for KY-57	5810-01-026-9621	1	A8027
Digital Subscriber Voice Terminal (DSVT), TSEC/KY-68	5810-01-082-8404	2	A8083
Air Conditioner, Vertical, Compact, F18T-MPI	4120-01-325-7062	2	B0012
Electrostatic Discharge Workstation	4940-01-168-2044	2	H7299
Test Set, Telecommunications, BIT w/Breakout Box	6625-01-380-3788	1	H7029
Oscilloscope, Digital	6625-01-451-8727	1	A7060
Data Communications Analyzer, FIREBERD 6000	6625-01-400-1735	1	A7081
Test Set, Telecommunications, CRX 5200-17	6625-01-369-9813	1	A7087
Digital Multimeter, Fluke 77/BN	6625-01-336-3372	1	H7030
Modular Command Post Shelter (MCPS) Tent	8340-01-323-2454	1	N/A
Tactical Fiber Optic Bulkhead Connector #107	A3102750	9	N/A

3. Fielding Methodology

a. General Fielding Plan. The DTC Facility will be fielded vertically. Initial Operating Capability (IOC) will be achieved with the delivery of the DTC Facility to I MEF in the second quarter of FY02. The DTC Facility is a Category 1, Level 3 system fielding under the Total Package Fielding (TPF) method in accordance with Technical Manual (TM) 4420-15/1.

(1) List of Allowances and Delivery Schedule. See Appendix A.

(2) Schedule of Events. See Appendix B.

b. Method of Fielding. The DTC Facility and support equipment will be force fed to gaining commands, with the first system being fielded to Marine Corps Tactical Systems Support Activity (MCTSSA) in the third quarter of FY01.

c. Fielding Responsibilities

(1) Gaining Commands. The gaining command is responsible for provision of the fielding facility/facilities, in addition to applicable services and security commensurate with the fielding effort for the command. These facilities and services include:

(a) Central Fielding Facility. Provide adequate sheltered and secure workspace for equipment installation, issue, and storage of CCI and Materiel Fielding Team (MFT) tools. Provide office space with requisite office furnishings for the MFT Site Chief. Provide a storage area large enough to store 4 DTCs and accessible to trucks. The storage area should have adequate space for the use of a forklift to offload material from trucks to the storage area and material to/from the storage area to the installation area. The facility should have adequate power for operation of the MFT's office equipment (computer and fax machines) and power tools. Provision or access to Class A telephone service for voice, data, and fax is also required.

(b) Central Training Facility. Provide two secure classrooms with space for twelve students and the conduct of concurrent New Equipment Training (NET). Office space is required for the Training Supervisor and support personnel with requisite office furnishings. Provision or access to Class A telephone service for voice, data, and fax is also required.

(c) Unit Representative. Each unit fielded the DTC Facility is to provide a representative authorized to conduct a joint Limited Technical Inspection (LTI) with the MFT representative for acceptance of the DTC Facility to the unit. An authorized unit representative will also be required for acceptance and invoice of the CCI components issued with the DTC Facility.

(d) Command Single Point of Contact (POC). A single POC from the Commander's Staff, authorized to act as liaison and coordinator for the fielding effort, is required. This representative is required in order to resolve any problems or issues that may arise with facilities provided, as well as conflicts between the unit fielded and the MFT. This POC is also the command representative to the DTC Project Officer for resolution of problems associated with fielding of the DTC Facility.

(e) Material Disposal. As DTC Facility fielding creates disposable and recyclable materials, dumpsters and other appropriate disposal containers are required at the fielding site.

(f) Transportation and Material Handling Equipment. Provision of transport of the DTC Facility material from the base Traffic Management Office (TMO) will be required. The availability of a forklift and operator for use by MFT warehouse personnel is required for moving, loading, and unloading the DTC Facility material in the storage area.

(2) MARCORSYSCOM. The DTC Project Officer is responsible for the execution, direction, and funding of the DTC Facility fielding effort, i.e., employing a contracted MFT to install and issue the DTC Facility to units possessing authorized allowances, in addition to conducting concurrent NET training as directed. The DTC Project Officer may designate staff members as the Fielding and/or Training Officer/Chief, as appropriate. The Fielding and Training Officer are the representatives of the DTC Project Officer and are responsible for the direction and provision of material to the MFT and the resolution of problems associated with fielding and training.

(a) MFTs. The DTC Facility MFTs are responsible for the day-to-day operation of DTC Facility fielding and training to major commands/activities based on the fielding and training schedule and other agreements established by MARCORSYSCOM and the gaining command.

(b) MFT Site Chief. The MFT Site Chief is the representative of the DTC Project Officer in matters associated with day to day fielding of material. The Training Chief is the representative of the DTC Project Officer in matters associated with training. Fielding is conducted in accordance with agreements, written or verbal, authorized by MARCORSYSCOM, the DTC Project Officer, and the major command and/or the POC. Quantities fielded will be in accordance with the allowances in Appendix A of this ULSS. Exceptions to Appendix A must be authorized by the Commanding General (CG), Marine Corps Combat Development Command (MCCDC).

(c) MFT Administrative Matters. Funding, billeting and transportation matters for personnel of the DTC Facility MFT are the responsibility of the DTC Project Officer and the gaining command's POC.

(d) MFT Arrival at Gaining Command. The DTC Project Officer or the Fielding Officer/Chief will ensure that gaining commands are notified of the pending arrival of the DTC Facility MFT, its personnel composition, and any special requirements associated with their stay in the command's area. This notification will be by Naval message or other appropriate means.

(e) Coordination of Fielding Effort. The DTC Project Officer or a representative will coordinate the fielding effort to the gaining commands in conjunction with the MFT Site chiefs as required.

(3) COMMARCORLOGBASES, Albany. Assign participants to the MFT.

(4) Software Support Activity. Assign participants to the MFT.

4. Logistics Support

a. Maintenance Support. The DTC Facility relies to a great extent on contractor/vendor support for maintenance. However, flexibility for organic support at the organizational and intermediate level does exist.

(1) Maintenance Concept. The DTC Facility maintenance concept was developed using standard Marine Corps levels and echelons of maintenance. The DTC Facility will be supported at the lowest level and as far forward to the user as possible. This concept provides for three levels of maintenance: organizational, intermediate, and depot. These levels are further divided into five echelons, first and second echelon at the organizational level of maintenance, third and fourth echelons at the intermediate level, and fifth echelon at the depot level of maintenance.

(a) The DTC Facility is comprised of equipment supported by three separate maintenance commodities: Motor Transport Maintenance supports the MK 23, Medium Tactical Vehicle Replacement (MTVR), 7-ton cargo truck; Engineer Maintenance supports the ECUs, S-280 Shelter, and the MCPS; while Communications-Electronics Maintenance supports the computers and related communication equipment. The using unit has responsibility to provide organizational level maintenance, to include first echelon preventive maintenance on all organic assets.

(b) The MTVR, ECUs, S-280 shelter, and MCPS requiring maintenance beyond the unit's maintenance authorization, will be evacuated in accordance with standard Marine Corps maintenance procedures to the Maintenance Battalion of the supporting Force Service Support Group (FSSG) for repair.

(2) Echelons of maintenance are outlined in the unit's Table of Organization (T/O) mission statement. Military Occupational Specialty (MOS) 2823, Technical Controller, personnel up through fourth echelon maintenance, will maintain the fielded system and DTC Facility unique components.

(a) Fault Assist Module (FAM) Kit. The DTC Facility will be fielded with a FAM Kit to assist the Technical Controller by giving him a set of "known good" circuit cards to assist while troubleshooting the tactical circuit switch. (Note: They are not used to get the system operational but to ensure that all failed circuit cards are identified as fast as possible. Once the failed circuit card is detected, the Technical Controller would float the failed circuit card for a serviceable one in the spares block).

(b) DTC Facility maintenance maximizes "on-equipment" repair to rapidly restore system operations. The functional system-level of maintenance responsibilities include, but are not limited to, performing system level installation of the DTC Facility, ensuring proper operation of network interfaces, isolating malfunctions to the Line Replaceable Unit (LRU), repairing the system by removing and replacing failed LRUs, and completing required repairs on the internal or external DTC Facility cabling.

(c) Organizational Maintenance. Organizational maintenance tasks are performed "on-equipment" by the Technical Controllers, MOS 2823, Unit Level Circuit Switch Operator/Maintainers, MOS 0614, and Call Service Attendants, MOS 0612. Organizational maintenance consists of both preventive and corrective maintenance tasks as follows:

- 1 Operating the DTC Facility to include set-up and tear-down,
- 2 Initializing and configuring application software,

- 3 Installing, setting up, and configuring all components of the DTC Facility,
- 4 Monitoring system operation and network performance,
- 5 Fault isolating using Built-in-Test (BIT)/Built-in-Test-Equipment (BITE) and General Purpose Test Equipment,
- 6 Restoring system and application software, and
- 7 Removing and replacing failed LRUs.

(d) Intermediate Maintenance. Intermediate level maintenance provides both “on-equipment” and limited “off-equipment” maintenance by Technical Controllers, MOS 2823, assisted by Micro Computer Repairers, MOS 2818, Computer Technicians, MOS 2821, and Unit Level Circuit Switch Maintainers, MOS 2822.

(e) Depot Maintenance. Depot level maintenance includes the complete repair, overhaul, rebuild, and calibration of equipment, as well as the performance of highly complex maintenance actions. General Dynamics Communication Systems (GD-CS) will perform depot level maintenance for warranted components of the DTC Facility. Material not covered by warranty will be maintained in accordance with current maintenance procedures. Complete system rebuild or overhaul is not envisioned for the DTC Facility.

(2) Designated Support Depots. Upon completion of the Interim Contractor Support (ICS) period, the Marine Corps Maintenance Center Activity, Marine Corps Logistics Bases, Albany, GA will accomplish organic depot support.

(3) Calibration Requirements. Electronics Maintenance Company (ELMACO) will accomplish the calibration and repair of Test, Measurement, and Diagnostic Equipment (TMDE). Items requiring calibration are identified in Appendix E.

b. Contractor Support Requirements

(1) Depot Support. Depot support during the warranty period will be provided by the production contractor, GD-CS at their Taunton, MA, facility in order to optimize the use of production engineers and expedite problematic equipment resolutions. DTC Facilities with a valid warranty extending beyond December 2004 will rely on GD-CS for depot support. After the warranty period expires, DTC Facilities will rely on MARCORLOGBASES, Albany, GA. Non-warranted component and/or vendor support will be utilized, as appropriate, through coordination with the WSM at MARCORLOGBASES, Albany, GA.

(2) ICS. The Commander, MARCORSYSCOM (COMMARCORSYSCOM), has funded GD-CS to provide interim support services commencing from January 2002 to December 2004. Units are responsible for budgeting resources for non-warranted repairs. Upon completion of the ICS period, DTC Facilities still possessing a valid warranty will coordinate warranty repairs with the Warranty Administrator at MARCORLOGBASES. In addition, the contractor will provide the following services, as a minimum:

(a) GD-CS will maintain a fully integrated contractor logistics database system (Guardian) to capture/record details on warranty failure rates and maintenance actions to include:

date, time, reporting unit, response time, item, part number, failure, failure mode, and corrective action taken. The Guardian logistics database system will provide warranty tracking and transfer control when replacement parts are provided, as well as part/stock number cross-referencing. Guardian will be available on-line and will allow management personnel at MARCORLOGBASES, Albany and MARCORSYSCOM direct access to the warranty database. Guardian captured data will be utilized to identify failure rates/trends and to compile spares/repair parts usage data necessary to transition to organic maintenance procedures at the end of the ICS period. GD-CS will make available all documentation generated during the ICS period in order to facilitate the transition to organic support.

(b) Establish and maintain a 24-hour per day, 365-day per year technical assistance helpdesk, and hotline to assist operator and maintenance personnel. The toll free number established is 1-877-888-USMC. A log will be maintained which documents all calls to include using unit. (The GD-CS technical assistance hotline can be accessed internationally for a toll.)

(3) CLS. Contractor Logistics Support for the DTC Facility is not envisioned at this time.

c. Manpower, Personnel, and Training. Current Tables of Organization (T/Os) will be modified for the gaining commands to assure sufficient personnel to support the fielding of the DTC Facility. Specific manpower, personnel, and training requirements, including job tasks, have been formalized in the Manpower and Training Plan (MTP).

(1) Personnel Requirements. The DTC Facility is operated and maintained by the same personnel, Technical Controllers, MOS 2823, assigned to the current analog technical control facility, AN/TSQ-84. A Call Service Attendant, MOS 0612, and a Unit Level Circuit Switch Operator, MOS 0614, are also required. The fielding of the DTC Facility will introduce some personnel changes to the Marine Corps manning levels of MOS 0612, MOS 0614 and MOS 2823, since there are more DTC Facilities being fielded than AN/TSQ-84s being replaced.

(2) Operational Manning Requirements. For a specific breakdown of MOSs and billets necessary to operate one DTC Facility 24 hours a day with two 12-hour shifts, see Table 2.

Table 2. DTC Facility Operator Billets

MOS	BILLET	QTY
0612	Call Service Attendant	2
0614	Unit Level Circuit Switch Operator	2
2822	*Electronic Switching Equipment Technician	1
2823	Technical Controller (Operator)	5

* Indicates that this MOS may be used to augment MOS 2823, if necessary.

(b) Operator Responsibilities. Operator personnel, Technical Controller, MOS 2823, for the DTC Facility, will install, operate, and maintain the DTC Facility at the organizational level. The responsibilities of the operators will include, but are not limited to:

- 1 Planning support of the technical facility,
- 2 Assisting the Communications Chief in evaluating the communications plan,
- 3 Installing technical control equipment,
- 4 Coordinating installation of communications systems,
- 5 Operating technical control equipment to locate faults or degradation in communications networks, and
- 6 Performing maintenance on the technical control facility

The Call Service Attendant, MOS 0612, will operate and perform organizational level maintenance on the call service positions. The Unit Level Circuit Switch Operator, MOS 0614, will operate and perform organizational level maintenance on the circuit switches.

(c) Maintenance Personnel. For a specific breakdown of MOSs and billets necessary to maintain the DTC Facility, see Table 3 below.

Table 3. DTC Facility Maintainer Billets

MOS	BILLET	QTY
2818	Personal Computer Technician	1
2821	Computer Technician	1
2822	Electronic Switching Equipment Technician	1
2823	Technical Controller	1

(d) Maintenance Personnel Responsibilities. The Technical Controller, MOS 2823, will provide maintenance for the DTC Facility up through fourth echelon maintenance. The Technical Controller will also remove any COMSEC equipment requiring maintenance and forward defective components to the authorized maintenance activity. The Personal Computer Technician, MOS 2818, and the Computer Technician, MOS 2821, provide organizational maintenance for the computer-based systems and peripherals for the DTC Facility. The Electronic Switching Equipment Technician, MOS 2822, will maintain the circuit switches and multiplexers for the DTC Facility.

(2) Training Requirements. Training will include: (a) Follow-on Operational Test and Evaluation (FOT&E) training, (b) contractor provided Instructor and Key Personnel (I&KP) training, (c) New Equipment Training (NET) by I&KP team and/or contractor personnel and (d) MOS formal school training. The contractor will present the courses listed in Tables 4, 5, and 6 to the number of students at the site indicated:

Table 4. DTC Facility Operator/Maintainer MOS 2823 Training

TYPE/LENGTH	# COURSES	# STUDENTS	LOCATION	DATES
FOT&E - 56 days	1	8 per class	GD-CS Taunton, MA	11 Jun 01 – 28 Aug 01
I&KP - 40 days	1	8 per class	Camp Pendleton, CA	16 Oct 01 – 13 Dec 01
NET I - 48 days	1	8 per class	Camp Pendleton, CA	1 Feb 02 – 10 Apr 02
NET II - 48 days	1	8 per class	Camp Lejeune, NC	26 Apr 02 – 3 Jul 02

TYPE/LENGTH	# COURSES	# STUDENTS	LOCATION	DATES
NET III - 48 days	1	8 per class	Camp Hansen, OKI	16 Aug 02 – 23 Oct 02
NET IV - 48 days	1	8 per class	Reserves-TBD	5 Dec 02 – 21 Feb 03

Table 5. Unit Level Circuit Switch Intermediate Maintainer MOS 2822 Training

TYPE/LENGTH	# COURSES	# STUDENTS	LOCATION	DATES
FOT&E - 56 days	1	4 per class	GD-CS Taunton, MA	11 Jun 01 – 28 Aug 01
I&KP - 40 days	1	4 per class	Camp Pendleton, CA	16 Oct 01 – 13 Dec 01
NET I - 48 days	1	4 per class	Camp Pendleton, CA	1 Feb 02 – 10 Apr 02
NET II - 48 days	1	4 per class	Camp Lejeune, NC	26 Apr 02 – 3 Jul 02
NET III - 48 days	1	4 per class	Camp Hansen, OKI	16 Aug 02 – 23 Oct 02
NET IV - 48 days	1	4 per class	Reserves-TBD	5 Dec 02 – 21 Feb 03

Table 6. DTC Facility Switch Operator/Organizational Maintainer MOS 0614 Training

TYPE/LENGTH	# COURSES	# STUDENTS	LOCATION	DATES
FOT&E - 56 days	1	4 per class	GD-CS Taunton, MA	11 Jun 01 – 28 Aug 01
I&KP - 40 Days	1	4 per class	Camp Pendleton, CA	16 Oct 01 – 13 Dec 01
NET I - 48 days	1	4 per class	Camp Pendleton, CA	1 Feb 02 – 10 Apr 02
NET II – 48 days	1	4 per class	Camp Lejeune, NC	26 Apr 02 – 3 Jul 02
NET III – 48 days	1	4 per class	Camp Hansen, OKI	16 Aug 02 – 23 Oct 02
NET IV – 48 days	1	4 per class	Reserves- TBD	5 Dec 02 – 21 Feb 03

(a) FOT&E Training. The first increment of an operator/maintainer course is to support the FOT&E training shall be taught by the contractor using draft, Government-approved courseware. Government-approved comments and recommendations for course improvement received from FOT&E course attendees shall be incorporated into the final, approved courseware. FOT&E Training will be conducted at GD-CS Taunton, MA.

(b) I&KP Training. I&KP training will be conducted at Camp Pendleton, CA. Instructors from MCCES, the Command and Control Systems Course (CCSC), MCTSSA, and designated personnel from each MEF will attend I&KP training. These personnel will then be used to initiate and transition DTC Facility specific training into the respective school and MOS producing curriculum. Government-approved attendee comments and recommendations for course improvement shall be incorporated into the courseware.

(c) NET. New equipment training will enable the using unit to use the DTC Facility in its intended operational mode and will coincide with initial delivery of the system. The NET Team will consist of instructors provided by the contractor. This training will be conducted at each receiving MEF location.

(d) MOS Formal Training. The contractor will develop training material and products of sufficient depth to demonstrate and teach all major modes of operation and maintenance to be included in the following MOS producing courses:

- 1 MOS 0614, Unit Level Circuit Switch Operator/Maintainer Course, DTC Facility Circuit Switch Operation and organizational maintenance, at MCCES, 29 Palms, CA.
- 2 MOS 2822, Unit Level Circuit Switch Intermediate Maintainer Course, DTC Facility Circuit Switch intermediate maintenance, at MCCES, 29 Palms, CA.
- 3 MOS 2823, Mobile Technical Controller Course, DTC Facility Operator/Maintainer and intermediate maintenance at MCCES, 29 Palms, CA.

(3) Training Support Items. MCCES will receive two DTC Facilities to use for the Technical Controller Course. In addition, MCCES will retain the prototype DTC Facilities to allow a network to be formed for training. MCCES will furnish all training devices utilized as part of the scheduled training curriculum. The contractor will supply all materials used by the NET teams.

d. Supply Support. In order to maintain system readiness levels, IIP packages will be provided to augment system warranty procedures. Typically, unit maintenance activity supply representatives will facilitate the direct exchange/return of unserviceable LRUs, as outlined in the unit Warranty Administrator's responsibilities. Limited product drawings will be required to support the system-level provisioning effort. Drawings for otherwise provisioned items will be utilized and included in the system technical data package, if available.

(a) Spares. An Initial Issue Provisioning (IIP) package containing low-density spares/repair part will be released by MARCORLOGBASES, Albany, GA in support of the DTC Facility. Active MEFs and MARFORRES IIP packages will be released to coincide with the delivery schedule listed in Appendix A of this document. MCCES and MCTSSA will receive a low-density IIP package in the second quarter of FY02.

(b) Normal density spares/repair parts common to both the DTC Facility and TDN Server will be provisioned as part of an IIP package released for the TDN Server to the SASSY Management Unit (SMU) of each MEF's FSSG, MCCES, and MCTSSA.

(c) Spares Transition. During the ICS period, maintenance failure rates captured by the contractor's Guardian Logistics database will be monitored by MARCORLOGBASES, Albany, to identify trends. Upon the completion of the ICS period, MARCORLOGBASES, using this data, will augment IIP spares/repair part blocks previously positioned and transition to organic supply procedures.

e. Support Equipment. The DTC Facility is designed to minimize support equipment required at the user level. It is supportable by the common suite of Marine Corps General Purpose Test Equipment. The DTC Facility is an integration of COTS and GOTS hardware and software. Test, Measurement, and Diagnostic Equipment (TMDE) identified for the DTC Facility will be either General Purpose Test Equipment or Special Purpose Test Equipment.

Support and test equipment includes any equipment that is not an integral part of the DTC Facility but is required and used in its deployment, installation, operation, and maintenance.

(1) Special Tools. See Table 7 below.

Table 7. Special Tools

NOMENCLATURE	PART NUMBER	NSN	TAMCN
Remover, Electrical Contact (BNC Cable Plug)	RT1S	5120-01-019-4154	1
Remover, Electrical Contact (Trompeter, PL 155 Short)	RT4S	5120-01-177-4961	1
Remover, Electrical Contact (Trompeter, PL 155 Long)	RT4L	5120-01-222-6648	1

(2) Common Tools. See Table 8 below.

Table 8. Common Tools

NOMENCLATURE	PART NUMBER	NSN	TAMCN
Tool Kit, Electronic Maintenance *	MK-2569/P	5180-01-244-1290	A7900
Communications Electronics Tool Kit *	98001A0014	5180-01-145-7868	H7490

* Using Unit Responsible Item (UURI) on SL-3.

(d) Special Purpose Test Equipment. See Table 9 below.

Table 9. Special Purpose Test Equipment

NOMENCLATURE	PART NUMBER	NSN	TAMCN
Meter, Dialed Digit	TPM-32/MF	TBD	N/A
Test Unit, Verification*	KT-83	5810-01-111-4080	A8087

* UURI on SL-3.

(4) General Purpose Test Equipment. See Table 10 below.

Table 10. General Purpose Test Equipment

NOMENCLATURE	PART NUMBER	NSN	TAMCN
Data Communications Analyzer	FireBERD 6000N	6625-01-400-1735	A7081
BIT Error Rate Tester w/Breakout Box	IDS Model # 72/62	6625-01-380-3788	H7029
Multimeter, Digital	77/BN	6625-01-336-3372	H7030
Oscilloscope, Digital	HP 54825N	6625-01-451-8727	A7060

NOMENCLATURE	PART NUMBER	NSN	TAMCN
Test Set, Telecommunications	CXR 5200-17	6625-01-369-9813	A7087
Electrostatic Discharge Workstation	MK-2551A/U	4940-01-168-2044	H7299
Cable Tester, WaveTek *	LANTEK PRO XL	6625-01-449-3658	H7015

* UURI on SL-3.

(5) Application Program Sets and Test Program Sets. There are no Application Program Sets or Test Program Sets identified at this time.

(6) Other Support Equipment. See Appendix G.

f. Technical Publications. The final technical publications on CD-ROM, which will support and be associated with this Weapon System/Equipment (WS/E), will be over packed with the system. All system publications will be found on the Interactive Electronic Technical Manual (IETM) CD-ROM identified below. A complete listing of IETM and Technical Manuals (TMs) required to support the system can be found in Appendix H. A separate SL-3 and SL-4 will not be published.

TM NUMBER	SHORT TITLE	PCN
TM 10664A-CD	Operation and Maintenance Manual with Parts List, Digital Technical Control (DTC) Facility, AN/TSQ-XXX	176 106640 00

The IETM developed for this WS/E has all applicable publications as part of the IETM. There is a management plan for the IETM located in Appendix I. It will be very important for the Marines and the Weapon Systems Manager to ensure all publications used in this IETM are kept current and they are identified whenever there are changes. Marines are reminded to review the procedures for submitting a Navy and Marine Corps (NAVMC) form 10772 for recommended changes or suggestions to publications.

g. Computer Resources Support

(1) Software and Firmware Support. Due to the extensive use of COTS and NDI software, a dedicated Weapons System Support Activity (WSSA) will not be required to support the DTC Facility. MCTSSA, the Assistant Program Manager for Software, will perform any WSSA functions required, to include updating, staffing, revising, and distributing the approved Computer Resources Life Cycle Management Plan (CRLCMP). As outlined in the Software Transition Plan, GD-CS will maintain the software until turned over to the Government. While the software is under GD-CS control, MCTSSA will provide the government review, including security concerns, of proposed changes to the software baseline. When the software has transitioned to government control, MCTSSA's local procedure for configuration control and software maintenance will take effect. At a minimum, MCTSSA will maintain configuration control of the software identified in Table 11.

(2) Software Trouble Reporting. All field-level computer software and firmware problems and requests for changes will the APM Software at MCTSSA.

(3) Software Changes. All software changes or new software will be developed by MCTSSA, tested, loaded onto the appropriate media (CD-ROM or Digital Audio Tape (DAT)), and shipped to fielding sites.

Table 11. DTC Facility Integrated Software

SOFTWARE NOMENCLATURE	TYPE	PART NUMBER
Network Management System Workstation		
COE Kernel 3.4	GOTS	99002A7036-1
Adobe Acrobat Reader 3.0	GOTS	99002A7000-1
Netscape Communicator 4.06 (Messenger) E-mail	GOTS	99002A7033-1
Netscape Communicator 4.06 (Navigator) Browser	GOTS	99002A7035-1
ISC DHCP (DHCP Server)	COTS	
SiteNet Multilink 1.1	COTS	99002A7004-1
NTP	COTS	
PanaVue 3.01.02	COTS	99002A7017-1
PanaVue 800 Manager 3.01.01	COTS	
Solaris 2.5.1	COTS	99002A7018-1
McAfee Anitvirus 3.1.2	GOTS	99002A7037-1
Scripting Language, Perl 5.004	COTS	99002A7007-1
Scripting Language, TCL 8.0	COTS	99002A7011-1
Scripting Language, GUI extension TK 8.0	COTS	99002A7013-1
MIBs	COTS	99002A7009-1
Account Groups (COE Acct Grp) V.25	COTS	99002A7005-1
ESOP (SWOLOP) 11.0.8	CFM	99002A7006-1
Installation Scripts	COTS	
HPOV NNM 6.1	COTS	99002A7016-1
C-SOLOP RD302182	COTS	
REDCOM 4.1	COTS	
Promina 800 REL 2x4.03	COTS	
ADMIN PC		
Netscape Communicator 4.06 (Messenger) E-mail	GOTS	99002A7033-1
Netscape Communicator 4.7 (Messenger) Browser	GFM	99002A7035-1
Interactive Technical Manual Tool (IADS)	GFM	
Microsoft Office 2000 Standard	GFM	99002A7002-1
Microsoft Windows 98	COTS	99002A7003-1
Adobe Acrobat Reader 4.0	COTS	99002A7004-1
Visio Professional 5.0	COTS	

SOFTWARE NOMENCLATURE	TYPE	PART NUMBER
Norton Ghost 6.0	GFM	
Norton Antivirus 6.0 for Windows	GFM	
Tera Term Pro 2.3	COTS	
SiteNet Multilink 1.5	COTS	

(4) Test Suites. MCTSSA will receive a complete open frame DTC Facility. The test suite includes all the equipment issued as a DTC Facility less the S-280 shelter.

h. Facilities. To be determined.

i. Existing Facilities. The AN/TSQ-XXX is fully supportable through the use of existing facilities. Specific facility requirements, including any additional security restrictions relevant to fielding, will be the responsibility of the using unit.

(1) New Facilities. No new facilities are required to support the DTC Facility.

(2) Interim Facilities. No interim facilities are required to support the DTC Facility.

j. Packaging, Handling, Storage, and Transportation

(1) Packaging

(a) Preservation and packaging for long term storage and shipment to overseas destinations shall be in accordance with the level A requirements of MIL-STD-2073-1D, Appendix A, Table A.VI, Electronic Equipment and the guidelines of MIL-DTL-55507, Shelter, Electrical Equipment (With or Without Equipment) Packaging of. Items scheduled for domestic shipment, immediate use, or short-term storage shall be preserved and packaged in accordance with the best commercial practices of ASTM D 3951-98.

(b) In the event of a return of an item or its components for repair, return to stock, etc., the owning unit shall be responsible for packaging and preservation in accordance with current policy and procedures (i.e. MIL-STD-2073-1D, DoD Standard Practice for Military Packaging, MCO 4030.36; Marine Corps Packing Manual, MIL-HDBK-263, Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment (Excluding Electrically Initiated Explosive Devices); and TI-4400-15/1, Packaging, Handling, Storage and Transportation of Electrostatic Discharge Sensitive Items). Items returned for stock shall be in accordance with the level A requirements, items returned for repair shall be to level B requirements. Should a repair/spare part, that is determined to be electrostatic sensitive, be required to be returned for repair or return to stock, it shall be packed and preserved in accordance with the requirements of MIL-STD-2073-1D, Appendix J, Table J.Ia., Specialized Preservation Code "GX" and TI-4400-15/1. All items subject to electrostatic discharge shall be in accordance with MIL-STD-129N, Standard Practice for Military Marking.

(2) Handling. Special handling is required for CCI equipment (see Appendix F). No special handling procedures are required for developmental items for off-loading, receiving or deprocessing the DTC Facility. However, protection for items in transit and during storage is required to ensure that the packaged items are of proper size and weight to facilitate handling using standard handling equipment and devices. If special handling procedures are required, they will be listed in the DTC Facility IETM and training materials. Batteries and nuclear, biological, and chemical devices used with the DTC Facility may contain contaminated or radioactive materials. Special handling procedures for these items are described in the safety summary of the DTC Facility IETM. The contractor will provide storage and issue, as required.

(3) Storage. The special requirements for storage of CCI equipment may be found in Appendix F. DTC Facility developmental items are not known to have limited shelf life or other special storage requirements. Should any special procedures for shelf maintenance or special storage conditions be required, they will be identified by storage instructions in the DTC Facility IETM or supply bulletins. Implementation of required security procedures for the storage and control of classified items in the field is the responsibility of the gaining unit. MARCORLOGBASES, Albany, will provide security procedures for TPF storage instructions for the fielding of the DTC Facility, as required. These requirements will be passed to the gaining unit before fielding commences. The gaining unit will make preparations for security of the TPF and storage. The DTC Facility requires neither Prepositioning of Materiel Configured to Unit Sets (POMCUS) nor Theater Reserve Materiel.

(4) Transportation. The DTC Facility will be transportable by all modes of transportation. CCI equipment will be transported in accordance with applicable directives. Cryptographic equipment, which is unkeyed and “decertified,” may be transported with other equipment provided it is in a sealed container and accounted for by a continuous receipt system. Special couriers are required only if the equipment is certified or “keyed.” Refer to Appendix F for transportation requirements of the CCI equipment for the DTC Facility.

(a) Security In-Transit. Prior to shipping, all CCI equipment, classified disk cartridges, and data will be stored or shipped in accordance with CMS-1A, DCMS Policy and Procedures Manual.

(b) Helicopter Lift Certification. The DTC Facility successfully passed the Helicopter lift certification, utilizing the CH-53E helicopter, on April 4, 2001.

k. Transportability and Naval Integration. To be determined.

l. Warranties. Each DTC Facility has a three-year warranty. GD-CS will provide a zero defect warranty covering workmanship, materials (hardware and firmware), design, and performance characteristics on the DTC Facility. The warranty begins with the acceptance of the DTC Facility. The warranty applies to all delivered equipment excluding equipment identified in Tables 1 and 10. The warranty coverage will not cover components that become defective through no fault of the contractor (i.e., Government employee damaging a circuit card, improper operation, etc.). Payment for non-warranty repairs is the responsibility of the owning unit.

(1) Warranty Type. The warranty guarantees that equipment delivered, including equipment provided by vendors and subcontractors, will remain defect free for three years following acceptance. Table 12 represents warranty and ICS effective dates per gaining command.

Table 12. Warranty and ICS Effective Dates

GAINING COMMAND	WARRANTY	ICS
MCTSSA	Apr 2001 – Mar 2004	Jan 2002 – Dec 2004
MCCES	Jul 2001 – Jun 2004	Jan 2002 – Dec 2004
I MEF	Jan 2002 - Dec 2004	Jan 2002 - Dec 2004
II MEF	Apr 2002 - Mar 2005	Apr 2002 - Dec 2004
III MEF	Jul 2002 - Jun 2005	Jul 2002 - Dec 2004
MARFORRES	Oct 2002 - Sep 2005	Oct 2002 - Dec 2004

(2) Covered Items. A complete listing of warranted components is contained in Appendix D.

(3) Warranty Administrator. COMMARCORLOGBASES has appointed a Marine Corps Warranty Administrator for the DTC Facility. The Warranty Administrator is responsible for coordinating warranty issues/matters with GD-CS. In the event of a warranty dispute, the following Warranty Administrator contact information applies:

MARINE CORPS LOGISTICS BASES
 ATTN: 847-3
 814 RADFORD BOULEVARD
 ALBANY, GA 31704-1128
 DSN: 567-6524/5
 COML: (229) 639-6524/5
 EMAIL: friersone@matcom.usmc.mil

(4) Contractor Responsibilities. Upon notification of a warranted item failure, GD-CS will provide the unit's Warranty Administrator with disposition instructions for return of the failed LRU. Transportation costs to and from the unit will be borne by GD-CS. Within 30 days of receipt of the failed LRU at the contractor's designated facility, GD-CS shall return a repaired or replacement item to the using unit.

(5) Special Handling Instructions. A NAVMC 1018 Inspection/Repair Tag shall be completed and affixed to the failed LRU prior to shipment to the contractor's designated facility. LRUs returned for repair will, whenever possible, be shipped in the reusable containers maintained by the unit maintenance activity from the original shipment of spares. Items, which are electrostatic sensitive, shall be appropriately marked and packaged in their protective wrapping material. All items shall be packaged to provide adequate protection from

environmental conditions during transit. Shipping containers and accompanying documents shall be marked “warranted item.”

(6) Unit Warranty Administrator Procedures for Failed LRUs. Upon receipt of a failed LRU, the unit’s Warranty Administrator will provide initial warranty verification/assessment. A visual inspection should be conducted to confirm that the LRU failure is in fact a warranty action. If misuse/abuse is suspected, the unit’s Maintenance Officer should be contacted. The unit’s Warranty Administrator will verify the accurate completion of the NAVMC 1018 Inspection/Repair Tag depicting the LRU failure and contact the GD-CS technical assistance helpdesk toll free number 1-877-888-USMC. The GD-CS technical assistance helpdesk will provide the unit’s Warranty Administrator a Return Material Authorization (RMA) number along with disposition instructions for the failed LRU. The unit Warranty Administrator will package and ship the failed LRU to the contractor’s designated facility. Pre-addressed shipping labels will be provided by GD-CS.

m. ESH

(1) The production, maintenance, and operation of the DTC Facility does not require the use of any ozone depleting substances or any of the Environmental Protection Agency’s list of 17 toxins.

(2) The uninterruptible power supplies contain sealed lead acid batteries. The fluorescent tube located inside the NEC monitor contains mercury; no special precautions are necessary unless the monitor screen is shattered. Disposition and disposal of lead acid batteries and damaged monitors shall be in accordance with established host-nation or federal, state, and local regulations.

(3) The DTC Facility could potentially injure personnel by electric shock if high voltage points are touched. Voltage points are guarded and labeled to prevent inadvertent contact during maintenance. There are no operational procedures that require the user to access these voltages. Standard safety practices such as labeling, grounding, and incorporation of warnings into training and technical manuals have been utilized.

(4) A Safety Assessment Report (SAR) was generated based on the DTC Facility’s normal operational configuration. The normal operational configuration for the DTC Facility is defined as the shelter dismounted from the vehicle. Operation of the DTC Facility while mounted on the vehicle will require the use of ladders to reach the upper signal entry panels. The provided ladder is intended for use at the access door when mounted. It is not designed for accessing either the top of the shelter or the signal entry panels. Integral handholds and footholds are provided for access to the top of the shelter. Using units are responsible for the proper use of ladders and observing required safety precautions during mounted operations.

n. POA&M. To be determined

5. Actions Required to Place Equipment In Service

a. Gaining Commands. Gaining commands are required to complete the following actions to place the DTC Facility and supporting material/equipment into service:

(1) Inventory. Conduct an inventory and LTI of the DTC Facility equipment per its enclosed packing list and provide a signed copy to COMMARCORLOGBASES (Attn: 847-3), Albany, GA, with information copies to: COMMARCORSYSCOM (C4I COMM), Commander, Marine Forces Atlantic (MARFORLANT), or Commander, Marine Forces Pacific (MARFORPAC), or Commander, MARFORRES respectively, not later than 10 working days after receipt.

(2) In-service Date. Notify COMMARCORSYSCOM, (C4I COMM) and COMMARCORLOGBASES (Attn: 847-3) when new equipment is placed in service.

(3) Accountability. Gaining commands will ensure accountability for new assets on unit property records/controlled-item-reporting per the current editions of MCO P4400.150 and MCO P4400.82.

(4) Post Fielding Evaluation Reports. Gaining commands will submit post fielding evaluation reports per the current editions of MCO 4105.4 and TM 4420.15/1.

(6) Materiel Defects Reporting. A Product Quality Deficiency Report (PQDR) will be submitted for category 1 and 2 deficiencies identified, per the current edition of MCO 4855.10, and local operating procedures. The MARCORSYSCOM Project Officer will be advised of deficiencies requiring immediate attention.

(7) Retrograde of Existing Equipment. Retrograde and disposition instructions for those items replaced by the DTC Facility will be provided by MARCORLOGBASES, Albany, via separate correspondence.

(8) Obtaining Supporting Consumables. Gaining commands are required to budget for and requisition supporting consumables. These items should be readily obtainable from local Direct Support Supply Center (Serv-Mart) using locally established procedures. See Appendix J.

(9) Security Requirements. Ensure all CCI equipment, classified disk cartridges, and data will be stored in accordance with the CMS-1, DCMS Policy and Procedures Manual. Table 13 represents CCI utilized in support of the DTC Facility.

Table 13. DTC Facility CCI

NOMENCLATURE	QTY	NSN	TAMCN
* Reader, Tape, General Purpose, TSEC/KOI-18	1	5810-01-026-9620	A8024
* Transfer Device, Electronic, TSEC/KYK-13	1	5810-01-026-9618	A8025
* Transfer Device, Data (DTD), AN/CYZ-10 V (3)	1	5810-01-393-1973	A8023
Transition Unit Nest Assembly, HGF-93	2	5810-01-212-8129	A8088
Automatic Key Distribution Center, TSEC/KGX-93	2	5810-01-212-8128	A8069

NOMENCLATURE	QTY	NSN	TAMCN
Loop Key Generator, TSEC/KG-82	16	5810-01-082-8403	A8059
Trunk Encryption Device, TSEC/KIV-19	24	5810-01-449-7179	A8085
Loop Encryption-Decryption Device w/Wireline Adapter, TSEC/KIV-7HS	4	5810-01-431-8264	A8084
Speech Security Equipment, TSEC/KY-57	1	5810-00-434-3644	A8031
Vehicular Power Adapter for KY-57, TSEC/HYP-57	1	5810-01-026-9621	A8027
Digital Subscriber Voice terminal (DSVT), TSEC/KY-68	2	5810-01-082-8404	A8083

* Not an SL-3 component of the DTC Facility

(10) Controlled Item Reporting. The DTC Facility is a controlled item and will be reported per the current edition of MCO P4400.82.

(11) MCGERR. The DTC Facility is a candidate for reporting under the MCGERR System as specified in MCBul 3000.

b. COMMARCORLOGBASES, Albany. The WSM will ensure that the following is accomplished:

(1) Establish and implement administrative control mechanisms for the supply support and depot level maintenance programs provided by the contractor or system integration facility.

(2) Provide gaining unit requests for T/E deficiencies required to support the functionality of the new product.

(3) Implement disposition instructions for all systems and equipment replaced as a result of the product fielding (i.e., a phase out plan) as directed by the Program Manager (PM).

(4) Identify when fielding reaches 85 percent of the programs planned allowances to the Program Manager (PM). If this equipment is reportable per the current edition of MCBul 3000, notify Headquarters Marine Corps (LPP-1) when fielding reaches 85 percent.

(5) Monitor National Stock Number (NSN) attainment and evaluate maintenance failure rates captured by the Guardian logistics database system. Augment positioned spares upon completion of the ICS period, and transition the system to organic supply support.

(6) Ensure the Warranty Administrator assigned resolves warranty issues reported by the user community, monitors PQDRs for trend analysis, and reports results to the Program Manager.

(7) Post published ULSS on document repository.

c. MARCORSYSCOM. The Program Management Office will ensure the following is accomplished:

(1) Ensure that the system is loaded to the Logistics Management Information System (LMIS) and that appropriate T/Os and T/Es are updated. Ensure action is initiated to reflect allowance data in the Equipment Allowance File (EAF) coinciding with the project in service date.

(2) Field the system to the Operating Forces. Notify appropriate activities of any problems or issues that delay fielding beyond the projected in-service date.

(3) Program the funds and budget for the initial fielding of the end item.

(4) Provide all aspects of technical and logistical assistance to the gaining command. Periodically provide briefings on any planned product improvements.

(5) Maintain life cycle management of the system per the current editions of MCO 4105.4 and TM 4420-15/1, as required.

(6) Provide COMMARCORLOGBASES, Albany the digital signed ULSS for posting on the document repository.

d. Designated Software Support Activity. Duties of the Software Support Activity will be performed by MCTSSA.

APPENDIX A

List of Allowances and Delivery Schedules

T/E NO.	UNIT NAME	UNIT PLANNED ALLOWANCE	MULTIPLIER	TOTAL	DELIVERY SCHEDULE											
					FY01				FY02				FY03			
					1	2	3	4	1	2	3	4	1	2	3	4
MEF HQ - Rationale: Two DTC Facilities to support the MEF HQ (Forward and Main) and one to support the Component HQ or one DTC Facility each for Main, Forward and Rear CP or one DTC Facility to support MEF HQ and two DTC Facilities to support Component HQs.																
N4684	SUPPORT CO, COMM BN, I MHG	3	1	3						3						
N4784	SUPPORT CO, COMM BN, II MHG	3	1	3							3					
N4884	COMM CO, COMM BN, III MHG	3	1	3								3				
N4984	COMM CO, COMM BN, MARFORRES	3	1	3									3			
DIVISION HQ - Rationale: One DTC Facility to support the HQ.																
N1015	COMM CO, HQBN, 1ST MARDIV	1	1	1						1						
N1025	COMM CO, HQBN, 2 MARDIV	1	1	1							1					
N1035	COMM CO, HQBN, 3D MARDIV	1	1	1								1				
N1045	COMM CO, HQBN, 4TH MARDIV	1	1	1									1			
WING HQ - Rationale: One DTC Facility to support the HQs at each airfield.																
N8652	AIRFIELD DET, MWCS, MACG, 3D MAW	1	2	2						2						
N8652	AIRFIELD DET, MWCS, MACG, 2D MAW	1	2	2							2					
N8652	AIRFIELD DET, MWCS, MACG, 1ST MAW	1	1	1								1				
N8652	AIRFIELD DET, MWCS, MACG, 4TH MAW	1	1	1									1			
FSSG HQ - Rationale: One DTC Facility to support the HQ.																
N3113	COMM CO, H&S BN, 1ST FSSG	1	1	1						1						
N3213	COMM CO, H&S BN, 2D FSSG	1	1	1							1					
N3313	COMM CO, H&S BN, 3D FSSG	1	1	1								1				
N3413	COMM CO, H&S BN, 4TH FSSG	1	1	1									1			
SUPPORTING ESTABLISHMENTS																
7720	MCCES, MCAGCC, 29 PALMS, CA	2	1	2				2								
7442	MCTSSA (MARCORSYSCOM), CA	1	1	1			1									
SUSTAINMENT																
N/A	WRMR, MCLB, ALBANY, GA	1	1	1									1			
ACTIVE FORCES :																
I MEF				7												
II MEF				7												

T/E NO.	UNIT NAME	UNIT PLANNED ALLOWANCE	MULTIPLIER	TOTAL	DELIVERY SCHEDULE											
					FY01				FY02				FY03			
					1	2	3	4	1	2	3	4	1	2	3	4
	III MEF			6												
	SUPPORTING ESTABLISHMENTS			3												
	RESERVES			6												
	DMF			1												
	TOTAL DTC FACILITIES			30												

NOTE: The information provided above is accurate as of the date of publication of the ULSS. Subsequent changes to unit allowances or deliveries are reflected through the modification of quantities in the EAF.

APPENDIX C

DTC Facility Interface Systems and Equipment

NOMENCLATURE	NSN	TAMCN
SUBSCRIBER EQUIPMENT		
Digital Subscriber Voice Terminal (DSVT), TSEC/KY-68	5810-01-082-8404	A8083
Digital Non-Secure Voice Terminal (DNVT), TA-1042	5805-01-318-8421	H3465
Secure Telephone Unit, STU-III (MMT1500/DNVT)	5810-01-408-0224	A8049
Tactical Telephone, TA-838	5805-00-124-8678	A2635
Facsimile, Digital, Lightweight, AN/UXC-7	5815-01-187-7844	A0890
Automatic Telephone Switchboard, SB-3865	5805-01-187-9399	A2508
Automatic Telephone Switchboard, SB-3614	5805-01-032-1694	A2505
Communications Terminal, AN/UGC-74C (V)3	5815-01-211-4122	A0284
TRANSMISSION SYSTEMS		
Terminal, Radio, Troposcatter, Digital, AN/TRC-170	5895-01-354-7601	A2179
Terminal Set, Radio, AN/MRC-142	5895-01-333-3040	A1955
Satellite Communications Terminal, AN/TSC-85B	5895-01-284-8305	A0812
Satellite Communications Terminal, AN/TSC-93B	5895-01-284-8306	A0814
Tri-Band Satellite Terminal, AN/TSC-156	5895-01-454-5365	A0818
Transportable TACSATCOM, AN/TSC-154 (SMART-T)	5895-01-435-0571	A3232
Message System, Digital, AN/PSC-2	5895-01-339-8341	A0498
Terminal, Communications, Satellite, Manpack, AN/PSC-3	5820-01-145-4943	A0917
Converter Set, Fiber Optics, AN/GSC-54	6020-01-237-2218	A0652
26 Pair Cable, CX-4566 (500 ft.)	5995-01-114-5501	H2086
Tactical Fiber Optic Cable, CX-13295	6020-01-220-5435	H3458
Cable Telephone, WF-16/U	6145-00-910-8847	H2117
Coaxial Cable, CX-11230	5995-00-133-9126	
LAN 10B2, Coaxial Cable		
NETWORK SYSTEMS		
Automatic Telephone Central Office, AN/TTC-42	5805-01-188-3993	A0248
Automatic Central Office, AN/TTC-39	5805-01-121-4395	
Mobile Subscriber Equipment		
Theater Deployable Communications System		
Data Network Gateway	5895-01-467-7469	A2535
Data Network Server	5895-01-467-6942	A2538
DISN Defense Switched Network		
DISN IDNX Network		
Public Switched Telephone Network (PSTN)		
DISN SIPRNET		
DISN NIPRNET		
DRSN		
AUTODIN		

APPENDIX D

DTC Facility Components Covered by Warranty

NOMENCLATURE	QTY	NSN/PART NUMBER
PATCHING EQUIPMENT		
Loop Patch Panels	30	JC2/48M-GOVT
Support, Electrical Card Holder, 18 Slot	5	5998-01-326-5792/PMCH-2
Cable Assembly, Special Purpose, 2 ft.	12	5995-01-446-3911/PM-MM-PC-2
Cable Assembly, Special Purpose, 2 ft.	36	5995-01-222-9196/PMPC-2
Cord Assembly, Single, 3 Conductor	12	5995-00-113-0970/PJ716
Cord Assembly, Dual, 3 Conductor	174	5995-01-291-7490/PJ764
Cord Assembly, Dual, 3 Conductor	24	5995-00-113-0971/4-15346-7660
Patch Cord, EIA-232 to DB25	2	PMCP-C-M-6
Plug, Telephone	24	5935-00-113-7507/PJ746
Plug, BNC to Bantam	2	PAT-006
Looping Plug, Kit	2	PMLP-KIT-B
CCA, Patch Module, RS232	68	PMM-2(P/R)
Test Set, Data Transmission Line, RS232	2	6625-01-394-9033/016-110834-01
Patchboard, Electrical	12	5998-01-418-4523/JSI-48/J72
Jack, Normal Thru Twinax	382	J158
Jack, Telephone, Single Sub-Twinax	477	5935-01-165-2928/979270-1
Connector, Plug Electrical	8	5935-01-334-1920/BN153
Connector, Plug, Electrical	24	5935-01-092-9695/B4036872
Adapter, Test Loop Plug	10	6625-01-237-5341/LPTWM2TP-78
Patch Cord, Sub-Twinax, 2 ft.	180	PTWM-24-78
MANAGEMENT EQUIPMENT		
Computer Workstation, Sun Ultra 10	2	A22UKC1A9P-512CP
Trackball, Data Entry	2	7025-01-361-6728/BSUNMD
Display, 18", Color-NEC	2	LA-1831JMW-BK
Processor, HP KAYAK XU, 500MHz	1	99002C8016-2
CPU Terminator Card	1	796019-1
PCMCIA Reader	1	64113-5
Monitor, 15" LCD	1	LCD1525V
Keyboard, Data Entry	2	7025-01-440-5622/G84-4400
Printer, HP Laser Jet 2100M	1	7025-01-440-5812/C4171A
Serial Converter	1	PDC0173307
Modem, V.3600	3	6209548200010
COMMUNICATIONS EQUIPMENT		
Short Haul Modems – Tent	8	ME659-M
Modem Rack, Short Haul	1	RM216
Power Supply, Modem Rack	1	6130-01-479-0465/PS460A
Line Drive Card, Multifunction	8	ME758-RJ45
Multiplexer Set, FCC-100 (V) 9	4	5895-01-452-7764/97010109

NOMENCLATURE	QTY	NSN/PART NUMBER
CCA, SNMP	4	5998-01-452-8436/21000955-004
CCA, CELP, Low Delay	16	5998-01-450-4180/21001011
CCA, Driver, CDI, High Speed	4	5998-01-385-4667/85970130-058
CCA, Port CDI, Dual, Low Speed	4	5998-01-385-4555/85974125-125
Card, CDI Aggregate	4	85970030
Card, CDI Port, Dual, High Speed	8	85970070
Card, Voice FXO	4	21000822
Card, CVSD Port	8	84890190
Card, PCM Port	4	84890200
Card, Asynchronous Port	8	84890210
Card, Port Carrier	12	84890350
Card, Sync Port, NRX, High Speed	8	84890540
Terminator, Balanced	8	84890630
Terminator, Voice	12	84890650
Terminator, Unbalanced	8	84890670
Driver, RS422/423	4	85090180
MultiRate Voice, Chassis	2	MPN110001-1
Data/Voice Channel Multiplexer, MultiRate Voice Card	4	MPN102330-1
Campus, Stand Alone, CSU/DSU * 2 Rack-Mounted, 2 Stand-alone	4	?
Cable, 12" HD to RS530, Female	4	150-1057-03
T1/Flex Module	4	150-1173-02
Rack, Electronic Junction, 2 Slot, KIV-19	12	5975-01-452-7801/36025800
Rack , KIV-7 HS 4 PK, Pulse	1	3016-1
Interface Unit, Automatic Data Processing, 24 Port, 10BASET LAN Hub	1	7025-01-445-1180/ AT-F3024TR-15 AND AT-FA3
8 Port 10BaseT w/BNC/AUI	1	AT-MR820TR-15
BNC Appliqué	1	AT-A8
Transceiver, 10BaseT to AUI	2	6030-01-478-5626/AT-MX20T-05
Time & Frequency Rcvr, GPS, XL-DC-602	1	151-358-109
Antenna w/50 ft cable	1	142-616-50
Lightning Arrestor	1	140-014-TC
Intermediate Distributing Frame, Type 10 Rack	2	5805-01-282-9612/1012UC
Module, Variable Atten Voice	6	5998-01-424-6778/4410S
Frequency Amplifier, Variable Voice	6	5895-01-251-2712/4001A
Analog Bridging Module, Active Bridge, 4 wire/6 way, CCA	3	5998-01-197-5040/4446
Blanker Interface, VF Echo Cancellation Module	4	5895-01-462-6343/4119S
Power Supply, 48V	2	6130-01-362-1233/8021
Fiber Optic Modem	9	5895-01-186-3665/A3099781

NOMENCLATURE	QTY	NSN/PART NUMBER
TACTICAL CIRCUIT SWITCH EQUIPMENT		
Communication Subsystem, Tactical Circuit Switch, Compact Digital Switch (CDS)	1	5895-01-464-0231/02-2758810-1
Console, Switching Control, Tactical Call Service Position	1	5895-01-386-2832/02-1416125-1
Handset, H350	1	5965-01-128-3944/H350/U
CCA, MTG	1	5998-01-433-7019/06-1414139-5
CCA, DCBU	1	5998-01-457-3784/06-1414145-4
CCA, MATRIX2	1	5998-01-474-8343/06-1420152-2
CCA, TICEPT1	2	5998-01-467-8815/06-2754043-3
CCA, DTGSM	6	5998-01-460-5116/06-2754400-4
CCA, CCU2	1	5998-01-474-7263/06-2759450-101
CCA, COMSEC2	1	5998-01-474-3777/A3178139-102
CCA, Terminator	2	5998-01-466-0678/06-2772030-1
CCA, ESTIC	1	5998-01-466-2085/A3178625-100
CCA, 20RING	1	5998-01-396-0365/06-1411808-1
CCA, 2WLTU	6	5998-01-424-4058/SM-E-822724-3
CCA, 41MUX	1	5998-01-398-7373/06-1417401-1
CCA, 4WLTU	3	5998-01-440-4524/SM-E-822727-3
CCA, DPLMA	30	5998-01-369-2072/SM-E-820423-3
CCA, GPMDM	1	5998-01-373-5828/SM-E-820429-4
CCA, MFLTU	3	5998-01-387-8789/SM-E-822632-3
CCA, MXDMX	4	5998-01-382-6872/06-1402258-4
CCA, NILTU	2	5998-01-347-8891/SM-E-822891
CCA, TCLTU	3	5998-01-424-4060/SM-E-822879-3
CCA, TGMOW	1	5998-01-369-2071/SM-E-820421-2
CCA, TIMTG	1	5998-01-382-8941/06-1408949-3
CCA, QUAD IOE	1	5998-01-361-3996/SM-D-823794
CCA, CPU	1	5998-01-362-1207/SM-D-823795
CCA, Memory	1	5998-01-361-3997/SM-D-823796
CCA, Termination	1	5998-01-362-1208/SM-D-823797
CCA, DVOW	1	5998-01-470-7461/SM-E-816163-3
Cable Set, CDS	1	89-2771516-1
Panel, Power Distribution	1	6110-01-392-9108/03-1414105-1
Interface Unit, Communications Equipment, CDU Assembly	1	5895-01-470-0879/02-2729976-1
Chassis, Electrical-Electronic	1	5975-01-478-7598/03-2753097-1
Blower Assembly, SRN	1	5805-01-458-6025/03-2753168-1
Extractor, CCA, SRN	1	5998-01-138-0717/SM-A-838409-1
CDS Power Supply	1	6130-01-391-9049/SPS3912
SRN Power Supply	1	4C5NA2E-1804
Power Supply	1	6130-01-388-8437/SPS4112
TRANSMISSION RESOURCE CONTROLLER (TRC) EQUIPMENT		

NOMENCLATURE	QTY	NSN/PART NUMBER
TRC Promina 800, 4 Shelf, 16 Slot	1	08461
Module, Prime Switch Echo, 32 Channel	3	4210
Module, Prime Voice, 24 Channel	6	4120A
TRC-BX, Front Card	6	9097
TRC-BXI-2 SHLD	6	9098A
TRC-NSD-2, Front Card	6	9071-A
Dual, EIA530 DCE I/F	6	9079B
TRC-PRC	6	9055A
TRC-DS-1 I/F	6	9007A
TRC-QASD, Front	2	9067A
TRC-RS232C DCE I/F	2	9035B
TRC-USD, Front	5	9009A
TRC-CDP, Dual I/F	4	9070A
Front Card, SA-TRK	10	9955A
SA-530 I/F	10	9957B
TRC Assembly	1	99002A1060-1
TRC Front Card, PSM	1	PERSMA
TRC Server I/F Card	1	PERPSMIA
Chassis, 16 Slot	1	010840
TRC Assembly	1	99002A1060-2
TRC PX3, 8 Port	1	5141LHB-002
Module, Ethernet	1	5105A
TRC Assembly	1	99002A1060-3
Module, 16 Port, Prime Switch	1	005140PL-002
Front Card, QBRI	1	9911A
QBRI/F Module	1	029920-001
COMMERCIAL CIRCUIT SWITCH EQUIPMENT		
Commercial Circuit Switch, (IGX-C) Standard Shelf	1	SA9028-061
Module, Trk SF	8	MA0629-114
Module, Ring Generator 20Hz	7	MA0060-005
Module, Dynamic Line Board	16	MA0602-201
Module, Universal Clock	3	MA0473-163
Module, MTI User Config.	6	MA0463-101
Module, 4 Wire CTI	3	MA0368-102
Module, Trunk 2W E&M, Type I	3	MA0341-101
Module, Trunk 2W E&M, Type II	3	MA0341-105
Module, Trunk 4W E&M, Type I	3	MA0341-123
Module, Trunk 4W E&M, Type II	3	MA0341-127
Module, Trunk LS/GS Ring Down	6	MA0331-101
Module Set, Trunk DS1, 2 Bds	10	MA0292-003
Module, Line Bd ISDN BRI S	26	MA531-322
Module, Line Bd ISDN BRI U	2	MA530-322

NOMENCLATURE	QTY	NSN/PART NUMBER
Module, DTMF-8	2	MA0609-310
Module, Sender/Receiver, 8 Circuit	2	MA0520-102
Board Set, Supervisor/Controller	8	MA0671-007
Console	2	SA9008-001
Tray, Cable	8	MA0332-201
MSU Cell, 120VAC +/- 5V	8	TA9026-012
PCMCIA SRAM 1M	1	MA0638-001
Dynamic Line Card, 8 Circuit	3	MA0209-103
Radio Wireline Interface	2	DPI4520
Board Set, ETSI	7	MA0588-102
Commercial Call Service Position	1	5895-01-386-2832/02-1416125-1
MISCELLANEOUS EQUIPMENT		
UPS, Ruggedized, 3.0	3	99002A1056-1
UPS, KVA, Liebert, 3.0	3	GXT3000RT-120
Battery Cabinet, External, UPS 96V	3	6130-01-447-4459/GXT96VBATT
Battery Cable, 3 Meter, 96V	3	108-00194-02
Management Module, SNMP	3	SNMPE3
Power Entry Panel	1	99002A2040-1
Power Supply, 5VDC	1	HSD-5-12-OVP
Power Supply, 28VDC	2	HSC-28-2.0
Power Supply, QAVP	1	6037A
Power Distribution Panel	1	99002A2062-1
Power Distribution Interface	1	6068B
Meter, Dialed Digit Grabber	1	TPM-32/MF
Converter, NRZ/CDI	4	5895-01-480-9838/97350040
S-280 Shelter Modified	1	99002A3003-1

APPENDIX E

Items Requiring Calibration

NOMENCLATURE	NSN/PART NUMBER
BIT Error Rate Tester w/Breakout Box	6625-01-380-3788
Cable Tester, WaveTek	6625-01-449-3658
Data Communications Analyzer, FireBERD 6000N	6625-01-400-1735
Digit Grabber	TPM-32
Multimeter, Digital	6625-01-336-3372
Oscilloscope, Digital	6625-01-451-8727
Test Set, Telecommunications, CRX 5200-17	6625-01-369-9813
Test Unit, Verification, KT-83	5810-01-111-4080

APPENDIX F

Packaging, Handling, Storage, and Transportation of CCI Equipment

The following is a quote of Section 535 of CMS-21A, Communications Security Material System Policy and Procedures Manual for the Electronic Key Management System (EKMS) for Tiers 1 and 2. It is provided here for familiarization only. Refer to the most current edition of CMS-1A or CMS-21A for current policy and procedures. CMS-1A or CMS-21A is the authority for the Navy and Marine Corps regarding packaging, handling, storage and transportation of CCI equipment.

535. CONTROLLED CRYPTOGRAPHIC ITEM (CCI)

a. Definition: A secure telecommunications or information handling equipment, or associated cryptographic component, which is unclassified but controlled. Designated items will bear the designation Controlled Cryptographic Item or CCI.

b. Accountability: CCI is centrally accountable to DCMS by serial number (AL 1) or quantity (AL 2).

c. General Access Requirements:

(1) A security clearance is not required for access to unkeyed CCI. Normally, access must be restricted to U.S. citizens whose duties require such access.

(2) Unkeyed CCI and/or CCI keyed with unclassified key marked or designated CRYPTO, must be stored in a manner that affords protection against pilferage, theft, sabotage, or tampering, and ensures that access and accounting integrity are maintained.

d. Access Requirements for Resident Aliens: Resident aliens who are U.S. Government employees, U.S. Government contractor employees, or National Guard, active duty, or reserve members of the U.S. Armed Forces may be granted access to CCI provided their duties require access.

e. Access Requirements for Foreign Nationals:

Non-U.S. citizens who are employed by the U.S. Government at foreign locations where there is a significant U.S. military presence (two or more military bases) may handle CCI material in connection with warehouse functions, provided they are under the direct supervision of an individual who has been granted access to CCI material.

(1) Access to Unkeyed CCI: Access may be granted to Foreign Nationals under the following conditions:

(a) In conjunction with building maintenance, custodial duties, or other operational responsibilities that were performed by unescorted personnel in the area prior to the installation of the CCI.

(b) The CCI is installed within a U.S. controlled or combined facility with a permanent U.S. presence, as opposed to a host nation facility.

(c) Command security authority has determined that the risk of tampering with the CCI, which could result in compromise of U.S. classified or sensitive classified information, is acceptable in light of the local threat, perceived vulnerability, and the sensitivity of the information being protected as indicated by its classification, special security control, and intelligence life.

(d) The system doctrine for the CCI does not specifically prohibit such access.

(2) Access to Keyed CCI: The access requirements listed above for unkeyed CCI also apply to keyed CCI with the following additional restrictions:

(a) The non-U.S. citizens are civilian employees of the U.S. Government and are assigned to a combined facility.

(b) The non-U.S. citizens hold a clearance at least equal to the highest level of the keying material or information being processed.

(c) The CCI material remains U.S. property and a U.S. citizen is responsible for it. The presence of such installed CCIs must be verified at least monthly and the verification documented and retained in accordance with local command policy.

(d) The communications to be protected are determined to be essential to the support of a U.S. or combined operation.

(e) U.S. users communicating with such terminals are made aware of the non-U.S. citizen status of the CCI user.

NOTE: 1. Waivers to permit unescorted access by non-U.S. citizens to installed CCIs under the conditions listed above must be submitted to DCMS//20//.

2. Non-U.S. citizens in countries listed in the Attorney General's Criteria Country list may not be granted access to installed CCI equipment without approval from DIRNSA//I11//;submit requests via the Chain of Command to DCMS//20//.

f. Keying CCI:

(1) Only properly cleared and designated U.S. citizens are authorized to key CCI with classified U.S. key. Waivers of this policy must be authorized by DCMS//20//.

(2) Non-U.S. personnel are authorized to key CCI using only Allied key or unclassified U.S. key.

h. Classification of CCI When Keyed: When keyed, CCI assumes the classification of the

keying material it contains, and must be handled in accordance with the control and safeguarding requirements for classified keying material described in this manual.

i. Installing CCI in a Foreign Country: When there is an operational necessity to install and operate a CCI in a foreign country at a facility that is either unmanned or manned entirely by non-U.S. citizens, the installation must be approved, in advance, by DCMS//20//.

(1) In addition to the requirements listed above, special security measures will be required (e.g., constructing vault areas, storing CCI material in approved security containers, installing locking bars on equipment racks, installing alarm systems) to prevent unauthorized access to the CCI by non-U.S. citizens.

(2) The installation of the CCI must be accomplished and controlled by U.S. citizens who shall verify the presence of the CCI equipment at regular intervals.

i. Moving CCI to a Sensitive Environment. CCI material should not be moved from an environment where the risk of tampering by foreign nationals is acceptable, to a more sensitive environment where the risk of tampering by foreign nationals is not acceptable.

(1) When operational requirements necessitate moving CCI to a more sensitive environment, the command must send a message to DCMS//20// requesting authorization to move the material.

(2) Before moving the CCI, it must be examined for signs of tampering by qualified COMSEC maintenance personnel.

(3) Report any evidence or suspicion of tampering to DIRNSA//I413// as a COMSEC incident in accordance with Chapter 9. The affected CCI equipment shall be removed from operational use pending disposition instructions from DIRNSA.

j. Transporting Keyed/Unkeyed CCI:

(1) CCI must not be shipped in a keyed condition unless removing the key is impossible.

(2) Unkeyed CCI may be shipped/transported by any means delineated below.

k. Methods of Shipping CCI. CCI equipment must be shipped only to authorized activities using any of the following methods:

(1) Authorized U.S. Government department, service, or agency courier (e.g., Navy Supply System).

(2) Authorized U.S. Government Contractor/Company or U.S. citizen courier.

(3) U.S. Postal Service Registered mail or express mail, provided the material does not at any time pass out of U.S. postal control, pass through a foreign postal system, pass through any

foreign inspection, or otherwise fall under the control of unescorted foreign nationals. When using express mail, the shipper must obtain assurance from U.S. Postal Service authorities that the material will receive continuous electronic or manual tracking to the point of delivery. A recipient's signature must be obtained. Material must be introduced into the postal system "across-the-counter" at a U.S. Postal Service Facility; postal drop boxes must not be used.

NOTE: 1. There are certain restrictions governing the size and weight of packages that can be shipped via registered mail. Prior to shipping the CCI, check with the postal service to determine whether the shipment qualifies.

2. First, fourth, certified, insured, and parcel post are not authorized methods of shipping CCI equipment.

(4) Commercial carriers (non-military aircraft) may be used to transport CCI (includes CCI being transported in conjunction with Foreign Military Sales) within the U.S., its territories, and possessions, providing the carrier warrants in writing the following:

(a) Is a firm incorporated in the U.S. that provides door-to-door service.

(b) Guarantees delivery within a reasonable number of days based on the distance to be traveled.

(c) Possesses a means of tracking individual packages within its system to the extent that should a package become lost, the carrier can, within 24 hours following notification, provide information regarding the last known location of the package(s).

(d) Guarantees the integrity of the vehicle's contents at all times.

(e) Guarantees that the package will be stored in a security cage should it become necessary for the carrier to make a prolonged stop at a carrier terminal.

(f) Utilizes a signature/tally record (e.g., a carrier's local signature/tally form or the DD Form 1907 or Form AC-10) that accurately reflects a continuous chain of accountability and custody by each individual who assumes responsibility for the shipment while it is in transit;

OR

1 Utilizes an electronic tracking system that reflects a chain of accountability and custody similar to that provided by a manually prepared signature/tally record.

2 Ensures positive identification of the actual recipient of the material at the final destination.

3 Uses a hard-copy printout that serves as proof of service; the printout must reflect those points, during transit, where electronic tracking of the package/shipment occurred.

(5) U.S. military, military-contractor, or private air service (e.g., AMC, LOGAIR, QUICKTRANS), provided the carrier satisfies the requirements identified above for commercial non-aircraft carriers.

(6) U.S. Diplomatic Courier Service.

(7) DCS outside CONUS, when no other methods of secure transportation is available. Prior authorization must be obtained from DCS before any unkeyed CCIs are introduced into the DCS system.

(8) Commercial passenger aircraft may be used within the U. S., its territories, and possessions. Transport of CCI material outside the U.S., its territories, and possessions on a U.S. flag or any foreign-owned, controlled, or chartered aircraft, is strongly discouraged because of the threat of terrorists and the lack of U.S. control.

NOTE: Requirements/restrictions for shipping CCI on commercial aircraft are detailed in paragraph I.

(9) Non-U.S. citizens who are employed by the U.S. Government at foreign locations where there is a significant U.S. military presence (two or more military bases) may transport CCI material, provided there is a signature record that provides continuous accountability for custody of the shipment from the time of pick-up to arrival at the final destination.

NOTE: A U.S. citizen must accompany the foreign driver carrying the material; or the material must be contained in a closed vehicle or shipping container (e.g., CONEX, DROMEDARY, or similar authorized container) which is locked with a high security lock and contains a shipping seal that will prevent undetected access to the enclosed material.

I. Requirements and Restrictions for Transporting CCI on Commercial Aircraft:

(1) The container(s) and content(s) may be subject to certain security inspections, including x-ray, by airport personnel. Inspections are permissible, but only in the presence of the courier.

(2) Inspection of CCI material must be restricted to exterior examination only and conducted in the presence of the courier. To preclude unnecessary inspections by airport personnel, couriers should carry current orders, letters, and ID cards identifying them as designated couriers.

(3) CCI material must be stored in the cabin of the aircraft where the courier can maintain continuous control of the material.

(4) When the size of the CCI shipment is too large for storage in the cabin of the aircraft, the entire shipment must be packaged in a suitable container, which is secured and sealed in such a manner so that any unauthorized access to the enclosed CCI can be detected by the courier. The CCI shipment may then be shipped as checked baggage, provided the LIFO procedure is coordinated with the carrier.

m. Storage of CCI: Unkeyed CCI and/or CCI keyed with unclassified key marked or designated CRYPTO, must be stored in a manner that affords protection against pilferage, theft, sabotage, or tampering, and ensures that access and accounting integrity are maintained.

n. Packaging CCI: Package unkeyed CCI for shipment in a manner that will allow for tamper detection and prevent damage while in transit.

(1) In addition to the information required on the packaging label, include the office code or duty position title of the individual who is designated to accept custody of the CCI equipment to ensure proper delivery. Do not use the name of an individual.

(2) The shipping document must also contain an emergency telephone number(s) for the intended recipient in the event delivery is made after normal working hours.

o. Notification to Intended Recipient. Regardless of the method used to transport CCI, the transferring command must, within 24 hours of shipping, notify the intended recipient of the method of transportation and a list of CCI(s) that have been shipped.

p. Shipments not Received

(1) If a shipment of CCI equipment has not been received within five working days after the expected delivery date, contact the originator of the shipment immediately.

(1) If the location of the shipment cannot be determined, tracer action must then be initiated. The material shall be assumed to be lost and the incident must be reported to DIRNSA FT GEORGE G MEADE MD//I413/Y265// in accordance with Chapter 9.

q. Reportable Incidents:

(1) Lost shipments, shipments that show evidence of possible tampering, and unauthorized access to CCI equipment must be reported to DIRNSA//I413/Y265//, info DCMS//20//.

(2) All other incidents involving improper shipping or handling of CCI equipment must be reported to DCMS//20//, info DIRNSA//I413//. If a commercial carrier is involved, include the name(s) of the carrier(s).

APPENDIX G

Other Support Equipment

NOMENCLATURE	P/N	NSN	QTY	TAMCN
Medium Tactical Vehicle Replacement (MTVR), Cargo Truck *	MK 23	2320-01-465-2174	1	D0198
Mobile Electric Power Distribution System **	002221SL87	6110-01-272-6953	1	B0600
Generator **	MEP-805A	6115-01-274-7389	1	B0953
Fire Extinguisher	35040	4210-01-324-2179	2	N/A
First Aid Kit	11677011	6545-00-922-1200	2	K4344
Kit, Snake Bite	Y19201	6545-01-281-1237	1	N/A
Grounding Kit	MK2551A	5120-01-263-1760	1	H7255
Ground Rods (3 Section)	W-R-550-B III	5975-01-053-3991		N/A
Slide Hammer, Grounding	13226E7741	5120-01-013-1676	1	N/A
Patch Cord Plug Set	Various	Refer to SL-3		N/A
Cable Mounting Reel	RC-405/TR	8130-00-711-0537		N/A
Floor Mat	MIL-M-15562	7220-01-057-1897		N/A
Screwdriver, Cross Tip # 1		5120-00-240-8716	1	N/A
Screwdriver, Cross Tip # 2		5120-00-234-8913	1	N/A
Screwdriver, Flat Tip, .125		5120-00-236-2127	1	N/A
Screwdriver, Flat Tip .094		5120-00-062-8454	1	N/A
Cutters, Diagonal 4.0"		5110-00-935-0890	1	N/A
Pliers, Slip Joint 10.0"		5120-01-113-4303	1	N/A
Handle, Socket		5120-00-778-0583	1	N/A
Socket, 7/16"		5120-00-239-0016	1	N/A
Socket, 1/2"		5120-00-189-8610	1	N/A
Wrench, 7/16"		5120-01-287-5984	1	N/A
Pouch, Tool		5140-00-329-4306	1	N/A
ESD Wrist Strap		4240-01-165-8865	1	N/A
Padlock, Combination	7849937P001	5340-00-285-6523	1	N/A
Power Cable, 50 ft., 2 ea.	A1-29798D-1		2	N/A
Power Stub, Cable Assembly	8735533-10	5995-01-382-7390	1	N/A
Cable, 20 ft., ECU Power	09-2750825-1X3		1	N/A

* MTVR will be force-fed to FMF units commencing July 2001.

** Denotes UURI.

APPENDIX H

Technical Publications

PUBLICATION CONTROL NUMBER	TITLE	PUBLICATION TYPE
613-10625-00 (Rev A)	Multiport Micro Repeater Installation Guide	COTS MANUAL
UM SL-53040 (Rev A)	Environmental Integrator INTGR-19SE	COTS MANUAL
UM 644-0106.01	Keyboard User Manual	COTS MANUAL
SL-23131 (Rev N)	Uninterruptible Power Supply, GXT-3000RT-120	COTS MANUAL
8600-1632MF (Issue 2)	Digit Grabber, TPM-32/MF	COTS MANUAL
613-10560-00 (Rev A)	Manageable Hub/Repeaters Installation Guide 3600 Series, AT-3624TR	COTS MANUAL
613-10157 (Rev B)	Hub/Repeaters and AT-S4 Firmware Module Network Operations Manual 3600 Series	COTS MANUAL
T0097B	Modem Users Guide, Modem, V.3600	COTS MANUAL
24000991-000 (Rev G)	Multiplexer, Time Division, AN/FCC-100 (V) 9 Operation and Maintenance Manual	COTS MANUAL
78133812	Multisync LCD1810 Monitor User's Manual	COTS MANUAL
78134641	Multisync LCD 1525V Monitor User's Manual	COTS MANUAL
24001092-000 (Rev A)	CDI Module CV-2408-M Operation and Maintenance Manual	COTS MANUAL
D4700-90001	Processor Kayak XU, Workstation Users Guide	COTS MANUAL
D4700-90901	Processor Kayak XU, Workstation Family Familiarization Guide	COTS MANUAL
ADCP-50-305 (9 th Edition)	Digital Patching User's manual EIA-232/EIA-530	COTS MANUAL
2100TN	Laser Jet Printer 2100TN User's Manual	COTS MANUAL
36025801 (Rev A)	Performance, Interface Specification, and Installation Manual for KIV-19 Rackmount Adapter	COTS MANUAL
029163-004	Xpress Module, Promina 800	COTS MANUAL
027935-004	Data Modules, Promina 800	COTS MANUAL
030415-001	HINTU Module, Promina 800	COTS MANUAL
027936-004	Port Extender 560 Module & Desktop Unit, Promina 800	COTS MANUAL
029838-003	Previously Released Equipment, Promina 800	COTS MANUAL
029014-005	Prime Voice Modules, Promina 800	COTS MANUAL
029761-002	Prime Voice Analog & Prime Voice Analog w/Compression Modules, Promina 800	COTS MANUAL
029556-002	PX3 Platform Guide Promina Release 2.X.2	COTS MANUAL
029205-002	Quad Basic Rate Interface Release 2.0, Promina 800	COTS MANUAL
027932-004	Trunk Modules, Promina 800	COTS MANUAL
027933-004	TRK-3 Module, Promina 800	COTS MANUAL
027934-005	Voice Modules, Promina 800	COTS MANUAL
027924-005	Alarms & Events, Promina 800	COTS MANUAL
027925-005	Operator Interface, Promina 800	COTS MANUAL

PUBLICATION CONTROL NUMBER	TITLE	PUBLICATION TYPE
027937-004	SNMP Agents, Promina 800	COTS MANUAL
027956-004	Common Equipment, Promina 800	COTS MANUAL
027931-004	Hardware Description, Promina 800	COTS MANUAL
027927-004	Node Configuration, Promina 800	COTS MANUAL
030238-002	Addendum Release 2.X.4, Promina 800	COTS MANUAL
029837-002	Quick Reference Guide, Promina 800	COTS MANUAL
500-628-200-01 (Rev 1)	Campus-Flex Interface Card Users Manual 150-1173-01	COTS MANUAL
500-601-100 (Rev 1)	Campus T-1 System User Manual 150-1150-01	COTS MANUAL
008820E3	Radio Line Interface Programmer's Manual	COTS MANUAL
008841 E001-A	Dispatch Console User's Guide	COTS MANUAL
806-0163-10 (Rev A)	Sun Ultra 10 with Preinstalled Software Guide	COTS MANUAL
805-7764-12 (Rev A)	Sun Ultra 10 Service Manual	COTS MANUAL
805-1797-10 (Rev A)	Sun PCI Adapter Installation and User's Guide	COTS MANUAL
805-7171-10 (Rev A)	Sun Keyboard and Mouse Guide	COTS MANUAL
805-3941-10 (Rev A)	Sun StorEdge UniPack User's Guide	COTS MANUAL
008421-V40-10	ISDN Gateway Exchange Users Guide SA9028-061	COTS MANUAL
TM 102330 (Rev 2.0)	Multi-Rate Voice Card Operation & Maintenance Manual	COTS MANUAL
TM 76.8210XX-F	Rack, Equip., Universal, Type 10	COTS MANUAL
TM 76.818021-E	Power Supply 8021	COTS MANUAL
TM 76-824001A	Line Amplifier Module 4001A User's Manual	COTS MANUAL
TM 76.814446A	Active Bridge Module 4446	COTS MANUAL
TM 76.814119/S-A	Echo Canceling Unit, 4119S	COTS MANUAL
TM 76-814410	Pad Transformer Module 4410	COTS MANUAL
36025366	Operator Instructions & Interface Requirements Setup KIV-19 Trunk Encryption Device (TED)	COTS MANUAL
4065544-0201	KIV-7HS, KG-84 COMSEC Module User's Guide	COTS MANUAL
TM 10-5411-207-24P	S-280 Shelter	COTS MANUAL
TM-10-8340-222-10	Tent, Modular Command Post Shelter	COTS MANUAL
TM-11-5805-804-13&P	Tactical Circuit Switch Maintenance Manual	COTS MANUAL
TM 11-5895-1576-13&P	Call Service Position Console Maintenance Manual	COTS MANUAL
	Digital Technical Control	

APPENDIX I

DTC Facility IETM Configuration Management Plan

1. All recommended changes to DTC Facility publications should be submitted to the Life Cycle Management Center (LCMC), Code 852, 814 Radford Boulevard, Albany, GA 31704-0320 in accordance with the procedures outlined in MCO P5215.17_. This includes recommended changes to IETMs, COTS manuals, Software Users Manuals (SUMs), and all other manuals included on the IETM CD-ROM. Information copies of NAVMC form 10772 will be provided to MARCORSYSCOM (C4ISRComm-R), DTC Logistician, MCB Quantico, VA 22134-5010.
2. During the annual review of IETMs, the WSM, Code 847-3, Albany, GA, shall ensure the validity of all manuals on the IETM CD-ROM. This review includes COTS manuals, other services technical manuals (Army, Air Force, Navy), and the SUMs. If new manuals are required to support this equipment the WSM will coordinate with MARCORSYSCOM (Code PSD) for the acquisition of the new publication and having it added to the Marine Corps Publication and Distribution System (MCPDS). Prior to requesting the publication be incorporated into the IETM CD-ROM, the WSM will notify Code 852 of the requirement.
3. MCTSSA is not responsible for requests from Marine Operating Forces to make changes to the SUM. MCTSSA will direct the user to submit changes via NAVMC form 10772 to LCMC (Code 852) who will enter the change request into the NAVMC form 10772 tracking program and provide a copy to Code 847-3. LCMC, Code 847-3, will then coordinate the resolution of the NAVMC form 10772 with LCMC, Code 852 and MCTSSA, Box 555171, CSD, DTC Project Officer, Camp Pendleton, CA 92055-5171. If the SUM requires updating, MCTSSA will author a revision document that will be sent to LCMC, Code 847-3, for inclusion in the next revision of the IETM CD-ROM.
4. If a change to the IETM CD-ROM is determined at any level to be such a critical nature that it is considered an emergency, the following procedures will be followed:
 - a. LCMC, Code 852, will receive the recommended change via the electronic NAVMC form 10772 and coordinate with the appropriate WSM.
 - b. If the change is deemed critical and requires immediate action to protect personnel and/or equipment, the WSM will follow established policy in issuing a WSM Alert. After the WSM Alert is issued to the Marine Operating Forces and the equipment dead lined (if needed), the WSM will follow up this action by either coordinating with LCMC, Code 852 for a publication change or Modification/Supply/Technical Instruction (as appropriate).
 - c. The changed manual or new instruction will be included in the next revision of the IETM.
5. When inserting changes to the IETM CD-ROM, file names of the documents contained on the CD will not change throughout the lifecycle of the IETM, no matter how many changes take

place. Changes or revised documents will be indicated on the first page of the document in the file.

APPENDIX J

Consumables

Listing of Supporting Consumables

NOMENCLATURE	P/N	U/I
Alcohol, Isopropyl		BT
Cloth, Cleaning (5 lb.)		BD
Detergent (5 lb.)		BX
Floppy Diskettes		BX
Lamp, Incandescent	A3151862	EA
Lamp, Incandescent Red		EA
Tape (Back-up Drive)	DDS-2	EA
Tape, Cleaning (Tape Drive)		EA
Toner Cartridge, HP2100M Printer	C4096A or C4097A	EA
Primer, Red	TPI-RD/MILA46106	
Adhesive, Sealant	TP-I-CL/MILA46106	
Sealing Compound	MILS22473/GR-A	BT
Sealing Compound	MILS22473/GR-C	BT
Sealing Compound	MILS22473/GR-BLUE	BT
Sealing Compound	MILS22473/GR-H	BT

APPENDIX K

Acronyms

APS	Application Program Sets
ATM	Asynchronous Transfer Mode
AUTODIN	Automatic Digital Network
BIT	Built-In-Test
BITE	Built-In-Test-Equipment
C ⁴ I	Command, Control, Communication, Computers, and Intelligence
CCA	Circuit Card Assembly
CCI	Controlled Cryptographic Item
CDI	Conventional Defense Initiative
CD-ROM	Compact Disk-Read Only Memory
CG	Commanding General
CMS	Communications Security Material System
COMMARCORSYSCOM	Commander, Marine Corps Systems Command
COMMARCORLOGBASES	Commander, Marine Corps Logistics Bases
COMSEC	Communications Security
CONUS	Continental United States
COTS	Commercial-off-the-Shelf
CLS	Contractor Logistics Support
CRLCMP	Computer Resources Life Cycle Management Plan
CRYPTO	Cryptographic
DAT	Digital Audio Tape
DCMS	Digital Communications Management System
DCS	Defense Courier Service
DIRNSA	Director, National Security Agency
DISN	Defense Information System Network
DOD	Department of Defense
DSU	Direct Support Unit
DTC	Digital Technical Control
EAF	Equipment Allowance File
ECU	Environmental Control Unit
ELMACO	Electronics Maintenance Company
ESD	Electrostatic Sensitive Device
ESH	Environmental, Safety, and Health
FMF	Fleet Marine Force
FOC	Full Operational Capability
FOT&E	Follow-On Test and Evaluation

FSSG	Force Service Support Group
GD-CS	General Dynamics-Communication Systems
GFM	Government Furnished Materiel
GOTS	Government-Off-The-Shelf
GPTE	General Purpose Test Equipment
GYSGT	Gunnery Sergeant
Hz	Hertz
I&KP	Instructor and Key Personnel
ICS	Interim Contractor Support
ID	Item Designator
IDS	Interface Design Specification
IETM	Interactive Electronic Technical Manuals
IIP	Initial Issue Provisioning
IOC	Initial Operational Capability
kW	Kilowatt
LAN	Local Area Network
LIFO	Last-In First-Out
LMIS	Logistics Management Information System
LO	Lubrication Order
LRU	Line Replaceable Unit
LTI	Limited Technical Inspection
MAGTF	Marine Air-Ground Task Force
MARCORSYSCOM	Marine Corps Systems Command
MARFORLANT	Marine Forces Atlantic
MARFORPAC	Marine Forces Pacific
MARFORRES	Marine Forces Reserve
MCCDC	Marine Corps Combat Development Command
MCCES	Marine Corps Communication-Electronics School
MCGERR	Marine Corps Ground Equipment Resource Reporting
MARCORLOGBASES	Marine Corps Logistics Bases
MCBul	Marine Corps Bulletin
MCO	Marine Corps Order
MCPDS	Marine Corps Publication Distribution System
MCTSSA	Marine Corps Tactical Systems Software Activity
MEF	Marine Expeditionary Force
MFT	Materiel Fielding Team
MIL-HDBK	Military Handbook
MIL-STD	Military Standard
MOS	Military Occupational Specialty
MGYSGT	Master Gunnery Sergeant

MTP	Manpower and Training Plan
MTVR	Medium Tactical Vehicle Replacement
NAVMC	Navy and Marine Corps
NDI	Non-developmental Items
NET	New Equipment Training
NIPRNET	Non-secure Internet Protocol Router Network
NRZ	Non-return-to-Zero
NSN	National Stock Number
OEM	Original Equipment Manufacturer
ORD	Operational Requirement Document
O&MMC	Operations and Maintenance Marine Corps
PDF	Portable Document Format
PDS	Practices Dangerous to Security
PDSS	Post Deployment Software Support
PLMS	Publication Locator Management System
PM	Program Manager
POA&M	Plan of Action and Milestones
POC	Point of Contact
POL	Petroleum, Oil, and Lubricants
POMCUS	Prepositioning of Materiel Configured to Unit Sets
PQDR	Product Quality Deficiency Report
ROD	Report of Discrepancy
SAC	Stores Account Code
SIPRNET	Secure Internet Protocol Router Network
SMU	SASSY Management Units
SPTE	Special Purpose Test Equipment
TAMCN	Table of Authorized Materiel Control Number
T/E	Table of Equipment
TECHCON	Technical Control
TDN	Tactical Data Network
TDS	Tactical Data System
TM	Technical Manual
TMDE	Test, Measurement, and Diagnostic Equipment
TMO	Traffic Management Office
T/O	Table of Organization
TP	Technical Publication
TPS	Test Program Sets
TPF	Total Package Fielding
TR	Technical Representative

UC	Unit Cost
ULSS	User's Logistics Support Summary
UI	Unit of Issue
USMC	United States Marine Corps
UURI	Using Unit Responsible Item
VAC	Volts, Alternating Current
WSSA	Weapons System Support Activity
WSM	Weapon System Manager