

# **MCO 1510.44C**

**Individual Training Standards (ITS)  
System for**

## **GROUND ELECTRONICS MAINTENANCE OCCUPATIONAL FIELD (OCCFLD) 28**



Signed 10 Jan 01  
W. E. GASKIN  
By direction

MARINE CORPS ORDER 1510.44C

From: Commandant of the Marine Corps  
To: Distribution List

Subj: INDIVIDUAL TRAINING STANDARDS (ITS) SYSTEM FOR GROUND ELECTRONICS MAINTENANCE  
OCCUPATIONAL FIELD (OCCFLD) 28

Ref: (a) MCO 1510.34A  
(b) MCO 1553.1B  
(c) MCO 1553.2  
(d) MCO 1553.3  
(e) MCO 3500.27

Encl: (1) Description of an Individual Training Standard  
(2) Management of Individual Training Standards  
(3) Summary/Index of Individual Training Standards  
(4) Common Individual Training Standards  
(5) Training Support  
(6) Individual Training Standards  
(7) Summary/Index of Individual Training Standards by Specific Category (MOJT,  
DL, PST)

1. Purpose. To publish revised Individual Training Standards (ITS) at enclosures (1) through (6) for OccFld 28.

2. Cancellation. MCO 1510.44B

3. Background

a. References (a) through (d) establish the system used to publish all training standards, provide policy, and assign training responsibilities, especially as applied to the Systems Approach to Training (SAT).

b. ITs establish the training requirements for all Marines in the same occupational field (OccFld), Military Occupational Specialty (MOS), or billet. They provide a foundation upon which unit commanders, Functional Learning Center (FLC) directors, and Distance Learning (DL) developers build training packages for individual Marines as part of unit training plans or formal courses of instruction.

c. ITs represent the skills that contribute to the unit mission as expressed in the Mission Performance Standards. Changes to doctrine or force structure or the introduction of new weapons or equipment may necessitate revision of this Order.

4. Summary of Revision. This Order has been revised in its entirety.

5. Information

a. ITs are used by unit commanders and school directors to design, develop, conduct, and evaluate the individual training of Marines. Unit commanders are responsible for the sustainment of all individual tasks that have been deemed, through analysis, to support the unit's Mission Essential Task List (METL). Unit commanders

can, therefore, use the tasks contained in this Order as the basis of individual training through Managed On-the-Job Training (MOJT), instruction in unit level schools, or incorporation in their training plans. School directors will derive Terminal Learning Objectives (TLO) and Enabling Learning Objectives (ELO) from the tasks, conditions, standards, and performance steps of each associated ITS. Task lists reported by formal schools on Course Descriptive Data (CDD) submissions will consist of tasks contained in this Order that are designated for training at the appropriate level in the formal school.

b. Commanders and formal schools must apply the Operational Risk Management (ORM) process contained in reference (e) during the design, conduct, and supervision of all individual and unit training.

6. Action

a. Commanding General, Marine Corps Combat Development Command (CG MCCDC)

(1) Ensure that all schools use this Order to train personnel to the standards required by grade and MOS.

(2) Ensure that the Marine Corps Institute (MCI) and the Training and Audiovisual Support Centers (TAVSC) provide standardized job aids and other training support requirements to facilitate training in units.

(3) Review, revise, and manage the upkeep of this Order in coordination with Operating Force and Supporting Establishment commanders and MOS/OccFld sponsors.

(4) Ensure the Combat Development Process identifies the impact on training, by MOS and ITS, of all new equipment.

(5) Ensure coordination with the Commander, Marine Corps Systems Command (COMMARCORSSYSCOM) to integrate the acquisition of new equipment into formal school training per the published ITs.

b. Commanding Generals of the Marine Forces and Supporting Establishment Commands and Commanders of Separate Organizations not Commanded by a General Officer

(1) Use this Order as the basis for individual training.

(2) Conduct MOJT programs and/or instruction in unit level schools to satisfy initial, sustainment, and refresher training requirements in so far as the tasks support unit mission requirements.

7. Submission of Recommendations and Requirements. Recommendations concerning the content of this Order are invited. Submit recommendations for additions, deletions, or modifications to CG MCCDC (C472) via the chain of command.

8. Reserve Applicability. This Order is applicable to the Marine Corps Reserve.

W. E. GASKIN  
By direction

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DESCRIPTION OF AN INDIVIDUAL TRAINING STANDARD

1. ITS Designator. Each ITS has a unique three-part identifier that represents the specific task, the duty area under which that task is included, and the MOS (or billet) with which it is associated. Each part is separated by periods. An example of an ITS Designator is 0311.02.08.

a. The first four positions ("0311" in the example above) represent the MOS or billet. For any ITS associated with an official MOS, the four digits must be identical to those assigned to the MOS in MCO P1200.7 (MOS Manual).

b. The middle two positions ("02" in the example above) represent the duty or functional area. Duty areas within a given MOS are assigned consecutive ascending Arabic numerals. Duty areas 1 through 9 are always preceded by a leading zero to allow for proper sorting. In the example above, "02" represents the second duty area under MOS 0311.

c. The last two positions ("08" in the example above) represent a specific task. Tasks within a specific duty or functional area are assigned consecutive ascending Arabic numerals. Tasks 1 through 9 are always preceded by a leading zero to allow for proper sorting. In the example above, "08" represents the eighth task within the second duty area under MOS 0311.

2. ITS Components. There are six basic components of an ITS, five of which are mandatory:

a. Task. The task describes a specific and necessary behavior expected of a Marine in a particular MOS or job. It is a clearly stated, performance-oriented action requiring a learned skill.

b. Condition(s). This portion of the ITS describes the equipment, manuals, assistance/supervision, special physical demands, environmental conditions, and location affecting a Marine's performance of the task under real-world circumstances.

c. Standard(s). This portion of the ITS describes the level of proficiency to which the individual must perform the task.

d. Performance Steps. Collectively, the performance steps represent the logical sequence of actions required of the Marine to perform the task to standard. These actions are typically detailed in the references.

e. References. References are doctrinal publications, technical manuals, and other publications upon which the ITS and its performance steps are based. They should be readily available and provide detail to the procedures that are only summarized in the performance steps.

f. Administrative Instructions (Optional). Administrative instructions provide the trainer/instructor with special required or recommended circumstances, including safety precautions, relating to the training or execution of the task. These instructions may also clarify the meaning of the task.

3. ITS Training

a. Initial Training Setting. All ITSs are assigned an Initial Training Setting that includes a specific location for initial instruction (Formal School or MOJT), level of training required at that location (Standard or Preliminary), a sustainment factor

ENCLOSURE (1)

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(number of months between evaluation or retraining to maintain the proficiency required by the standard), and a "Required By" rank (the lowest rank at which task proficiency is required).

b. Training Materiel (Optional). Training materiel includes all training devices, simulators, aids, equipment, and materials (except ammunition and Marine Corps Institute (MCI) publications) required or recommended to properly train the task under the specified conditions and to the specified standard.

c. Ammunition (Optional). This section includes any ammunition, explosives, and/or pyrotechnics required for proper training of the ITS.

d. Current MCI(s) (Optional). This section includes a list of any currently available MCI publications designed to provide training related to this task.

MANAGEMENT OF INDIVIDUAL TRAINING STANDARDS

1. ITS Use

a. ITSs form the basis for all individual training in formal schools and units. They are written for all MOSs in order to specify the critical skills required by units of their individual Marines in support of the unit's combat missions as defined in the unit's Mission Essential Task List (METL).

b. Formal school directors are responsible for reviewing all ITSs marked for initial training at the formal school. They must conduct courses of instruction on those ITSs appropriate for their student populations in terms of grade or rank. The task portion of each ITS taught in a given course must appear in the Task List (Item 24) of the CDD for that course. In accordance with SAT, a Program of Instruction (POI) must also be developed for the course.

c. ITSs provide measures of performance that can be used by unit commanders to diagnose individual deficiencies and design training. Noted deficiencies should be scheduled for remediation on training plans or through MOJT, as appropriate.

d. A Marine should continue to receive instruction on ITSs that support his unit's METL. Individual training cannot cease upon graduation from a formal school because formal schools cannot prepare every Marine to serve in every billet. Individuals should be given opportunities in the unit to gain experience and responsibility as quickly as possible.

2. ITS Maintenance

a. A relationship exists between ITSs and the threat to Marine forces. Changes in the threat often trigger corresponding changes in our weapons, equipment, or doctrine, which then necessitate producing new or updated training standards. Such action requires a team effort on the part of the operating forces, the formal schools, and staff agencies at both Headquarters, U.S. Marine Corps and the Marine Corps Combat Development Command (MCCDC).

b. ITSs are ultimately validated by unit commanders and school directors. Records of Proceedings (ROP) resulting from Course Content Review Boards (CCRB) conducted by formal schools are particularly well suited for recommending revisions. The ROP should contain a justification for each proposed addition, deletion, or change and should accompany any request to obtain authority to depart from the currently published ITSs. Unit commanders can recommend changes through participation in a school's CCRB or directly via the chain of command. Unless significant changes warrant earlier action, ITS orders are revised and republished on a 4-year cycle.

c. ITS management is a dynamic process involving user maintenance as the key to refining standards to best serve unit missions. ITS users should evaluate whether ITSs support or fail to support an MOS, and ITS components should be examined for realism and pertinence. Users are encouraged to submit recommended changes to published ITSs through the chain of command.

ENCLOSURE (2)

SUMMARY/INDEX OF INDIVIDUAL TRAINING STANDARDS

1. General. This enclosure is a summary listing of all ITS tasks grouped by MOS and Duty Area.

2. Format. The columns are as follows:

a. SEQ. Sequence Number. This number dictates the order in which tasks for a given duty area are displayed.

b. TASK. ITS Designator. This is the permanent designator assigned to the task when it is created.

c. TITLE. ITS Task Title.

d. CORE. An "X" appears in this column when the task is designated as a "core" task required to "make" a Marine and qualify that Marine for the appropriate MOS. The absence of an "X" indicates that this is an advanced ("core plus") task that is mission, grade, or billet specific.

e. FLC. Functional Learning Center. An "X" appears in this column when the FLC is designated as the initial training setting. The absence of an "X" indicates that the initial training is accomplished through Managed On-The-Job Training (MOJT).

f. DL. Distance Learning Product. An "X" in this column indicates that at least one DL product is associated with this task. Consult enclosure (6) for details.

g. PST. Performance Support Tool. An "X" in this column indicates that at least one PST is associated with this task. Consult enclosure (6) for details.

h. SUS. Sustainment Training Period. An entry in this column represents the number of months between evaluation or retraining by the unit to maintain the proficiency required by the standard, provided the task supports the unit's METL.

i. REQ BY. Required By. An entry in this column depicts the lowest grade required to demonstrate proficiency in this task.

j. PAGE. Page Number. This column lists the number of the page in enclosure (6) that contains detailed information concerning this task.

<u>SEQ</u>	<u>TASK</u>	<u>TITLE</u>	<u>CORE</u>	<u>FLC</u>	<u>DL</u>	<u>PST</u>	<u>SUS</u>	<u>REQ BY</u>	<u>PAGE</u>
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MOS 2800, BASIC DATA/COMMUNICATIONS MAINTENANCE MARINE

DUTY AREA 01 - MAINTENANCE PLANNING

1)	2800.01.01	RECOMMEND TO/E CHANGES						12 SSgt	6-A-1
2)	2800.01.02	DRAFT UNIT'S MAINTENANCE POLICY LETTERS						12 SSgt	6-A-1
3)	2800.01.03	PLAN DEPLOYMENT/INSTALLATION OF A FIELD MAINTENANCE FACILITY			X			12 SSgt	6-A-2

DUTY AREA 02 - MAINTENANCE ADMINISTRATION

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SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
1)	2800.02.01	COMPLETE AN EQUIPMENT REPAIR ORDER (ERO)/ASSET TRACKING LOGISTIC AUTOMATED SUPPLY SYSTEM (ATLASS) WORK ORDER (WO)	X	X	X		12	Pvt		6-A-4
2)	2800.02.02	REQUISITION REQUIRED PARTS	X	X	X		12	Pvt		6-A-4
3)	2800.02.03	MANAGE MAINTENANCE SHOP PROGRAMS	X	X	X		12	Sgt		6-A-5
4)	2800.02.04	ANALYZE MAINTENANCE INFORMATION SYSTEM (MIS) DATA			X		12	Cpl		6-A-6
5)	2800.02.05	ADMINISTER PRE-EXPENDED BIN CONTROL PROGRAM					12	LCpl		6-A-7
6)	2800.02.06	ADMINISTER CALIBRATION CONTROL PROGRAM					12	LCpl		6-A-8
7)	2800.02.07	ADMINISTER MODIFICATION CONTROL PROGRAM					12	LCpl		6-A-9
8)	2800.02.08	ADMINISTER TOOL CONTROL PROGRAM					12	LCpl		6-A-9
9)	2800.02.09	ADMINISTER PUBLICATION CONTROL PROGRAM			X		12	LCpl		6-A-10
10)	2800.02.10	MAINTAIN EQUIPMENT RECORD JACKET ON ORGANIC MAINTENANCE EQUIPMENT					12	LCpl		6-A-11
11)	2800.02.11	REPORT QUALITY DEFICIENCY					12	LCpl		6-A-12
12)	2800.02.12	ADMINISTER COMMUNICATION-ELECTRONIC MAINTENANCE SHOP PROCEDURES			X		12	Sgt		6-A-13
13)	2800.02.13	MAINTAIN PREVENTIVE MAINTENANCE SCHEDULE					12	LCpl		6-A-14
14)	2800.02.14	ADMINISTER QUALITY CONTROL PROGRAM					12	Sgt		6-A-14
15)	2800.02.15	SUBMIT CHANGE TO TECHNICAL PUBLICATIONS					12	Pvt		6-A-15
16)	2800.02.16	ADMINISTER ELECTROMAGNETIC ENVIRONMENTAL EFFECTS (E3) PROGRAM					12	Cpl		6-A-15

DUTY AREA 03 - MAINTENANCE ACTIONS

1)	2800.03.01	PERFORM SOLDERING ON BASIC ELECTRONIC COMPONENTS	X	X			12	Pvt		6-A-17
2)	2800.03.02	PROTECT ELECTROSTATIC DISCHARGE (ESD) SENSITIVE DEVICES DURING HANDLING, STORAGE, AND TRANSPORTATION	X	X			12	Pvt		6-A-17
3)	2800.03.03	TEST GROUND COMMUNICATIONS/ELECTRONIC EQUIPMENT	X	X	X		12	Pvt		6-A-18
4)	2800.03.04	PERFORM LIMITED TECHNICAL INSPECTION (LTI) ON GROUND COMMUNICATIONS/ELECTRONIC EQUIPMENT					12	Pvt		6-A-19
5)	2800.03.05	DEPLOY A FIELD MAINTENANCE ACTIVITY					12	SSgt		6-A-20
6)	2800.03.06	DETERMINE MAINTENANCE SUPPORT REQUIREMENTS					12	Sgt		6-A-21
7)	2800.03.07	DIRECT MAINTENANCE ACTIONS					12	Sgt		6-A-21
8)	2800.03.08	PREPARE FOR EQUIPMENT EMBARKATION					12	Cpl		6-A-22

DUTY AREA 04 - MAINTENANCE OPERATIONS

1)	2800.04.01	INSTALL ELECTROMAGNETIC INTERFERENCE (EMI) MAINTENANCE SHELTER FOR FIELD USE					12	LCpl		6-A-24
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DUTY AREA 05 - MAINTENANCE TRAINING

1)	2800.05.01	CONDUCT TRAINING FOR COMMUNICATIONS MAINTENANCE PERSONNEL					12	Sgt		6-A-25
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ENCLOSURE (3)

SEQ TASK                      TITLE    CORE FLC DL   PST   SUS   REQ   BY   PAGE  
MOS 2802, ELECTRONICS MAINTENANCE OFFICER (GROUND)

DUTY AREA 01 - MAINTENANCE PLANNING

- |    |            |   |  |          |       |
|----|------------|---|--|----------|-------|
| 1) | 2802.01.01 | PLAN FOR DEPLOYMENT OF A MAINTENANCE UNIT   |  | 12 Capt  | 6-B-1 |
| 2) | 2802.01.02 | MANAGE C4 CONTRACTOR LOGISTICAL SUPPORT (CLS) PROGRAM FOR THE MARINE CORPS  |  | 12 Capt  | 6-B-2 |
| 3) | 2802.01.03 | PERFORM THE DUTIES OF AN ELECTRONICS MAINTENANCE OFFICER FOR MARINE EXPEDITIONARY FORCE/MAJOR SUBORDINATE COMMAND (MSC) HQS |  | 12 Capt  | 6-B-3 |
| 4) | 2802.01.04 | MANAGE STAFF OF ACQUISITION AND EQUIPMENT SPECIALISTS FOR SECTION OF MARINE CORPS SYSTEMS COMMAND (MARCORSYSCOM)            |  | 12 Capt  | 6-B-3 |
| 5) | 2802.01.05 | PERFORM THE DUTIES OF AN ELECTRONICS MAINTENANCE MANAGEMENT OFFICER FOR INSTALLATIONS & LOGISTICS (I&L)                     |  | 12 Maj   | 6-B-4 |
| 6) | 2802.01.06 | PERFORM THE DUTIES OF AN ELECTRONIC MAINTENANCE REQUIREMENTS OFFICER  |  | 12 Maj   | 6-B-5 |
| 7) | 2802.01.07 | COMMAND AN ELECTRONICS MAINTENANCE COMPANY, SERVICE COMPANY, OR SCHOOLHOUSE TRAINING COMPANY                                |  | 12 Maj   | 6-B-5 |
| 8) | 2802.01.08 | SPONSOR 2800 OCCUPATIONAL FIELD   |  | 12 LtCol | 6-B-6 |

DUTY AREA 02 - MAINTENANCE ADMINISTRATION

- |    |            |   |   |         |       |
|----|------------|---|---|---------|-------|
| 1) | 2802.02.01 | SUPERVISE ELECTRONIC MAINTENANCE SUPPORT PROGRAMS | X | 12 Capt | 6-B-8 |
| 2) | 2802.02.02 | SUPERVISE MAINTENANCE PRODUCTION                  |   | 12 Capt | 6-B-8 |
| 3) | 2802.02.03 | PREPARE A BUDGET                                  |   | 12 Capt | 6-B-9 |

DUTY AREA 03 - MAINTENANCE ACTIONS

- |    |            |   |  |         |        |
|----|------------|---|--|---------|--------|
| 1) | 2802.03.01 | SUPERVISE COMMUNICATION-ELECTRONIC MAINTENANCE                          |  | 12 Capt | 6-B-11 |
| 2) | 2802.03.02 | BRIEF COMMANDER ON EQUIPMENT READINESS OF A MAINTENANCE/SERVICE COMPANY |  | 12 Capt | 6-B-11 |

DUTY AREA 04 - MAINTENANCE OPERATIONS

- |    |            |   |  |         |        |
|----|------------|---|--|---------|--------|
| 1) | 2802.04.01 | SUPERVISE THE DEPLOYMENT OF A FIELD MAINTENANCE ACTIVITY                      |  | 12 Capt | 6-B-13 |
| 2) | 2802.04.02 | SUPERVISE OPERATIONS AND MAINTENANCE OF INTERGRATED TELECOMMUNICATIONS SYSTEM |  | 12 Capt | 6-B-13 |

DUTY AREA 05 - MAINTENANCE TRAINING

- |    |            |   |  |         |        |
|----|------------|---|--|---------|--------|
| 1) | 2802.05.01 | SUPERVISE TRAINING FOR COMMUNICATIONS MAINTENANCE PERSONNEL |  | 12 Capt | 6-B-15 |
|----|------------|---|--|---------|--------|



<u>SEQ</u>	<u>TASK</u>	<u>TITLE</u>	<u>CORE</u>	<u>FLC</u>	<u>DL</u>	<u>PST</u>	<u>SUS</u>	<u>REQ</u>	<u>BY</u>	<u>PAGE</u>
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DUTY AREA 04 - MAINTENANCE OPERATIONS

- |    |            |   |   |   |  |  |  |    |     |       |
|----|------------|---|---|---|--|--|--|----|-----|-------|
| 1) | 2810.04.01 | SUPERVISE TACTICAL AUTOMATED SWITCHING SYSTEM (TASS) DEPLOYMENT       | X | X |  |  |  | 12 | WO1 | 6-D-6 |
| 2) | 2810.04.02 | DIRECT OPERATIONS/MAINTENANCE OF INTEGRATED TELECOMMUNICATIONS SYSTEM | X | X |  |  |  | 12 | WO1 | 6-D-6 |

DUTY AREA 05 - MAINTENANCE TRAINING

- |    |            |   |   |   |  |  |  |    |     |       |
|----|------------|---|---|---|--|--|--|----|-----|-------|
| 1) | 2810.05.01 | DIRECT WIRE/CONSTRUCTION PLATOON/SECTION TRAINING | X | X |  |  |  | 12 | WO1 | 6-D-8 |
|----|------------|---|---|---|--|--|--|----|-----|-------|

MOS 2822, ELECTRONIC SWITCHING EQUIPMENT TECHNICIAN

DUTY AREA 03 - MAINTENANCE ACTIONS

- |    |            |   |   |   |   |  |  |    |      |       |
|----|------------|---|---|---|---|--|--|----|------|-------|
| 1) | 2822.03.01 | DIAGNOSE BASIC ELECTRONIC CIRCUITS  | X | X | X |  |  | 12 | Pvt  | 6-E-3 |
| 2) | 2822.03.02 | PERFORM CORRECTIVE MAINTENANCE ON ELECTRONIC DIGITAL SWITCHING EQUIPMENT            | X | X |   |  |  | 12 | Pvt  | 6-E-4 |
| 3) | 2822.03.03 | PERFORM ADVANCED CORRECTIVE MAINTENANCE ON ELECTRONIC DIGITAL SWITCHING EQUIPMENT   | X | X |   |  |  | 12 | Sgt  | 6-E-5 |
| 4) | 2822.03.04 | PERFORM CERTIFICATION PROCEDURES ON KGX-93 AND KT-83                                |   |   |   |  |  | 12 | Pvt  | 6-E-7 |
| 5) | 2822.03.05 | PERFORM CORRECTIVE MAINTENANCE ON COMMERCIAL ELECTRONIC DIGITAL SWITCHING EQUIPMENT |   |   |   |  |  | 12 | LCpl | 6-E-8 |
| 6) | 2822.03.06 | PERFORM LIMITED MAINTENANCE ON COMSEC EQUIPMENT USED IN DIGITAL SWITCHING SYSTEMS   |   |   |   |  |  | 12 | Pvt  | 6-E-9 |

DUTY AREA 04 - MAINTENANCE OPERATIONS

- |    |            |  |   |   |  |  |  |    |     |        |
|----|------------|--|---|---|--|--|--|----|-----|--------|
| 1) | 2822.04.01 | PROVIDE TECHNICAL ASSISTANCE DURING THE INSTALLATION OF ELECTRONIC DIGITAL SWITCHING EQUIPMENT | X | X |  |  |  | 12 | Pvt | 6-E-11 |
|----|------------|--|---|---|--|--|--|----|-----|--------|

MOS 2823, TECHNICAL CONTROLLER

DUTY AREA 01 - MAINTENANCE PLANNING

- |    |            |   |   |   |  |  |  |    |     |       |
|----|------------|---|---|---|--|--|--|----|-----|-------|
| 1) | 2823.01.01 | ASSIST COMMUNICATIONS CHIEF IN EVALUATING THE COMMUNICATIONS PLAN | X | X |  |  |  | 12 | Sgt | 6-F-1 |
|----|------------|---|---|---|--|--|--|----|-----|-------|

DUTY AREA 03 - MAINTENANCE ACTIONS

- |    |            |   |   |   |   |  |  |    |     |       |
|----|------------|---|---|---|---|--|--|----|-----|-------|
| 1) | 2823.03.01 | REPAIR FAULTS OR DEGRADATION IN COMMUNICATION NETWORKS  | X | X | X |  |  | 12 | Sgt | 6-F-3 |
| 2) | 2823.03.02 | PERFORM CORRECTIVE MAINTENANCE ON DIGITAL TECHNICAL CONTROL (DTC) FACILITY TO THE LINE REPLACEABLE UNIT (LRU) AND CHASSIS MOUNTED COMPONENT LEVEL | X | X | X |  |  | 12 | Sgt | 6-F-5 |

ENCLOSURE (3)



<u>SEQ TASK</u>	<u>TITLE</u>	<u>CORE</u>	<u>FLC</u>	<u>DL</u>	<u>PST</u>	<u>SUS</u>	<u>REQ</u>	<u>BY</u>	<u>PAGE</u>
<u>DUTY AREA 03 - MAINTENANCE ACTIONS</u>									
1) 2832.03.01	PERFORM CORRECTIVE MAINTENANCE ON MULTICHANNEL RADIO SYSTEMS LINE REPLACEABLE UNITS (LRU'S) TO THE SECONDARY REPLACEABLE UNIT (SRU) OR CHASSIS MOUNTED COMPONENT LEVEL	X	X				12	Pvt	6-J-3
2) 2832.03.02	PERFORM ADVANCED CORRECTIVE MAINTENANCE ON MULTICHANNEL RADIO SYSTEMS	X	X				12	Sgt	6-J-4

MOS 2833, FLEET SATELLITE TERMINAL TECHNICIAN

<u>DUTY AREA 03 - MAINTENANCE ACTIONS</u>									
1) 2833.03.01	PERFORM CORRECTIVE MAINTENANCE ON FLEET SATELLITE TERMINAL EQUIPMENT	X	X	X			12	Sgt	6-K-3
2) 2833.03.02	PERFORM LIMITED MAINTENANCE ON COMSEC EQUIPMENT USED IN FLEET SATELLITE TERMINAL SYSTEMS						12	Sgt	6-K-4

DUTY AREA 04 - MAINTENANCE OPERATIONS

1) 2833.04.01	PROVIDE TECHNICAL ASSISTANCE DURING THE INSTALLATION OF FLEET SATELLITE TERMINAL EQUIPMENT	X	X				12	Sgt	6-K-6
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MOS 2834, SATELLITE COMMUNICATIONS TECHNICIAN

<u>DUTY AREA 03 - MAINTENANCE ACTIONS</u>									
1) 2834.03.01	PERFORM CORRECTIVE MAINTENANCE ON GROUND MOBILE FORCES (GMF) SATCOM EQUIPMENT TO THE COMPONENT LEVEL	X	X				12	Sgt	6-L-3
2) 2834.03.02	PERFORM LIMITED MAINTENANCE ON COMSEC EQUIPMENT USED IN GROUND MOBILE FORCES (GMF) SATCOM SYSTEMS						12	Sgt	6-L-4

DUTY AREA 04 - MAINTENANCE OPERATIONS

1) 2834.04.01	PROVIDE TECHNICAL ASSISTANCE DURING THE INSTALLATION OF GROUND MOBILE FORCES (GMF) SATCOM EQUIPMENT	X	X				12	Sgt	6-L-6
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MOS 2842, ENHANCED POSITION LOCATION REPORTING SYSTEM (EPLRS) MAINTENANCE TECHNICIAN

DUTY AREA 01 - PLANNING

1) 2842.01.01	PLAN AN/TSQ-158(V)4 ENHANCED POSITION LOCATION REPORTING SYSTEM (EPLRS) MASTER STATION MAINTENANCE SUPPORT	X	X				12	Sgt	6-M-1
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MCO 1510.44C  
10 JAN 01

SEQ TASK TITLE CORE FLC DL PST SUS REQ BY PAGE

DUTY AREA 03 - MAINTENANCE ACTIONS

1) 2842.03.01	DIRECT THE INSTALLATION OF THE ENHANCED POSITION LOCATION REPORTING SYSTEM (EPLRS) NET CONTROL STATION (NCS)	X	X		12 Sgt	6-M-3
2) 2842.03.02	INITIALIZE THE EPLRS NCS		X	X	12 Sgt	6-M-4
3) 2842.03.03	PERFORM CORRECTIVE MAINTENANCE ON EPLRS NCS	X	X		12 Sgt	6-M-4

DUTY AREA 04 - OPERATIONS

1) 2842.04.01	PROVIDE TECHNICAL ASSISTANCE DURING THE INSTALLATION OF ENHANCED POSITION LOCATION REPORTING SYSTEM (EPLRS) AND THE EPLRS NCS	X	X		12 Sgt	6-M-7
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MOS 2844, GROUND COMMUNICATIONS ORGANIZATIONAL REPAIRER

DUTY AREA 03 - MAINTENANCE ACTIONS

1) 2844.03.01	PERFORM SINGLE CHANNEL RADIOS (SCR) SYSTEMS TROUBLESHOOTING	X	X		12 Pvt	6-N-3
2) 2844.03.02	PERFORM TACTICAL TELEPHONE SYSTEMS TROUBLESHOOTING	X	X		12 Pvt	6-N-4
3) 2844.03.03	PERFORM CORRECTIVE MAINTENANCE ON TACTICAL SWITCHBOARDS TO THE LINE REPLACEABLE UNIT (LRU) LEVEL	X	X		12 Pvt	6-N-5
4) 2844.03.04	PERFORM CORRECTIVE MAINTENANCE ON SINGLE CHANNEL RADIOS (SCR) TO THE LINE REPLACEABLE UNIT (LRU) LEVEL	X	X		12 Pvt	6-N-6
5) 2844.03.05	PERFORM CORRECTIVE MAINTENANCE ON TACTICAL TELEPHONES TO THE LINE REPLACEABLE UNIT (LRU) LEVEL	X	X		12 Pvt	6-N-7
6) 2844.03.06	PERFORM CORRECTIVE MAINTENANCE ON AN/MRC-142 TO THE LINE REPLACEABLE UNIT (LRU) LEVEL			X	12 Pvt	6-N-8

DUTY AREA 04 - MAINTENANCE OPERATIONS

1) 2844.04.01	PROVIDE TECHNICAL ASSISTANCE DURING THE INSTALLATION OF GROUND COMMUNICATIONS EQUIPMENT	X	X		12 Pvt	6-N-10
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MOS 2846, GROUND ELECTRONICS INTERMEDIATE REPAIRER

DUTY AREA 03 - MAINTENANCE ACTIONS

1) 2846.03.01	DIAGNOSE BASIC ELECTRONIC CIRCUITS	X	X	X	12 Pvt	6-O-3
2) 2846.03.02	PERFORM CORRECTIVE MAINTENANCE ON SINGLE CHANNEL RADIO (SCR) LINE REPLACEABLE UNITS (LRU) TO THE SECONDARY REPLACEABLE UNIT (SRU) OR CHASSIS MOUNTED COMPONENT LEVEL	X	X		12 Pvt	6-O-4
3) 2846.03.03	PERFORM CORRECTIVE MAINTENANCE ON AN/MRC-142 LINE REPLACEABLE UNITS (LRU)			X	12 Pvt	6-O-6

ENCLOSURE (3)

<u>SEQ TASK</u>	<u>TITLE</u>	<u>CORE</u>	<u>FLC</u>	<u>DL</u>	<u>PST</u>	<u>SUS</u>	<u>REQ</u>	<u>BY</u>	<u>PAGE</u>
	TO THE SECONDARY REPLACEABLE UNIT (SRU) OR CHASSIS MOUNTED COMPONENT LEVEL								

MOS 2847, TELEPHONE SYSTEMS/PERSONAL COMPUTER INTERMEDIATE REPAIRER

DUTY AREA 03 - MAINTENANCE ACTIONS

1)	2847.03.01	DIAGNOSE BASIC ELECTRONIC CIRCUITS	X	X	X		12	Pvt	6-P-3
2)	2847.03.02	PERFORM CORRECTIVE MAINTENANCE ON TACTICAL TELEPHONES AND SWITCHBOARD LINE REPLACEABLE UNITS (LRU) TO THE SECONDARY REPLACEABLE UNIT (SRU) LEVEL OR CHASSIS MOUNTED COMPONENT LEVEL	X	X			12	Pvt	6-P-4
3)	2847.03.03	PERFORM CORRECTIVE MAINTENANCE ON COMPUTER EQUIPMENT	X	X			12	Pvt	6-P-6
4)	2847.03.04	PERFORM CORRECTIVE MAINTENANCE ON COMPUTER PERIPHERAL EQUIPMENT	X	X			12	Pvt	6-P-7
5)	2847.03.05	PERFORM CORRECTIVE MAINTENANCE ON STAND ALONE TACTICAL POWER SUPPLIES TO THE PIECE PART COMPONENT LEVEL	X	X			12	Pvt	6-P-8
6)	2847.03.06	PERFORM CORRECTIVE MAINTENANCE ON FIBER OPTIC CABLE	X	X			12	Pvt	6-P-10

MOS 2848, TACTICAL REMOTE SENSOR SYSTEM MAINTENANCE TECHNICIAN

DUTY AREA 03 - MAINTENANCE ACTIONS

1)	2848.03.01	PERFORM CORRECTIVE MAINTENANCE ON TACTICAL REMOTE SENSOR SYSTEM (TRSS)	X	X			12	Pvt	6-Q-3
2)	2848.03.02	PERFORM CORRECTIVE MAINTENANCE ON TRSS LINE REPLACEABLE UNITS (LRU) TO THE SECONDARY REPLACEABLE UNIT (SRU) OR CHASSIS MOUNTED COMPONENT LEVEL	X	X			12	Pvt	6-Q-4

DUTY AREA 04 - MAINTENANCE OPERATIONS

1)	2848.04.01	PROVIDE TECHNICAL ASSISTANCE DURING THE INSTALLATION OF THE TACTICAL REMOTE SENSOR SYSTEM (TRSS)	X	X			12	Pvt	6-Q-6
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MOS 2862, ELECTRONICS MAINTENANCE TECHNICIAN

DUTY AREA 03 - MAINTENANCE ACTIONS

1)	2862.03.01	PERFORM ADVANCED CORRECTIVE MAINTENANCE ON SINGLE CHANNEL RADIOS (SCR) AND ANCILLARY EQUIPMENT TO THE PIECE PART COMPONENT LEVEL	X	X			12	Sgt	6-R-3
2)	2862.03.02	PERFORM ADVANCED CORRECTIVE MAINTENANCE ON TACTICAL TELEPHONES, SWITCHBOARDS, AND ANCILLARY EQUIPMENT TO THE PIECE PART COMPONENT LEVEL	X	X			12	Sgt	6-R-5

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<u>SEQ TASK</u>	<u>TITLE</u>	<u>CORE</u>	<u>FLC</u>	<u>DL</u>	<u>PST</u>	<u>SUS</u>	<u>REQ</u>	<u>BY</u>	<u>PAGE</u>
3) 2862.03.03	PERFORM ADVANCED CORRECTIVE MAINTENANCE ON COMPUTERS AND PERIPHERAL EQUIPMENT TO THE PIECE PART COMPONENT LEVEL	X	X			12	Sgt		6-R-7

DUTY AREA 04 - MAINTENANCE OPERATIONS

1) 2862.04.01	PROVIDE ADVANCED TECHNICAL ASSISTANCE DURING THE INSTALLATION OF GROUND COMMUNICATIONS EQUIPMENT	X	X			12	Sgt		6-R-9
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MOS 2867, AN/TSC-120 RADIO TECHNICIAN

DUTY AREA 03 - MAINTENANCE ACTIONS

1) 2867.03.01	PERFORM CORRECTIVE MAINTENANCE ON AN/TSC-120 RADIO EQUIPMENT	X	X	X		12	Pvt		6-S-3
2) 2867.03.02	PERFORM CORRECTIVE MAINTENANCE ON AN/TSC-120 LINE REPLACEABLE UNITS (LRU) TO THE SECONDARY REPLACEABLE UNIT (SRU) OR CHASSIS MOUNTED COMPONENT LEVEL	X	X			12	Pvt		6-S-4
3) 2867.03.03	PERFORM LIMITED MAINTENANCE ON COMSEC EQUIPMENT USED IN AN/TSC-120					12	Pvt		6-S-6

DUTY AREA 04 - MAINTENANCE OPERATIONS

1) 2867.04.01	PROVIDE TECHNICAL ASSISTANCE DURING THE INSTALLATION OF AN/TSC-120 RADIO EQUIPMENT	X	X			12	Pvt		6-S-8
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MOS 2871, TEST MEASUREMENT AND DIAGNOSTIC EQUIPMENT TECHNICIAN

DUTY AREA 02 - MAINTENANCE ADMINISTRATION

1) 2871.02.01	COMPLETE CALIBRATION MAINTENANCE FORMS AND DOCUMENTS	X	X			12	Pvt		6-T-2
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DUTY AREA 03 - MAINTENANCE ACTIONS

1) 2871.03.01	TROUBLESHOOT TEST MEASUREMENT AND DIAGNOSTIC EQUIPMENT/GENERAL PURPOSE TEST EQUIPMENT (TMDE/GPTE)	X	X	X		12	Pvt		6-T-3
2) 2871.03.02	REPAIR TMDE/GPTE	X	X	X		12	Pvt		6-T-4
3) 2871.03.03	VERIFY ACCURACY OF TMDE/GPTE	X	X			12	Pvt		6-T-5
4) 2871.03.04	ADJUST TMDE/GPTE	X	X			12	Pvt		6-T-6

MOS 2874, METROLOGY TECHNICIAN

DUTY AREA 01 - MAINTENANCE PLANNING

1) 2874.01.01	PLAN METROLOGY EQUIPMENT MAINTENANCE SUPPORT	X	X			12	Sgt		6-U-1
2) 2874.01.02	PLAN TEST MEASUREMENT AND DIAGNOSTIC EQUIPMENT (TMDE) MAINTENANCE SUPPORT	X	X			12	Sgt		6-U-2
3) 2874.01.03	MANAGE STANDARDS TRACEABILITY PROGRAM	X				12	Sgt		6-U-3

ENCLOSURE (3)

<u>SEQ TASK</u>	<u>TITLE</u>	<u>CORE</u>	<u>FLC</u>	<u>DL</u>	<u>PST</u>	<u>SUS</u>	<u>REQ</u>	<u>BY</u>	<u>PAGE</u>
<u>DUTY AREA 03 - MAINTENANCE ACTIONS</u>									
1)	2874.03.01 TROUBLESHOOT TEST MEASUREMENT AND DIAGNOSTIC EQUIPMENT (TMDE)	X	X	X			12	Sgt	6-U-5
2)	2874.03.02 REPAIR TMDE	X	X	X			12	Sgt	6-U-7
3)	2874.03.03 VERIFY ACCURACY OF TMDE	X	X				12	Sgt	6-U-9
4)	2874.03.04 ADJUST TMDE	X	X				12	Sgt	6-U-11
5)	2874.03.05 VERIFY ACCURACY OF CALIBRATION FACILITY STANDARD	X	X				12	Sgt	6-U-13
6)	2874.03.06 ADJUST CALIBRATION FACILITY STANDARD	X	X				12	Sgt	6-U-13

DUTY AREA 04 - MAINTENANCE OPERATIONS

1)	2874.04.01 DEPLOY CALIBRATION MAINTENANCE FACILITY	X	X				12	Sgt	6-U-15
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MOS 2881, MICROMINIATURE AND AUTOMATIC TEST EQUIPMENT TECHNICIAN

DUTY AREA 03 - MAINTENANCE ACTIONS

1)	2881.03.01 PERFORM PREVENTIVE MAINTENANCE ON THE MICROMINIATURE SOLDERING STATION (2M WORKSTATION)	X	X				12	Pvt	6-V-3
2)	2881.03.02 PERFORM CORRECTIVE MAINTENANCE ON ELECTRONIC COMPONENTS/CIRCUITS UTILIZING THE 2M WORKSTATION	X	X	X			12	Pvt	6-V-4
3)	2881.03.03 PERFORM CORRECTIVE MAINTENANCE ON CIRCUIT CARD ASSEMBLIES	X	X	X			12	Pvt	6-V-5
4)	2881.03.04 PERFORM CORRECTIVE MAINTENANCE ON COMMUNICATION SECURITY EQUIPMENT	X	X				12	Pvt	6-V-6
5)	2881.03.05 PREPARE AUTOMATED TEST EQUIPMENT (ATE) FOR OPERATION	X	X				12	Pvt	6-V-8
6)	2881.03.06 PERFORM CORRECTIVE MAINTENANCE ON THE 2M WORKSTATION	X	X				12	Pvt	6-V-9
7)	2881.03.07 CREATE A SILVER DISK	X	X				12	Pvt	6-V-10

DUTY AREA 04 - MAINTENANCE OPERATIONS

1)	2881.04.01 PROVIDE TECHNICAL ASSISTANCE DURING THE INSTALLATION OF COMMUNICATION SECURITY EQUIPMENT	X	X				12	Pvt	6-V-12
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MOS 2884, GROUND RADAR REPAIRER

DUTY AREA 03 - MAINTENANCE ACTIONS

1)	2884.03.01 PERFORM CORRECTIVE MAINTENANCE ON GROUND RADAR EQUIPMENT	X	X	X			12	Pvt	6-W-3
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MOS 2887, GROUND ARTILLERY ELECTRONICS TECHNICIAN

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10 JAN 01

<u>SEQ TASK</u>	<u>TITLE</u>	<u>CORE</u>	<u>FLC</u>	<u>DL</u>	<u>PST</u>	<u>SUS</u>	<u>REQ</u>	<u>BY</u>	<u>PAGE</u>
<u>DUTY AREA 03 - MAINTENANCE ACTIONS</u>									
1)	2887.03.01	PERFORM CORRECTIVE MAINTENANCE ON THE FIREFINDER RADAR (FFR) TO THE LINE REPLACEABLE UNIT (LRU) LEVEL	X	X	X		12	Pvt	6-X-3
2)	2887.03.02	PERFORM CORRECTIVE MAINTENANCE ON METEOROLOGICAL MEASURING SYSTEM (MMS) TO THE LRU LEVEL	X	X	X		12	Pvt	6-X-4
3)	2887.03.03	PERFORM CORRECTIVE MAINTENANCE ON THE MUZZLE VELOCITY SYSTEM (MVS) TO THE LRU LEVEL	X	X	X		12	Pvt	6-X-5
4)	2887.03.04	PERFORM CORRECTIVE MAINTENANCE ON ARTILLERY ELECTRONIC EQUIPMENT TO THE SECONDARY REPLACEABLE UNIT (SRU) OR CHASSIS MOUNTED COMPONENT LEVEL	X	X	X		12	Pvt	6-X-7
5)	2887.03.05	PERFORM CORRECTIVE MAINTENANCE ON ARTILLERY ELECTRONIC EQUIPMENT SRU TO THE PIECE PART COMPONENT LEVEL	X	X	X		12	Pvt	6-X-8
6)	2887.03.06	PERFORM CORRECTIVE MAINTENANCE ON THE GUN DIRECTION UNIT (GDU) TO THE LRU LEVEL					12	Pvt	6-X-10
7)	2887.03.07	PERFORM CORRECTIVE MAINTENANCE ON THE POSITION AZIMUTH DETERMINING SYSTEM (PADS) TO THE LRU LEVEL					12	Pvt	6-X-11
8)	2887.03.08	PERFORM ADVANCED CORRECTIVE MAINTENANCE ON ARTILLERY ELECTRONIC EQUIPMENT TO THE PIECE PART COMPONENT LEVEL					12	Sgt	6-X-12
<u>DUTY AREA 04 - MAINTENANCE OPERATIONS</u>									
1)	2887.04.01	PROVIDE TECHNICAL ASSISTANCE DURING THE INSTALLATION OF ARTILLERY ELECTRONIC EQUIPMENT	X	X			12	Pvt	6-X-14
2)	2887.04.02	PROVIDE GUIDANCE FOR THE OPERATION OF ARTILLERY ELECTRONIC TEST EQUIPMENT			X		12	Sgt	6-X-15
<u>MOS 2891, ELECTRONICS MAINTENANCE CHIEF</u>									
<u>DUTY AREA 01 - MAINTENANCE PLANNING</u>									
1)	2891.01.01	ASSIST IN THE PLANNING FOR DEPLOYMENT OF A FIELD MAINTENANCE ACTIVITY	X	X	X		12	MSgt	6-Y-1
2)	2891.01.02	DRAFT DATA/COMMUNICATIONS-ELECTRONIC MAINTENANCE SOP	X	X			12	MSgt	6-Y-2
<u>DUTY AREA 02 - MAINTENANCE ADMINISTRATION</u>									
1)	2891.02.01	MANAGE MAINTENANCE PRODUCTION	X	X	X		12	MSgt	6-Y-3
<u>DUTY AREA 03 - MAINTENANCE ACTIONS</u>									
1)	2891.03.01	SUPERVISE MAINTENANCE ACTIONS	X	X			12	MSgt	6-Y-5

ENCLOSURE (3)



COMMON INDIVIDUAL TRAINING STANDARDS

1. General. This enclosure lists the ITS tasks common to more than one MOS within the OccFld. It is designed to assist the trainer in consolidating training for common tasks.

2. Format. The columns are as follows:

a. TASK TITLE. A listing of all tasks common to at least two MOSs.

b. COMMON TASK NUMBERS. A listing of the ITS designators for all ITSS containing the same task title.

<u>TASK TITLE</u>	<u>COMMON TASK NUMBERS</u>		
CREATE A SILVER DISK	2881.03.07	8641.02.04	
DIAGNOSE BASIC ELECTRONIC CIRCUITS	2822.03.01 2847.03.01	2831.03.01	2846.03.01
PERFORM CORRECTIVE MAINTENANCE ON ELECTRONIC COMPONENTS/CIRCUITS UTILIZING THE 2M WORKSTATION	2881.03.02	8641.02.03	
PERFORM PREVENTIVE MAINTENANCE ON THE MICROMINIATURE SOLDERING STATION (2M WORKSTATION)	2881.03.01	8641.02.01	
PREPARE AUTOMATED TEST EQUIPMENT (ATE) FOR OPERATION	2881.03.05	8641.01.01	

TRAINING SUPPORT

1. This enclosure summarizes four categories of training support by ITS for the entire OccFld:

Appendix A: References

Appendix B: Training Material

Appendix C: Ammunition, Explosives, and Pyrotechnics

Appendix D: Distance Learning Products

Appendix E: Performance Support Tools

2. If support identified in any appendix is not applicable to this OccFld, the appendix will include a statement to that effect.

REFERENCES

1. General. References are doctrinal publications, technical manuals, and other publications upon which an ITS and its performance steps are based. They should be readily available and provide the detailed procedures for accomplishing the task. This section includes a list of all reference publications associated with any task in this OccFld.

2. Format. The columns are as follows:

a. REFERENCES. This column summarizes all references associated with at least one ITS task in this OccFld.

b. TASK NUMBERS. A listing of all ITS tasks to which the corresponding reference is associated.

<u>REFERENCES</u>	<u>TASK NUMBERS</u>			
ANNEX K	2802.04.02	2810.01.02	2810.04.01	2810.04.02
	2823.01.01	2823.04.02	2842.03.02	
Applicable Technical Publications/Manuals	2800.02.02	2800.02.03	2800.02.04	2800.02.06
	2800.02.07	2800.02.08	2800.02.09	2800.02.11
	2800.02.13	2800.02.14	2800.02.15	2800.02.16
	2800.03.01	2800.03.02	2800.03.03	2800.03.04
	2800.03.05	2800.03.06	2800.03.07	2800.03.08
	2800.04.01	2800.05.01	2802.01.01	2802.01.02
	2802.01.03	2802.01.04	2802.01.05	2802.01.06
	2802.01.07	2802.02.02	2802.02.03	2802.03.01
	2802.04.01	2802.04.02	2802.05.01	2805.03.01
	2805.04.01	2805.05.01	2810.01.02	2810.03.03
	2810.04.02	2810.05.01	2822.03.01	2822.03.02
	2822.03.03	2822.03.04	2822.03.05	2822.03.06
	2822.04.01	2823.01.01	2823.03.01	2823.03.02
	2823.04.01	2823.04.02	2826.03.01	2826.03.02
	2826.04.01	2827.03.01	2827.04.01	2831.03.01
	2831.03.02	2831.03.03	2831.04.01	2832.03.01
	2832.03.02	2833.03.01	2833.03.02	2833.04.01
	2834.03.01	2834.03.02	2834.04.01	2842.01.01
	2842.03.01	2842.03.02	2842.03.03	2842.04.01
	2844.03.01	2844.03.02	2844.03.03	2844.03.04
	2844.03.05	2844.03.06	2844.04.01	2846.03.01
	2846.03.02	2846.03.03	2847.03.01	2847.03.02
	2847.03.03	2847.03.04	2847.03.05	2847.03.06
	2848.03.01	2848.03.02	2848.04.01	2862.03.01
	2862.03.02	2862.03.03	2862.04.01	2867.03.01
	2867.03.02	2867.03.03	2867.04.01	2871.02.01
	2871.03.01	2871.03.02	2871.03.03	2871.03.04
	2874.01.01	2874.01.02	2874.01.03	2874.03.01
	2874.03.02	2874.03.03	2874.03.04	2874.03.05
	2874.03.06	2874.04.01	2881.03.01	2881.03.02
	2881.03.03	2881.03.04	2881.03.05	2881.03.06
	2881.03.07	2881.04.01	2884.03.01	2887.03.01
	2887.03.02	2887.03.03	2887.03.04	2887.03.05

Appendix A to  
ENCLOSURE (5)

REFERENCES	TASK NUMBERS			
	2887.03.06	2887.03.07	2887.03.08	2887.04.01
	2887.04.02	2891.01.01	2891.01.02	2891.02.01
	2891.03.01	8641.01.01	8641.01.02	8641.01.03
	8641.02.01	8641.02.02	8641.02.03	8641.02.04
	8641.03.01	8641.03.02	8641.03.03	8641.03.04
	8641.03.05	8641.03.06	8641.03.07	8641.03.08
	8641.03.09	8641.03.10		
Current Fiscal Budget for Base/Post/Station	2802.02.03	2810.02.01		
FSMAO Checklist	2802.02.02	2891.02.01		
Higher Headquarters Directives	2800.01.02	2800.02.05	2800.03.06	2800.05.01
	2802.01.02	2802.01.03	2802.01.04	2802.01.05
	2802.01.06	2802.01.07	2802.01.08	2802.05.01
	2805.05.01	2810.01.02	2891.01.02	
Maintenance Contracts	2802.02.03	2810.02.01		
Maintenance Float Catalog	2800.02.03	2800.03.06	2822.03.02	2822.03.03
	2823.03.02	2826.03.01	2832.03.01	2832.03.02
	2834.03.01	2846.03.02	2846.03.03	2847.03.02
	2847.03.04	2847.03.05	2848.03.01	2867.03.01
	2867.03.02	2871.03.02	2874.03.02	2887.03.01
Operational Order	2800.03.06	2802.01.01	2810.01.02	2822.04.01
	2823.01.01	2823.03.01	2823.04.01	2826.04.01
	2831.04.01	2833.04.01	2834.04.01	2842.03.02
	2842.04.01	2844.03.02	2891.01.01	
Plant SOP	2810.03.03			
Speed/Snap Program	2802.04.02	2810.04.02		
Tritac equipment records	2887.03.06			
Unit Training Plan	2800.05.01	2802.05.01	2805.05.01	
29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication	2800.02.03	2800.03.01	2800.04.01	2802.01.01
	2822.03.01	2822.03.05	2831.03.01	2842.03.01
	2842.03.03	2844.03.02	2844.03.03	2846.03.01
	2847.03.01	2862.03.01	2862.03.02	2862.03.03
	2871.03.01	2871.03.02	2871.03.04	2874.01.03
	2874.03.02	2874.03.03	2874.03.04	2874.03.06
	2874.04.01	2881.03.02	2881.03.03	2881.03.04
	2881.03.07	2887.03.02	2887.03.03	2887.03.04
	2887.03.05	2887.03.07	2887.03.08	2891.01.01
	2891.01.02	2891.03.01	8641.01.02	8641.01.03
	8641.02.03	8641.02.04	8641.03.01	8641.03.02
	8641.03.03	8641.03.04	8641.03.05	8641.03.06
	8641.03.07	8641.03.08	8641.03.09	8641.03.10
CJCSM 6231, Manual for Employed Joint Communications	2823.01.01	2823.04.02		

Appendix A to  
ENCLOSURE (5)

<u>REFERENCES</u>	<u>TASK NUMBERS</u>			
CMR, Consolidated Memorandum Report	2800.01.01	2800.02.03	2800.02.06	2800.02.07
	2800.02.08	2800.02.10	2800.02.13	2800.03.05
	2800.03.08	2846.03.03	2874.01.01	2874.01.02
CMS-21, COMSEC Material System Policy & Procedures	2802.04.01	2805.04.01	2810.04.01	2822.03.04
	2822.03.06	2823.03.02	2823.04.01	2826.03.02
	2831.03.03	2831.04.01	2833.03.02	2833.04.01
	2834.03.02	2834.04.01	2842.03.01	2842.03.03
	2842.04.01	2867.03.03	2881.03.04	2881.04.01
CMS-5_, COMSEC Material System Policy & Procedures Manual	2800.02.07	2800.03.04	2822.03.04	2822.03.06
	2826.03.02	2831.03.03	2833.03.02	2834.03.02
	2867.03.03	2881.03.04	2881.04.01	
DPR, Daily Processing Report	2802.03.02	2805.03.02	2810.03.01	
FEDLOG, Federal Logistic Data on Compact Disk	2800.02.01	2800.02.03	2800.03.04	2822.03.02
	2822.03.03	2822.03.06	2823.03.02	2826.03.01
	2826.03.02	2827.03.01	2831.03.02	2831.03.03
	2832.03.01	2832.03.02	2833.03.01	2833.03.02
	2834.03.01	2834.03.02	2842.03.03	2844.03.01
	2844.03.03	2844.03.04	2844.03.05	2844.03.06
	2846.03.02	2846.03.03	2847.03.02	2847.03.03
	2847.03.04	2847.03.05	2847.03.06	2848.03.01
	2848.03.02	2862.03.01	2862.03.02	2862.03.03
	2867.03.01	2867.03.02	2867.03.03	2871.02.01
	2871.03.02	2871.03.03	2874.03.01	2874.03.02
	2881.03.04	2884.03.01	2887.03.01	2887.03.04
	2887.03.08			
	FM 24-16, Communication-Electronic Operations Orders, Records and Reports	2823.04.02		
FMFM 3-1, Command and Staff Action	2802.03.02	2805.03.02		
IPC-610B, Industry Production Control	8641.01.02	8641.01.03	8641.02.03	8641.03.01
	8641.03.02	8641.03.03	8641.03.04	8641.03.05
	8641.03.06	8641.03.07	8641.03.08	8641.03.09
	8641.03.10			
IPC-7711, Industry Production Control 7711	8641.01.02	8641.01.03	8641.02.03	8641.03.01
	8641.03.02	8641.03.03	8641.03.04	8641.03.05
	8641.03.06	8641.03.07	8641.03.08	8641.03.09
	8641.03.10			
IPC-7712, Industry Production Control 7712	8641.01.02	8641.01.03	8641.02.03	8641.03.01
	8641.03.02	8641.03.03	8641.03.04	8641.03.05
	8641.03.06	8641.03.07	8641.03.08	8641.03.09
	8641.03.10			
JCS PUB 6-05.1 THROUGH 6-05.7, Employment of Joint Tactical Communication Systems: Joint Tactical Communications System Management	2823.01.01	2823.04.02		
MCBUL 5600, Series	2800.02.09			

Appendix A to  
ENCLOSURE (5)

MCO 1510.44C  
10 JAN 01

<u>REFERENCES</u>	<u>TASK NUMBERS</u>			
MCO 3000.11_, Marine Corps Ground Equipment Resources Reporting	2800.02.04 2891.02.01	2802.02.02	2805.02.02	2833.03.01
MCO 4400.82_, MIMMS Controlled Item Management Manual	2802.02.02	2833.03.01	2891.02.01	
MCO 4733.1_, Marine Corps TMDE CAMP	2800.02.06 2802.02.02 2874.01.03 2874.03.05	2800.02.08 2805.02.01	2802.01.04 2805.02.02 2874.03.03 2874.04.01	2802.02.01 2871.03.04 2874.03.04 2891.02.01
MCO 4855.10_, Product Quality Deficiency Report (PQDR)	2800.02.11			
MCO 5215.12, Managing and Maintaining Navy Directives Files and Establishing "Must Hold" Lists	2800.02.09			
MCO 5311.1_, Table of Manpower Requirements	2800.01.01	2802.01.08		
MCO 5390.2_, Leadership Training and Education	2800.05.01	2802.05.01		
MCO P1200.7_, MOS Manual	2800.01.02 2810.05.01	2800.05.01	2802.05.01	2805.05.01
MCO P1500.40_, Marine Corps Training Philosophy and Requirements	2800.05.01	2802.05.01	2805.05.01	2810.05.01
MCO P4105.3_, ILS Manual	2802.02.02	2805.02.02	2891.02.01	
MCO P4200.15_, Marine Corps Purchasing Procedures Manual	2802.02.03	2810.02.01		
MCO P4400.150_, Consumer Level Supply Policy Manual	2800.01.01 2802.01.01 2802.01.05 2802.02.02 2833.03.01 2891.02.01	2800.02.05 2802.01.02 2802.01.06 2805.02.01 2846.03.03	2800.02.08 2802.01.03 2802.01.07 2805.02.02 2871.02.01	2800.02.12 2802.01.04 2802.02.01 2810.03.03 2891.01.01
MCO P4400.84_, Special Programs Manual	2871.02.01			
MCO P4790.1_, Marine Corps Integrated Maintenance Management System (MIMMS) MANUAL	2822.03.03 2834.03.01	2823.03.02 2846.03.02	2832.03.01 2846.03.03	2832.03.02 2871.02.01
MCO P4790.2_, MIMMS Field Procedures Manual	2800.01.02 2800.02.03 2800.02.07 2800.02.12 2800.03.03 2800.03.07 2802.01.02 2802.01.06	2800.01.03 2800.02.04 2800.02.08 2800.02.13 2800.03.04 2800.03.08	2800.02.01 2800.02.05 2800.02.09 2800.02.14 2800.03.05 2800.05.01 2802.01.04 2802.02.01	2800.02.02 2800.02.06 2800.02.10 2800.02.15 2800.03.06 2802.01.01 2802.01.05 2802.02.02

Appendix A to  
ENCLOSURE (5)

REFERENCES	TASK NUMBERS			
	2802.03.01	2802.03.02	2802.04.01	2802.05.01
	2805.01.01	2805.02.01	2805.02.02	2805.03.01
	2805.03.02	2805.04.01	2805.05.01	2810.01.01
	2810.04.01	2822.03.02	2822.03.03	2822.03.04
	2822.03.06	2823.03.02	2826.03.01	2826.03.02
	2827.03.01	2831.03.02	2831.03.03	2832.03.01
	2832.03.02	2833.03.01	2833.03.02	2834.03.01
	2834.03.02	2842.03.03	2844.03.01	2844.03.02
	2844.03.03	2844.03.04	2844.03.05	2844.03.06
	2846.03.02	2846.03.03	2848.03.01	2848.03.02
	2862.03.01	2862.03.02	2862.03.03	2867.03.01
	2867.03.02	2867.03.03	2871.02.01	2871.03.01
	2871.03.02	2871.03.04	2874.01.01	2874.01.02
	2874.01.03	2874.03.01	2874.03.02	2874.03.03
	2874.03.04	2874.03.05	2874.03.06	2874.04.01
	2881.03.01	2881.03.03	2881.03.04	2881.03.05
	2881.03.06	2884.03.01	2887.03.01	2887.03.02
	2887.03.03	2887.03.05	2887.03.06	2887.03.07
	2887.03.08	2891.01.01	2891.01.02	2891.02.01
	2891.03.01	8641.01.01	8641.02.01	8641.02.02
MCO P5090.2_, Environmental Compliance and Protection Manual	2800.03.01	2800.04.01	2810.03.03	2822.03.05
	2842.01.01	2842.03.01	2842.03.03	2871.03.01
	2871.03.02	2874.01.01	2874.01.02	2874.03.02
	2881.03.02	2891.03.01	8641.02.03	8641.03.01
	8641.03.02	8641.03.03	8641.03.04	8641.03.05
	8641.03.06	8641.03.07	8641.03.08	8641.03.09
	8641.03.10			
MCO P5215.17_, The USMC Tech Pub System	2800.02.09	2802.02.02	2891.02.01	
MCO P5215.1_, Marine Corps Directives System	2800.02.09	2802.02.02	2891.02.01	
MCO P7100.8_, Field Budget Guidance Manual	2802.02.03	2810.02.01		
MCRP 3-0A, Unit Training Management Guide	2800.05.01	2802.05.01	2805.05.01	
MCRP 3-0B, How to Conduct Training	2800.05.01	2802.05.01	2805.05.01	
MCRP 6-22A, Multi-Service Communications Procedures for the Single-Channel Ground Radio	2844.04.01			
MCWP 4-11, Maintenance Operations	2891.03.01			
MCWP 4-24, Commander's Guide to Maintenance	2802.01.03	2802.03.01	2802.04.01	2802.05.01
	2805.02.02	2805.03.01	2805.03.02	2805.04.01
	2805.05.01	2810.03.01	2810.03.02	2810.04.02
	2810.05.01	2891.01.01	2891.01.02	2891.02.01
	2891.03.01			
MCWP 5-1, Marine Corps Planning Process	2800.01.02	2800.01.03	2802.01.01	2874.01.01
	2874.01.02	2891.01.01	2891.01.02	2891.03.01

<u>REFERENCES</u>	<u>TASK NUMBERS</u>			
MCWP 6-22, Communications and Information Systems	2800.01.02	2800.01.03	2800.02.12	2800.02.16
	2800.04.01	2800.05.01	2802.01.01	2802.01.07
	2802.05.01	2805.01.01	2805.05.01	2810.01.01
	2810.05.01	2823.01.01	2823.04.01	2823.04.02
	2842.01.01	2842.03.01	2842.03.02	2842.03.03
	2844.03.02	2874.03.05	2874.04.01	2887.03.04
	2891.01.01	2891.01.02	2891.03.01	
MPS, Load Plan	2802.01.01	2891.01.01		
MSDS, Material Safety Data Sheets	2800.03.01	2822.03.01	2822.03.05	2831.03.01
	2846.03.01	2847.03.01	2871.03.01	2874.01.03
	2881.03.02	2881.03.03	8641.02.03	8641.03.01
	8641.03.02	8641.03.03	8641.03.04	8641.03.05
	8641.03.06	8641.03.07	8641.03.08	8641.03.09
	8641.03.10			
NAVMC 2761, Catalog of Publications	2800.02.09			
PC HANDBOOK, Printed Circuit Handbook, COMBS 1988	8641.01.02	8641.01.03	8641.02.03	8641.03.01
	8641.03.02	8641.03.03	8641.03.04	8641.03.05
	8641.03.06	8641.03.07	8641.03.08	8641.03.09
	8641.03.10			
SECNAVINST 5510.30, Information and Personnel Security Program	2802.02.02	2802.04.01	2805.04.01	2810.04.01
	2822.03.04	2823.03.02	2823.04.01	2831.03.03
	2842.03.01	2891.02.01		
SECNAVINST 5510.36, Department of the Navy Information and Personnel Security Program Regulations	2800.01.03	2800.03.05	2800.03.08	2802.02.02
	2802.04.01	2805.04.01	2810.04.01	2822.03.04
	2823.03.02	2823.04.01	2831.03.03	2842.03.01
	2891.01.02	2891.02.01		
SECNAVINST P5530.13, Security Instruction F/SEN Convention (AA&E)	2800.03.05	2800.03.08	2802.04.01	2805.04.01
	2810.04.01			
SI 4400-15/5, SI	2800.03.02	2802.02.02	2891.02.01	
SL 1-2/3, Index of Authorized Publications in Stock	2800.02.06	2800.02.07	2800.02.08	2800.02.09
	2800.02.10	2800.03.04	2822.03.02	2822.03.03
	2822.03.06	2823.03.02	2823.04.01	2826.03.01
	2827.03.01	2831.03.02	2832.03.01	2832.03.02
	2833.03.01	2834.03.01	2844.03.01	2844.03.03
	2844.03.04	2844.03.05	2844.03.06	2846.03.02
	2846.03.03	2847.03.02	2847.03.03	2847.03.04
	2847.03.05	2848.03.01	2848.03.02	2862.03.01
	2862.03.02	2862.03.03	2867.03.01	2867.03.02
	2871.03.03	2874.03.01	2881.03.04	2887.03.01
	2887.03.08			
SL-3, Major Components of End Items	2800.02.02			
SL-4, Repair Parts for End Items	2800.02.02	2822.03.02	2822.03.03	2823.03.02
	2826.03.01	2827.03.01	2831.03.02	2832.03.01
	2832.03.02	2833.03.01	2834.03.01	2846.03.02
	2846.03.03	2847.03.03	2847.03.04	2847.03.05

REFERENCES	TASK NUMBERS			
	2848.03.01	2848.03.02	2862.03.01	2862.03.02
	2862.03.03	2867.03.01	2867.03.02	2871.03.03
	2887.03.01	2887.03.08		
SMT, Soldering Handbook for SMT, Manko, 1986	2881.03.02	2881.03.03	8641.02.03	8641.03.01
	8641.03.02	8641.03.03	8641.03.04	8641.03.05
	8641.03.06	8641.03.07	8641.03.08	8641.03.09
	8641.03.10			
TI 4400-15/5, Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items	2800.03.02	2802.02.02	2881.03.02	2881.03.06
	2891.02.01	8641.02.02	8641.02.03	8641.03.01
	8641.03.02	8641.03.03	8641.03.04	8641.03.05
	8641.03.06	8641.03.07	8641.03.08	8641.03.09
	8641.03.10			
TI-5820-25/22, Electromagnetic Enviromental Effects (E3) Procedures	2844.04.01			
TM 09999-15/1, ESD Awareness	8641.01.02	8641.01.03		
TM 09999-15/2, ESD Management	8641.01.02	8641.01.03		
TM 10510-14/1, Electronic Test Equipment Listing	2800.02.06	2800.03.03	2871.03.01	2871.03.02
	2871.03.03	2871.03.04	2874.01.03	2874.03.01
	2874.03.02	2874.03.03	2874.03.04	2874.03.05
	2874.03.06	2874.04.01		
TM 4700-15/1, Equipment Record Procedures	2800.02.01	2800.02.02	2800.02.03	2800.02.06
	2800.02.07	2800.02.08	2800.02.09	2800.02.10
	2800.02.11	2800.02.13	2800.02.15	2800.03.04
	2802.01.02	2802.01.03	2802.01.04	2802.01.05
	2802.01.06	2802.01.07		
TM 5895-45/1, Standard Miniature/2M Maintenance Practices for Electronic Assembly Repair	2881.03.01	2881.03.02	2881.03.03	2881.03.07
	8641.01.02	8641.02.01	8641.02.03	8641.02.04
	8641.03.01	8641.03.02	8641.03.03	8641.03.04
	8641.03.05	8641.03.06	8641.03.07	8641.03.08
	8641.03.09	8641.03.10		
TM 9406-15, Grounding Procedures	2800.02.16	2800.03.02	2800.04.01	2805.01.01
	2810.01.01	2822.04.01	2823.04.01	2826.04.01
	2827.04.01	2831.04.01	2833.04.01	2834.04.01
	2842.01.01	2842.03.01	2842.03.03	2842.04.01
	2844.04.01	2846.03.03	2848.04.01	2862.04.01
	2867.04.01	2874.01.01	2874.01.02	2874.04.01
	2887.04.01			
TM 9999-15/1, ESD Awareness Electro-Static Discharge	2800.01.02	2800.01.03	2800.02.06	2800.02.16
	2800.03.01	2800.03.02	2800.04.01	2802.02.02
	2822.03.01	2822.03.02	2822.03.03	2822.04.01
	2823.03.02	2823.04.01	2826.04.01	2827.03.01
	2831.03.01	2831.03.02	2831.03.03	2831.04.01
	2832.03.01	2832.03.02	2833.03.01	2833.03.02
	2833.04.01	2834.03.01	2834.03.02	2834.04.01
	2842.01.01	2842.03.03	2842.04.01	2844.04.01
	2846.03.01	2846.03.02	2847.03.01	2847.03.02

Appendix A to  
ENCLOSURE (5)

<u>REFERENCES</u>	<u>TASK NUMBERS</u>			
	2847.03.03	2847.03.04	2847.03.05	2848.03.01
	2848.03.02	2848.04.01	2862.03.01	2862.03.02
	2862.03.03	2862.04.01	2867.03.01	2867.03.02
	2867.03.03	2867.04.01	2871.03.02	2871.03.03
	2881.03.01	2881.03.02	2881.03.03	2881.03.04
	2881.03.06	2881.04.01	2884.03.01	2887.03.01
	2887.03.08	2887.04.01	2891.02.01	8641.02.01
	8641.02.02	8641.02.03	8641.03.01	8641.03.02
	8641.03.03	8641.03.04	8641.03.05	8641.03.06
	8641.03.07	8641.03.08	8641.03.09	8641.03.10
UM 4400-124, FMF SASSY Using Unit Procedures	2800.02.05	2800.02.08	2805.02.02	2846.03.03
	2847.03.05	2871.02.01		
UM 4400-15, Organic Property Control	2800.02.05	2800.02.08		
UM 4790-5, Users Manual MIMMS	2800.02.01	2800.02.02	2800.02.03	2800.02.04
	2800.02.05	2800.02.06	2800.02.07	2800.02.08
	2800.02.10	2800.02.11	2800.02.12	2800.02.13
	2800.02.14	2800.02.15	2800.03.03	2800.03.04
	2802.01.01	2802.02.01	2802.02.02	2805.02.01
	2805.02.02	2822.03.02	2822.03.03	2822.03.04
	2822.03.06	2823.03.02	2826.03.01	2826.03.02
	2827.03.01	2831.03.02	2831.03.03	2832.03.01
	2832.03.02	2833.03.01	2833.03.02	2834.03.01
	2834.03.02	2842.03.03	2844.03.01	2844.03.02
	2844.03.03	2844.03.04	2844.03.05	2844.03.06
	2846.03.02	2846.03.03	2847.03.02	2847.03.03
	2847.03.04	2847.03.05	2848.03.01	2848.03.02
	2862.03.01	2862.03.02	2862.03.03	2867.03.01
	2867.03.02	2867.03.03	2871.02.01	2871.03.01
	2871.03.02	2871.03.03	2871.03.04	2874.01.03
	2874.03.01	2874.03.02	2874.03.03	2874.03.04
	2874.03.05	2874.03.06	2874.04.01	2881.03.01
	2881.03.03	2881.03.04	2881.03.05	2881.03.06
	2887.03.01	2887.03.02	2887.03.03	2887.03.04
	2887.03.05	2887.03.06	2887.03.07	2887.03.08
	2891.01.01	2891.02.01	8641.01.01	8641.02.01
	8641.02.02			
UNIT CMR, Consolidated Memorandum Report	2800.02.04	2800.02.12		
UNIT SOP, Unit's Standing Operating Procedures	2800.02.03	2800.02.04	2800.02.06	2800.02.08
	2800.02.09	2800.02.12	2800.03.05	2800.03.07
	2800.03.08	2800.05.01	2802.01.01	2802.03.01
	2802.04.02	2802.05.01	2805.03.01	2805.05.01
	2810.01.02	2810.04.01	2810.04.02	2874.01.01
	2874.01.02	2891.01.01	2891.01.02	2891.03.01
UNIT TO/E, Table of Organization/Equipment	2800.01.01	2800.02.03	2800.02.04	2800.02.05
	2800.02.06	2800.02.07	2800.02.08	2800.02.09
	2800.02.10	2800.02.12	2800.02.14	2800.02.15
	2800.03.05	2800.03.08	2802.01.01	2802.01.03
	2802.01.07	2802.01.08	2802.02.02	2802.03.01
	2802.03.02	2802.04.01	2802.04.02	2805.03.01

REFERENCES

TASK NUMBERS

2805.03.02	2805.04.01	2810.01.02	2810.03.01
2810.04.01	2810.04.02	2842.01.01	2874.01.01
2874.01.02	2891.01.01	2891.02.01	

TRAINING MATERIEL

1. General. Training materiel includes all training devices, simulators, aids, equipment, and materials (except ammunition and MCIs) required or recommended to properly train a task under the specified conditions and to the specified standard.

2. Format. The columns are as follows:

a. MATERIEL. This column summarizes all training materiel used in support of at least one ITS task in this OccFld.

b. TASK NUMBERS. A listing of all ITS tasks supported by the corresponding training support item in the Materiel column. An asterisk (\*) precedes any task for which the training support item is mandatory for execution of the task.

<u>MATERIEL</u>	<u>TASK NUMBERS</u>				
11582A Attenuator Set	*2874.03.01	*2874.03.02	*2874.03.03	*2874.03.04	2887.03.08
123EMZ-12 Vernier Caliper	*2874.03.01	*2874.03.02	*2874.03.03	*2874.03.04	
1531-AB Strobotac	*2874.03.01	*2874.03.02	*2874.03.03	*2874.03.04	
2000 Semiconductor Device Test Set	*2822.03.01	*2822.03.02	*2823.03.01	*2823.03.02	*2826.03.01
	*2827.03.01	*2831.03.01	*2831.03.02	*2832.03.01	*2832.03.02
	*2833.03.01	*2834.03.01	*2842.03.03	*2847.03.01	*2848.03.01
	*2862.03.02	*2867.03.02	*2884.03.01	*2887.03.01	*2887.03.02
	*2887.03.03	*2887.03.04	*2887.03.05	2887.03.08	
2246A Oscilloscope	*2822.03.01	*2822.03.02	*2822.03.03	*2823.03.01	*2823.03.02
	*2826.03.01	*2827.03.01	*2831.03.01	*2831.03.02	*2832.03.01
	*2832.03.02	*2833.03.01	*2834.03.01	*2846.03.01	*2846.03.02
	2846.03.03	*2847.03.01	*2847.03.02	*2847.03.03	*2847.03.04
	*2847.03.05	*2848.03.01	*2848.03.02	*2862.03.01	*2862.03.02
	*2862.03.03	*2867.03.01	*2867.03.02	2867.03.03	*2874.03.01
	*2874.03.02	*2874.03.03	*2874.03.04	*2884.03.01	*2887.03.01
	*2887.03.02	*2887.03.03	*2887.03.04	*2887.03.05	2887.03.08
	2887.04.02				
2430A Oscilloscope	*2822.03.02	*2822.03.03	*2823.03.01	*2826.03.01	*2827.03.01
	*2832.03.02	*2842.03.03	*2847.03.06	*2862.03.01	*2867.03.02
	*2887.03.01	*2887.03.02	*2887.03.04	2887.03.05	2887.03.08
2465B Oscilloscope	*2874.03.01	*2874.03.02	*2874.03.03	*2874.03.04	
254EMZ-18 Master Vernier Height Gage	*2874.03.01	*2874.03.02	*2874.03.03	*2874.03.04	
28 Volt Power Supply	*2822.03.01	*2831.03.01	*2831.03.02	*2832.03.01	*2833.03.01
	*2834.03.01	*2846.03.01	*2846.03.02	2846.03.03	*2847.03.01
	*2847.03.02	*2847.03.04	*2847.03.05	*2848.03.02	*2862.03.01
	*2862.03.02	*2862.03.03	*2867.03.01	*2867.03.02	2867.03.03
	*2887.03.01	*2887.03.02	*2887.03.04	*2887.03.05	2887.03.08

<u>MATERIEL</u>	<u>TASK NUMBERS</u>				
3000-40 Directional Coupler	*2874.03.01	*2874.03.02	*2874.03.03	*2874.03.04	
33120A Function Generator	*2822.03.01	*2822.03.02	*2823.03.01	*2823.03.02	*2826.03.01
	*2827.03.01	*2831.03.01	*2832.03.01	*2832.03.02	*2833.03.01
	*2842.03.03	*2846.03.01	*2846.03.02	2846.03.03	*2847.03.01
	*2847.03.02	*2847.03.04	*2848.03.01	*2862.03.01	*2862.03.02
	*2867.03.01	*2867.03.02	*2871.03.01	*2871.03.02	*2871.03.03
	*2871.03.04	*2887.03.02	*2887.03.03	*2887.03.04	*2887.03.05
	2887.03.08				
34401A Digital Multimeter	*2822.03.01	*2822.03.02	*2822.03.03	*2823.03.01	*2823.03.02
	*2826.03.01	*2826.03.02	*2827.03.01	*2831.03.01	*2831.03.02
	*2832.03.01	*2832.03.02	*2833.03.01	*2834.03.01	*2842.03.03
	*2846.03.01	*2846.03.02	2846.03.03	*2847.03.01	*2847.03.02
	*2847.03.03	*2847.03.04	*2847.03.05	*2847.03.06	*2848.03.01
	*2848.03.02	*2862.03.01	*2862.03.02	*2862.03.03	*2867.03.01
	*2867.03.02	*2871.03.01	*2871.03.02	*2871.03.03	*2871.03.04
	*2874.03.01	*2874.03.02	2874.03.03	*2874.03.04	*2884.03.01
	*2887.03.02	*2887.03.03	*2887.03.04	*2887.03.05	2887.03.08
432A HP Power Meter	*2874.03.01	*2874.03.02	2874.03.03	*2874.03.04	
439 Personnel Scale	*2874.03.01	*2874.03.02	2874.03.03	*2874.03.04	
4410 Bird Wattmeter	*2822.03.01	*2822.03.02	*2822.03.03	*2823.03.01	2827.03.01
	2831.03.02	2832.03.02	2833.03.01	2834.03.01	*2844.03.01
	*2844.03.04	2846.03.02	*2848.03.01	*2862.03.01	*2867.03.01
	*2874.03.01	*2874.03.02	2874.03.03	*2874.03.04	
4800 Tachometer	2874.03.01	2874.03.02	*2874.03.03	*2874.03.04	
53132A HP Frequency Counter	*2874.03.01	*2874.03.02	*2874.03.03	*2874.03.04	
54825N Digital O'Scope	*2822.03.01	*2822.03.02	*2822.03.03	*2823.03.01	*2826.03.01
	*2827.03.01	*2832.03.02	*2834.03.01	*2842.03.03	*2862.03.01
	*2867.03.01	*2871.03.01	*2871.03.02	*2871.03.03	*2871.03.04
	*2887.03.03	2887.03.05			
5700A Fluke Meter Calibrator	2874.03.01	2874.03.02	*2874.03.03	*2874.03.04	
6556 Power Supply	*2823.03.01	*2823.03.02	*2827.03.01	*2847.03.01	*2847.03.03
	*2847.03.05	*2862.03.01	*2862.03.02	*2862.03.03	*2887.03.01
	*2887.03.02	*2887.03.03	2887.03.05		
77/BN Multimeter	*2846.03.02	*2847.03.04	*2847.03.05	*2847.03.06	*2848.03.02
	2867.03.03	*2884.03.01	2887.03.05		
8340B HP Synthesized Sweeper	*2874.03.01	*2874.03.02	*2874.03.03	2874.03.04	
8431 Electrical Dummy Load	*2823.03.01	*2834.03.01	*2862.03.01	*2867.03.01	2867.03.03
	*2887.03.04	*2887.03.05			
8510B Vector Network Analyzer	*2874.03.01	*2874.03.02	*2874.03.03	*2874.03.04	
8562A HP Spectrum Analyzer	*2874.03.01	*2874.03.02	*2874.03.03	*2874.03.04	

<u>MATERIEL</u>	<u>TASK NUMBERS</u>				
8643A Signal Generator	*2822.03.01	*2822.03.03	*2823.03.01	*2823.03.02	*2826.03.01
	*2827.03.01	*2831.03.01	*2831.03.02	*2832.03.01	*2832.03.02
	*2833.03.01	*2834.03.01	*2842.03.03	*2846.03.01	*2846.03.02
	2846.03.03	*2847.03.01	*2847.03.02	*2847.03.03	*2847.03.04
	*2847.03.05	*2848.03.01	*2848.03.02	*2862.03.01	*2862.03.02
	*2862.03.03	*2867.03.01	*2867.03.02	2867.03.03	*2871.03.01
	*2871.03.02	*2871.03.03	*2871.03.04	*2884.03.01	*2887.03.01
	*2887.03.02	*2887.03.03	*2887.03.04	*2887.03.05	2887.03.08
8644A HP Signal Generator	*2874.03.01	*2874.03.02	*2874.03.03	*2874.03.04	
8902AE04 HF Signal Generator	*2874.03.01	*2874.03.02	*2874.03.03	*2874.03.04	
8903B HP Audio Analyzer	*2874.03.01	*2874.03.02	*2874.03.03	*2874.03.04	
AN/CYZ-10 Digital Transfer Device	*2823.03.01	*2844.03.01	*2846.03.01	*2846.03.02	2847.03.02
	2862.03.01	2862.04.01	*2881.04.01		
AN/GRA-39 Radio Set Control Group	2844.04.01	*2862.03.02	2862.04.01		
AN/GRC-193 Radio Set	2844.03.01	*2844.03.04	2844.04.01	*2846.03.01	*2862.03.01
AN/GSC-54 Fiber Optic Converter	*2823.03.01	2833.03.01	2834.03.01		
AN/GSM-317 Optical Communications Test Set	*2822.03.01	*2847.03.06	*2862.03.01		
AN/GSQ-261 Tactical Remote Sensor System (TRSS)	*2848.03.01	*2848.03.02	*2848.04.01		
AN/MRC-110A Radio Terminal Set	2844.04.01	*2846.03.02	2862.03.01	2862.04.01	
AN/MRC-138A Radio Set	*2844.03.01	2844.04.01	2862.04.01		
AN/MRC-138B Radio Set	2862.04.01				
AN/MRC-140 Radio Set	2844.04.01	2846.03.01	2846.03.02	2862.03.01	2862.04.01
AN/MRC-142 Radio Set	2823.03.02	2831.03.02	2832.03.01	2832.03.02	2844.03.04
	2844.04.01	2846.03.01	2846.03.02	2846.03.03	2862.03.01
	2862.04.01				
AN/MRC-145 Radio Set	2844.03.01	2844.03.04	2844.04.01	2846.03.01	2846.03.02
	2862.03.01	2862.04.01			
AN/MSC-63A Communications Central	*2826.03.01	*2826.03.02			
AN/PPN-19 Radar Transponder Beacon	*2884.03.01				
AN/PPS-15A(V)2 Radar Set	*2884.03.01				

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<u>MATERIEL</u>	<u>TASK NUMBERS</u>				
AN/PRC-104 Radio Set	2844.04.01	*2846.03.01	*2846.03.02	*2862.03.01	2862.04.01
AN/PRC-104B Radio Set	*2844.03.01	*2844.03.04			
AN/PRC-113 (V)3 Radio Set	*2844.03.01 2862.04.01	2844.03.04	2844.04.01	2846.03.02	2862.03.01
AN/PRC-119 Radio Set	*2846.03.02	*2862.03.01			
AN/PRC-119A Radio Set	*2844.03.01	2844.03.04	2846.03.01	2846.03.02	2862.04.01
AN/PRC-119D Radio Set	*2844.03.01				
AN/PSC-2A EM Digital Message System	2844.03.01	2844.04.01	2846.03.02	2862.03.01	2862.04.01
AN/PSC-5 Satellite Communications Radio System	2834.03.01 2862.03.01	2844.03.01 2862.04.01	2844.03.04	2844.04.01	2846.03.02
AN/PSN-8 Global Positioning System (GPS) NAVSTAR	2862.03.01				
AN/TMQ-41MMS	*2887.03.02 2887.04.02	2887.03.04	2887.03.05	2887.03.08	2887.04.01
AN/TPQA Firefinder Radar Set	*2887.03.01 2887.04.02	2887.03.04	2887.03.05	2887.03.08	2887.04.01
AN/TRC-170 Radio Terminal Set	2823.03.01	2823.03.02	*2831.03.02	*2832.03.01	*2832.03.02
AN/TSC-120 Communications Central	2862.04.01	*2867.03.01	*2867.03.02	2867.03.03	2867.04.01
AN/TSC-85B Ground Mobile Forces Satellite Communications Terminal	*2834.03.01	2834.04.01			
AN/TSC-93B Ground Mobile Forces Satellite Communications Terminal	*2834.03.01	2834.04.01			
AN/TSC-96A Satellite Communications Central	*2833.03.01	*2833.03.02	2833.04.01	2834.03.02	
AN/TSQ-158(V)4 Net Control Station (EPLRS)	*2842.03.01	*2842.03.02	*2842.03.03	*2842.04.01	
AN/TSQ-90 Tactical Electronic Reconnaissance Processing & Evaluation System (TERPES)	*2827.03.01	*2827.04.01			
AN/TTC-42 Automatic Telephone Central Office	2822.03.02	*2823.03.01	2823.03.02		

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<u>MATERIEL</u>	<u>TASK NUMBERS</u>				
AN/USM-459A Universal Counter	*2832.03.01 *2871.03.03	*2832.03.02 *2871.03.04	*2862.03.01	*2871.03.01	*2871.03.02
AN/USM-465 Automatic Test Set	*2881.03.01 8641.01.01	*2881.03.02 8641.02.03	*2881.03.03 8641.02.04	*2881.03.05	*2881.03.07
AN/USM-631 Automatic Hybrid Test	*2881.03.01 8641.01.01	*2881.03.02 8641.02.03	*2881.03.03 8641.02.04	*2881.03.05	*2881.03.07
AN/USM-646 Automatic Test Set	*2881.03.01 *2887.03.04 8641.02.04	*2881.03.02 *2887.03.05	*2881.03.03 *2887.04.02	*2881.03.05 8641.01.01	*2881.03.07 8641.02.03
AN/USM-657(V2) Third Echelon Test System (TETS)	2822.03.01 *2871.03.03	2822.03.02 8641.01.01	*2823.03.01 8641.02.03	2848.03.01 8641.02.04	2871.03.01
AN/USQ-70 Position Azimuth Determining System	2887.03.04	2887.03.05	2887.03.07	2887.03.08	2887.04.01
AN/UXC-7 Lightweight Facsimile	2844.04.01	2862.03.01			
AN/VRC-88 Radio Set	*2844.03.01	2862.04.01			
AN/VRC-88A Radio Set (SINGARS)	*2846.03.02	*2862.03.01			
AN/VRC-88D Radio Set (SINGARS)	2844.03.01	*2846.03.02	2862.04.01		
AN/VRC-89 Radio Set	2862.04.01				
AN/VRC-89A Radio Set (SINGARS)	*2846.03.01				
AN/VRC-89D Radio Set (SINGARS)	2844.03.01	*2846.03.01			
AN/VRC-90 Radio Set	*2846.03.02	2862.04.01			
AN/VRC-90A Radio Set (SINGARS)	*2846.03.01	2862.03.01			
AN/VRC-90D Radio Set (SINGARS)	*2844.03.01				
AN/VRC-92A Radio Set (SINGARS)	*2846.03.01				
AN/VRC-92D Radio Set (SINGARS)	2844.03.01				
AS-2259	*2844.03.01				
ASAPS-4 Power Supply	2847.03.04	2847.03.05	*2862.03.03		

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<u>MATERIEL</u>	<u>TASK NUMBERS</u>				
C-11561 SINCGARS Control Unit	2862.03.01				
CX-11230 AG CX-11230A/G Special Cable Assembly (100 FT)	*2847.03.02				
CX-4566A/G Telephone Cable Assembly 100 Ft	*2823.03.01				
CX-4566A/G Telephone Cable Assembly 25Ft	*2823.03.01				
CX-4566A/G Telephone Cable Assembly 500Ft	*2823.03.01				
CX-4760A/U Telephone Cable Assembly	*2823.03.01				
Cable Tester	*2823.03.01	2847.03.06			
Computer Suite	*2847.03.03	*2847.03.04	*2862.03.03		
DT-205 Digital Tachometer	*2874.03.01	*2874.03.02	*2874.03.03	*2874.03.04	
DT-301 Digital Stroboscope	*2874.03.01	*2874.03.02	*2874.03.03	*2874.03.04	
Fiber Optic Fault Finder	2823.03.01	*2847.03.06			
HGX-82/TSEC Loop Key Generator Common Unit	*2881.03.04				
HP6274B Power Supply	2847.03.05				
HP6291A Power Supply	2847.03.05				
HP8562A Spectrum Analyzer	*2823.03.01	*2848.03.01	*2848.03.02		
HYP-57/TSEC Vehicular Power Adapter	*2844.03.01	*2881.03.04	*2881.04.01		
HYP-71 Auxillary Power Supply	*2823.03.01	2847.03.05			
HYX-57/TSEC Wireline Adapter	*2844.03.01	*2881.03.04	*2881.04.01		
J-1077A Distribution Box	*2823.03.02	*2832.03.01	*2844.03.01		
J-4843A/GRM Test Adapter	*2822.03.01 *2862.03.01	*2827.03.01 *2867.03.01	*2831.03.01 *2867.03.02	*2848.03.01 *2887.03.05	*2848.03.02 2887.04.02
KELTEC Power Supply for SB-3614(V)/TT	*2847.03.02				
KY-57 Vinson/VHF/FM/UHF	*2881.03.04	*2881.04.01			

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<u>MATERIEL</u>	<u>TASK NUMBERS</u>					
M-94 MVS	*2887.03.03 2887.04.02	2887.03.04	2887.03.05	2887.03.08	2887.04.01	
M1A1 Powder Thermometer	*2874.03.01	*2874.03.02	*2874.03.03	*2874.03.04		
M20-P100 Thermometer	*2874.03.01	*2874.03.02	*2874.03.03	*2874.03.04		
MD400 2K lb Wheel Scale	*2874.03.01	*2874.03.02	*2874.03.03	2874.03.04		
MK-2569/P Electronic System Tool Kit	*2867.03.01					
MK-2663/U Electronic Equipment Maintenance Kit	*2881.03.01 *8641.01.03 *8641.03.01 *8641.03.06	*2881.03.02 *8641.02.01 *8641.03.02 *8641.03.07	*2881.03.03 *8641.02.02 *8641.03.03 *8641.03.08	*2881.03.06 *8641.02.03 *8641.03.04 *8641.03.09	*8641.01.02 8641.02.04 *8641.03.05 *8641.03.10	
MK-2902/TPQ Maintenance Kit	*2887.04.02					
MW9070NV Optical Time Domain Reflectometer	2823.03.02	*2874.03.01	*2874.03.02	*2874.03.03	*2874.03.04	
Multimeter (Model 87)	*2847.03.03					
Network HUB	*2847.03.03	*2847.03.04	*2862.03.03			
Network Server	*2847.03.03	*2847.03.04	*2862.03.03			
OD-144 Gun Directional Unit	2887.03.04	2887.03.05	2887.03.06	2887.03.08	2887.04.01	
PC Commander Work Station	*2847.03.03	*2847.03.04				
PP-7333/GRC Power Supply	*2846.03.01	*2847.03.01	2847.03.05	*2862.03.01		
PP-7641/VSQ-1 Power Adaptor	*2842.03.02	*2842.03.03	*2842.04.01			
PP-8034 DC Power Converter	2847.03.05					
PP-8035 AC Power Converter	2847.03.05					
PP-8436/P Power Supply	*2846.03.01	2847.03.01	*2847.03.02	2847.03.05		
Printers	*2847.03.03	*2847.03.04	*2862.03.03			
RJ-45 Connector Kits	*2862.03.03					
RL-159 Hand Reel	*2823.03.01					
RL-31-E Hand Reel	*2823.03.01					
S133 Scale, Weighing	*2874.03.01	*2874.03.02	*2874.03.03	*2874.03.04		
S253Z Dial Indicator Set	*2874.03.01	*2874.03.02	*2874.03.03	*2874.03.04		
SB-22/PT Manual Telephone Switchboard	2823.03.01 2847.03.02	*2844.03.02 2862.03.01	*2844.03.03 2862.03.02	2844.04.01	2847.03.01	

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<u>MATERIEL</u>	<u>TASK NUMBERS</u>					
SB-3614/TT Telephone Switch	*2823.03.01	2844.03.02	*2844.03.03	2844.04.01	2847.03.01	
	*2847.03.02	*2862.03.01	*2862.03.02			
SB-3865 (P)/TTC Telephone Switchboard	*2823.03.01	2844.03.02	2844.03.03	2844.04.01	2847.03.01	
	*2847.03.02	*2862.03.01	*2862.03.02			
SB-4097/U Communication Patching Panel	*2823.03.01	*2844.03.02	2844.04.01	2847.03.01	2847.03.02	
	2862.03.02					
ST-43 KY-57 Back-to-Back Test Set	*2881.03.04	2881.04.01				
ST-58 Fill/Vinson/KG-84	*2881.03.04	2881.04.01				
TA-1/PT Telephone Set	*2844.03.02	*2844.03.03	2844.03.05			
TA-1042/U Digital Non-Secure Voice Terminal	2822.03.02	2822.03.03	*2823.03.01	*2844.03.03	*2862.03.01	
	*2862.03.02					
TA-312/PT Telephone Set	2823.03.01	*2844.03.02	*2844.03.03	*2844.03.05	*2847.03.02	
	*2862.03.01	*2862.03.02				
TA-838 TT Telephone Set	*2847.03.02	*2862.03.01	*2862.03.02			
TA-838-TT Telephone Set	*2844.03.02	*2844.03.03	*2844.03.05			
TA-938G Telephone Set	*2847.03.02	2862.03.02				
TA-954 Digital Non-Secure Voice Terminal	2862.03.02					
TA-977/PT Tone Signaling Adapter	*2844.03.02	*2844.03.03	2862.03.02			
TD-1234 Multiplexer Combiner	*2823.03.01	*2862.03.01	2862.03.02			
TETS Third Echelon Test Set	*2874.03.01	*2874.03.02	*2874.03.03	*2874.03.04	2887.04.02	
TK-17/G Tool Kit Electronic	*2842.03.02	*2842.03.03	*2842.04.01			
TS-4291/P Radio Test Set	*2827.03.01	*2844.03.02	2846.03.01	*2847.03.01	2847.03.02	
	2847.03.03	2862.03.01	*2867.03.01	*2867.03.02	2887.04.02	
TS-4317/GRM Radio Test Set	*2822.03.01	*2822.03.03	*2827.03.01	*2831.03.01	*2844.03.02	
	*2846.03.01	2846.03.03	*2847.03.01	*2847.03.02	*2847.03.03	
	*2848.03.01	*2848.03.02	*2862.03.01	*2867.03.01	*2867.03.02	
	*2871.03.01	*2871.03.03	*2871.03.04	*2884.03.01	*2887.03.05	
	2887.04.02					
TS-4335/G Fiber Optic Cable Test Set	*2847.03.06					
TSEC/KG-13 Electronic Key Generator	*2881.03.04	*2881.04.01				

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<u>MATERIEL</u>	<u>TASK NUMBERS</u>				
TSEC/KG-27 Electronic Key Generator	*2881.03.04	2881.04.01			
TSEC/KG-30-3 Multi-Purpose Record and Data Key Generator	*2881.03.04	2881.04.01			
TSEC/KG-33-3 Muti-Purpose Record and Data Key Generator	*2881.03.04	2881.04.01			
TSEC/KG-36 Key Generator	*2881.03.04				
TSEC/KG-40 Half-Duplex Digital Key Generator	*2881.03.04				
TSEC/KG-82 Loop Key Generator	*2822.03.06				
TSEC/KG-84A General Purpose Encryption Equipment	2833.03.01	2833.03.02	2833.04.01	*2881.03.04	*2881.04.01
TSEC/KG-84C General Purpose Encryption Equipment	*2823.03.01 *2881.03.04	*2826.03.02 *2881.04.01	2833.03.01	2833.03.02	2833.04.01
TSEC/KG-94/94A/194/194A Trunk Encryption Device	*2822.03.06 2834.03.02	*2823.03.01 2834.04.01	*2826.03.02 *2847.03.02	*2831.03.03 *2881.03.04	2834.03.01 *2881.04.01
TSEC/KGX-93 Automatic Key Disribution Center	2822.03.04	*2822.03.06			
TSEC/KIR-1A IFF Interrogator	2881.04.01				
TSEC/KIR-1C IFF Interrogator	*2881.03.04				
TSEC/KIT-1A IFF Transponder	*2881.03.04	2881.04.01			
TSEC/KOI-18 General Purpose Tape Reader	*2881.03.04	*2881.04.01			
TSEC/KY-2-2A Secure Voice Module	2881.03.04	2881.04.01			
TSEC/KY-57 Speech Security Equipment (VINSON)	*2822.03.06 2834.03.01 *2881.04.01	2826.03.02 2834.03.02	2833.03.01 2834.04.01	2833.03.02 2844.04.01	2833.04.01 *2881.03.04
TSEC/KY-58 Speech Security Equipment (VINSON)	*2831.03.03	*2881.03.04	2881.04.01		
TSEC/KY-65 Tactical Spech Security Equipment (PARKHILL)	*2881.03.04	*2881.04.01			

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<u>MATERIEL</u>	<u>TASK NUMBERS</u>			
TSEC/KY-65 Tactical Speech Security Equipment (PARKHILL)	2844.04.01			
TSEC/KY-68 Digital Subscriber Voice Terminal (DSVT)	2822.03.02	*2822.03.06	*2847.03.02	
TSEC/KY-90 Secure Digital Net Radio Interface Unit (SDNRIU)	*2881.03.04			
TSEC/KY-99 Advanced Narrowband Digital Voice Terminal (ANDVT/MINTERM)	*2844.03.01	2844.04.01	*2881.03.04	*2881.04.01
TSEC/KYK-13 Electronic Transfer Device	2844.04.01	*2881.04.01		
TSEC/KYV-5 ANDVT COMSEC Module (VACTOR)	2867.03.03	2881.04.01		
TSEC/KYX-15 Net Control Device	2844.04.01			
Z-ACD/TSEC Vehicular Power Supply	2881.03.04			
Z-AHP/TSEC Remote Control Unit	2881.03.04			

Appendix B to  
ENCLOSURE (5)

AMMUNITION, EXPLOSIVES, AND PYROTECHNICS

DOES NOT APPLY TO THIS ORDER.

DISTANCE LEARNING PRODUCTS

1. General. This appendix includes a list of all currently available or planned distance learning (DL) products, including Marine Corps Institute (MCI) publications, designed to provide training related to any task in this OccFld.

2. Format. The columns are as follows:

a. DISTANCE LEARNING PRODUCTS. This column summarizes all DL products assigned to at least one ITS task in this OccFld.

b. TASK NUMBERS. A listing of all ITS tasks associated with the corresponding DL product.

<u>DISTANCE LEARNING PRODUCTS</u>	<u>TASK NUMBERS</u>			
MCI 0410, MIMMS (AIS)	2800.02.01	2800.02.02		
MCI 0414, Ground Maintenance Procedures for Supervisors	2800.01.03	2800.02.03	2800.02.04	2800.02.12
	2802.02.01	2891.01.01	2891.02.01	
MCI 0416, The Marine Corps Publications and Directives System	2800.02.09			
MCI 2820, Electronics Mathematics for Marines	2822.03.01	2823.03.02	2826.03.01	2831.03.01
	2833.03.01	2846.03.01	2847.03.01	2867.03.01
	2871.03.01	2871.03.02	2874.03.01	2874.03.02
	2881.03.02	2881.03.03	2884.03.01	2887.03.01
	2887.03.02	2887.03.03	2887.03.04	2887.03.05
	8641.02.03	8641.03.01	8641.03.02	8641.03.03
	8641.03.04	8641.03.05	8641.03.06	8641.03.07
	8641.03.08	8641.03.09	8641.03.10	
MCI 286, Fundamentals of Digital Logic	2822.03.01	2823.03.02	2826.03.01	2831.03.01
	2833.03.01	2846.03.01	2847.03.01	2867.03.01
	2871.03.01	2871.03.02	2874.03.01	2874.03.02
	2881.03.02	2881.03.03	2884.03.01	2887.03.01
	2887.03.02	2887.03.03	2887.03.04	2887.03.05
	8641.02.03	8641.03.01	8641.03.02	8641.03.03
	8641.03.04	8641.03.05	8641.03.06	8641.03.07
	8641.03.08	8641.03.09	8641.03.10	
MCI 287, Introduction to Test Equipment	2800.03.03	2822.03.01	2823.03.01	2823.03.02
	2826.03.01	2827.03.01	2831.03.01	2833.03.01
	2846.03.01	2847.03.01	2867.03.01	2871.03.01
	2871.03.02	2874.03.01	2874.03.02	2881.03.02
	2881.03.03	2884.03.01	2887.03.01	2887.03.02
	2887.03.03	2887.03.04	2887.03.05	2887.04.02
	8641.02.03	8641.03.01	8641.03.02	8641.03.03
	8641.03.04	8641.03.05	8641.03.06	8641.03.07
	8641.03.08	8641.03.09	8641.03.10	
TBD, AN/MRC-142 Maintenance Course	2844.03.06	2846.03.03		

PERFORMANCE SUPPORT TOOLS

DOES NOT APPLY TO THIS ORDER.

INDIVIDUAL TRAINING STANDARDS

1. General. This enclosure contains all of the ITSs for this OccFld, grouped by MOS. Each MOS is contained in a separate Appendix to Enclosure (6).

2. Format. For each ITS, the following elements of information are provided:

a. TASK. The task describes a specific and necessary behavior expected of a Marine in a particular MOS or billet. It is a clearly stated, performance-oriented action requiring a learned skill. Skills that "make" a Marine or qualify that Marine for the appropriate MOS are designated as "CORE." Those advanced skills that are mission, grade, or billet specific are designated as "CORE PLUS."

b. CONDITION(S). This portion of the ITS describes the equipment, manuals, assistance/supervision, special physical demands, environmental conditions, and location affecting a Marine's performance of the task under real-world circumstances.

c. STANDARD(S). This portion of the ITS describes the level of proficiency to which the individual must perform the task.

d. PERFORMANCE STEPS. Collectively, the performance steps represent the logical sequence of actions required of the Marine to perform the task to standard. These actions are typically detailed in the references.

e. INITIAL TRAINING SETTING. All ITSs are assigned an initial training setting that includes a specific location for initial instruction [Functional Learning Center (FLC) or Managed On-The-Job Training (MOJT)], a sustainment factor (number of months between evaluation or retraining to maintain the proficiency required by the standard), and a "Required By" grade (the lowest grade at which task proficiency is required).

f. REFERENCE(S). References are doctrinal publications, technical manuals, and other publications upon which the ITS and its performance steps are based. They should be readily available and provide detail to the procedures that are only summarized in the performance steps.

g. TRAINING MATERIEL (Optional). Training materiel includes all training devices, simulators, aids, equipment, and materials [except ammunition, distance learning (DL) products, and performance support tools (PST)] required or recommended to properly train the task under the specified conditions and to the specified standard. Mandatory items are preceded by an asterisk(\*)

h. AMMUNITION (Optional). This table, if present, depicts the ammunition, explosives, and/or pyrotechnics required for proper training of the ITS.

i. DISTANCE LEARNING PRODUCT(S) (Optional). This section includes a list of any currently available or planned DL products designed to provide training related to this task.

j. PERFORMANCE SUPPORT TOOL(S) (Optional). This section includes a list of any currently available or planned PSTs designed to provide training related to this task.

k. ADMINISTRATIVE INSTRUCTIONS (Optional). Administrative instructions provide the trainer/instructor with special required or recommended circumstances, including safety precautions, relating to the training or execution of the task. These instructions may also clarify the meaning of the task.

MOS 2800, BASIC DATA/COMMUNICATIONS MAINTENANCE MARINE

DUTY AREA 01 - MAINTENANCE PLANNING

TASK: 2800.01.01 (CORE PLUS) RECOMMEND TO/E CHANGES

CONDITION(S): Provided a TO/E, a mission, concept of employment, and references.

STANDARD(S): To ensure the unit's TO/E are adequate to sustain mission requirements, per the references.

PERFORMANCE STEPS:

1. Review mission statement.
2. Review TO/E.
3. Review concept of employment.
4. Review appropriate users logistic support summaries (ULSS).
5. Determine any special allowances, as required.
6. Identify required changes.
7. Submit for approval.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: SSgt

REFERENCE(S):

1. CMR, Consolidated Memorandum Report
2. MCO 5311.1\_, Table of Manpower Requirements
3. MCO P4400.150\_, Consumer Level Supply Policy Manual
4. UNIT TO/E, Table of Organization/Equipment

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TASK: 2800.01.02 (CORE PLUS) DRAFT UNIT'S MAINTENANCE POLICY LETTERS

CONDITION(S): Provided the mission, TO/E directives from higher headquarters, Commander's guidance, and references.

STANDARD(S): To standardize the maintenance responsibilities for the unit, per the references.

PERFORMANCE STEPS:

1. Analyze mission, directives, policy guidance, and references.
2. Record/State, as required:
  - a. Safety procedures.

- b. Maintenance procedures.
  - c. Training procedures.
  - d. Physical security procedures.
  - e. Transmission/Emission security.
  - f. Cryptographic (COMSEC) procedures.
  - g. Command and control procedures.
  - h. Operational procedures.
  - i. Embarkation procedures.
  - j. Reports (administrative/operational).
  - k. Continuing actions of Marines.
  - l. ECCM.
  - m. Emergency Action Plan.
3. Staff policy letters for review by unit personnel.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: SSgt

REFERENCE(S):

1. Higher Headquarters Directives
2. MCO P1200.7\_, MOS Manual
3. MCO P4790.2\_, MIMMS Field Procedures Manual
4. MCWP 5-1, Marine Corps Planning Process
5. MCWP 6-22, Communications and Information Systems
6. TM 9999-15/1, ESD Awareness Electro-Static Discharge

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TASK: 2800.01.03 (CORE PLUS) PLAN DEPLOYMENT/INSTALLATION OF A FIELD MAINTENANCE FACILITY

CONDITION(S): Provided the mission, equipment, personnel, and references.

STANDARD(S): To provide maintenance capabilities per concept of employment, per the references.

PERFORMANCE STEPS:

1. Analyze Mission/Operations plan.

2. Record/State:
  - a. Safety procedures.
  - b. Test equipment requirements.
  - c. Maintenance facility requirements/space.
  - d. Power requirements.
  - e. Organic transportation requirements.
  - f. External transportation requirements.
  - g. Security requirements.
  - h. Reporting requirements.
3. Staff plan for comments.
4. Submit plan for approval.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: SSgt

REFERENCE(S):

1. MCO P4790.2\_, MIMMS Field Procedures Manual
2. MCWP 5-1, Marine Corps Planning Process
3. MCWP 6-22, Communications and Information Systems
4. SECNAVINST 5510.36, Department of the Navy Information and Personnel Security Program Regulations
5. TM 9999-15/1, ESD Awareness Electro-Static Discharge

DISTANCE LEARNING PRODUCT(S):

1. MCI 0414, Ground Maintenance Procedures for Supervisors

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DUTY AREA 02 - MAINTENANCE ADMINISTRATION

TASK: 2800.02.01 (CORE) COMPLETE AN EQUIPMENT REPAIR ORDER (ERO)/ASSET TRACKING LOGISTIC AUTOMATED SUPPLY SYSTEM (ATLASS) WORK ORDER (WO)

CONDITION(S): Provided designated equipment, ERO/WO, Test Measurement & Diagnostic Equipment (TMDE), and references.

STANDARD(S): To ensure services performed are recorded, per the references.

PERFORMANCE STEPS:

1. Open an ERO/ATLASS TASK/WO.
2. Record Job Status changes, as required.
3. Record requisitioned parts, as required.
4. Record installed parts, as required.
5. Record category code changes, as required.
6. Record description of work, as required.
7. Close an ERO/ATLASS TASK/WO.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. FEDLOG, Federal Logistic Data on Compact Disk
2. MCO P4790.2\_, MIMMS Field Procedures Manual
3. TM 4700-15/1, Equipment Record Procedures
4. UM 4790-5, Users Manual MIMMS

DISTANCE LEARNING PRODUCT(S):

1. MCI 0410, MIMMS (AIS)

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TASK: 2800.02.02 (CORE) REQUISITION REQUIRED PARTS

CONDITION(S): Provided designated faulty equipment, maintenance information systems (MIS) reports, and references.

STANDARD(S): To ensure timely and accurate delivery of parts, per the references.

PERFORMANCE STEPS:

1. Determine authorized echelon of maintenance.
2. Determine appropriate NSN with the use of SL-3, SL-4, and FEDLOG.

Appendix A to  
ENCLOSURE (6)

3. Check the pre-expended bin (PEB), as required.
4. Submit a requisition.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. MCO P4790.2\_, MIMMS Field Procedures Manual
3. SL-3, Major Components of End Items
4. SL-4, Repair Parts for End Items
5. TM 4700-15/1, Equipment Record Procedures
6. UM 4790-5, Users Manual MIMMS

DISTANCE LEARNING PRODUCT(S):

1. MCI 0410, MIMMS (AIS)

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TASK: 2800.02.03 (CORE) MANAGE MAINTENANCE SHOP PROGRAMS

CONDITION(S): Provided tools, equipment, personnel, and references.

STANDARD(S): To ensure compliance, per the references.

PERFORMANCE STEPS:

1. Supervise the following programs:
  - a. Calibration control.
  - b. Publication control.
  - c. Quality control.
  - d. Modification control.
  - e. Tool control.
  - f. Pre-expend Bin control.
  - g. MIMMS/AIS procedures, e.g. Analyze Data: Basic Statistical Procedures (identify trends), Database and Spreadsheet utilization in the analysis of information using MC standard (COTS) software.
  - h. Supply support procedures and special programs, e.g. SMU-credit card/PE/RA budgets, TO/E, reviews, WIR's/LUP's, LMIS, WEB addresses that benefit maintenance effort (MCCES PC TOOLS etc.) Capabilities of Depots/MCCES/Warranty Administration.

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- i. Quality assurance.
  - j. Quality Deficiency Report (QDR) procedures.
  - k. LTI procedures.
  - l. Recoverable Items Report (WIR) procedures.
  - m. Training procedures.
  - n. Deployment/Retrograde procedures.
  - o. Readiness reporting procedures.
  - p. Turn-over procedures.
  - q. Desk top procedures.
2. Conduct inspections.
  3. Correct discrepancies.
  4. Request external staff assistance or training, as required.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Maintenance Float Catalog
3. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
4. CMR, Consolidated Memorandum Report
5. FEDLOG, Federal Logistic Data on Compact Disk
6. MCO P4790.2\_, MIMMS Field Procedures Manual
7. TM 4700-15/1, Equipment Record Procedures
8. UM 4790-5, Users Manual MIMMS
9. UNIT SOP, Unit's Standing Operating Procedures
10. UNIT TO/E, Table of Organization/Equipment

DISTANCE LEARNING PRODUCT(S):

1. MCI 0414, Ground Maintenance Procedures for Supervisors

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TASK: 2800.02.04 (CORE PLUS) ANALYZE MAINTENANCE INFORMATION SYSTEM (MIS) DATA

CONDITION(S): Provided MIS data and references.

Appendix A to  
ENCLOSURE (6)

STANDARD(S): To detect and correct errors in the unit's maintenance reporting, per the references.

PERFORMANCE STEPS:

1. Verify recent changes.
2. Manage MIS data.
3. Manage exceptions listing, as required.
4. Submit corrections and new changes.
5. Validate ATLASS/MIMMS to WON or ERO to equipment, as required.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Cpl

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. MCO 3000.11\_, Marine Corps Ground Equipment Resources Reporting
3. MCO P4790.2\_, MIMMS Field Procedures Manual
4. UM 4790-5, Users Manual MIMMS
5. UNIT CMR, Consolidated Memorandum Report
6. UNIT SOP, Unit's Standing Operating Procedures
7. UNIT TO/E, Table of Organization/Equipment

DISTANCE LEARNING PRODUCT(S):

1. MCI 0414, Ground Maintenance Procedures for Supervisors

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TASK: 2800.02.05 (CORE PLUS) ADMINISTER PRE-EXPENDED BIN CONTROL PROGRAM

CONDITION(S): Provided the requirement, Commander's authorization, unit SOP, and references.

STANDARD(S): To ensure the unit has a source of common, low-cost, high-usage hardware items, per references.

PERFORMANCE STEPS:

1. Determine parts requirements.
2. Issue parts.
3. Inventory PEB.
4. Requisition replacement parts, as required.

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5. Reconcile requisitions, as required.
6. Update desk-top procedures.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: LCpl

REFERENCE(S):

1. Higher Headquarters Directives
  2. MCO P4400.150\_, Consumer Level Supply Policy Manual
  3. MCO P4790.2\_, MIMMS Field Procedures Manual
  4. UM 4400-124, FMF SASSY Using Unit Procedures
  5. UM 4400-15, Organic Property Control
  6. UM 4790-5, Users Manual MIMMS
  7. UNIT TO/E, Table of Organization/Equipment
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TASK: 2800.02.06 (CORE PLUS) ADMINISTER CALIBRATION CONTROL PROGRAM

CONDITION(S): Provided the requirement, equipment requiring calibration, unit SOP, and references

STANDARD(S): To ensure calibration readiness, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Identify all items of TMDE requiring calibration.
3. Notify owners of equipment requiring calibration.
4. Maintain calibration control records for all items of TMDE.
5. Update desk top procedures folder.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: LCpl

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. CMR, Consolidated Memorandum Report
3. MCO 4733.1\_, Marine Corps TMDE CAMP
4. MCO P4790.2\_, MIMMS Field Procedures Manual
5. SL 1-2/3, Index of Authorized Publications in Stock

Appendix A to  
ENCLOSURE (6)

6. TM 10510-14/1, Electronic Test Equipment Listing
7. TM 4700-15/1, Equipment Record Procedures
8. TM 9999-15/1, ESD Awareness Electro-Static Discharge
9. UM 4790-5, Users Manual MIMMS
10. UNIT SOP, Unit's Standing Operating Procedures
11. UNIT TO/E, Table of Organization/Equipment

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TASK: 2800.02.07 (CORE PLUS) ADMINISTER MODIFICATION CONTROL PROGRAM

CONDITION(S): Provided the requirement, designated equipment, unit SOP, and references.

STANDARD(S): To ensure that all modifications required on unit equipment have been completed and are recorded in the equipment records, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Identify equipment requiring modification.
3. Notify equipment owners of modification requirements.
4. Update modification control records.
5. Update desk-top procedures.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: LCpl

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. CMR, Consolidated Memorandum Report
3. CMS-5\_, COMSEC Material System Policy & Procedures Manual
4. MCO P4790.2\_, MIMMS Field Procedures Manual
5. SL 1-2/3, Index of Authorized Publications in Stock
6. TM 4700-15/1, Equipment Record Procedures
7. UM 4790-5, Users Manual MIMMS
8. UNIT TO/E, Table of Organization/Equipment

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TASK: 2800.02.08 (CORE PLUS) ADMINISTER TOOL CONTROL PROGRAM

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CONDITION(S): Provided the requirement, designated tool sets, kits, and chests, unit SOP, and references.

STANDARD(S): To ensure control of tool sets, chests and kits, and TMDE, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Identify all assigned tool sets, kits, and chests.
3. Identify inventory requirements.
4. Verify record of tool inventory.
5. Requisition replacements, as required.
6. Update desk-top procedures.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: LCpl

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. CMR, Consolidated Memorandum Report
3. MCO 4733.1\_, Marine Corps TMDE CAMP
4. MCO P4400.150\_, Consumer Level Supply Policy Manual
5. MCO P4790.2\_, MIMMS Field Procedures Manual
6. SL 1-2/3, Index of Authorized Publications in Stock
7. TM 4700-15/1, Equipment Record Procedures
8. UM 4400-124, FMF SASSY Using Unit Procedures
9. UM 4400-15, Organic Property Control
10. UM 4790-5, Users Manual MIMMS
11. UNIT SOP, Unit's Standing Operating Procedures
12. UNIT TO/E, Table of Organization/Equipment

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TASK: 2800.02.09 (CORE PLUS) ADMINISTER PUBLICATION CONTROL PROGRAM

CONDITION(S): Provided the requirement, designated publications, unit SOP, and references.

Appendix A to  
ENCLOSURE (6)

STANDARD(S): To ensure that all required publications are on hand or on requisition, per the references.

PERFORMANCE STEPS:

1. Inventory publications.
2. Requisition publications.
3. Incorporate required changes.
4. Update inventory records.
5. Update Publication Control Cards/Records.
6. Update desk-top procedures.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: LCpl

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. MCBUL 5600, Series
3. MCO 5215.12, Managing and Maintaining Navy Directives Files and Establishing "Must Hold" Lists
4. MCO P4790.2\_, MIMMS Field Procedures Manual
5. MCO P5215.17\_, The USMC Tech Pub System
6. MCO P5215.1\_, Marine Corps Directives System
7. NAVMC 2761, Catalog of Publications
8. SL 1-2/3, Index of Authorized Publications in Stock
9. TM 4700-15/1, Equipment Record Procedures
10. UNIT SOP, Unit's Standing Operating Procedures
11. UNIT TO/E, Table of Organization/Equipment

DISTANCE LEARNING PRODUCT(S):

1. MCI 0416, The Marine Corps Publications and Directives System

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TASK: 2800.02.10 (CORE PLUS) MAINTAIN EQUIPMENT RECORD JACKET ON ORGANIC MAINTENANCE EQUIPMENT

CONDITION(S): Provided equipment, record jackets, and references.

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STANDARD(S): To ensure the completion and maintenance of all equipment records applicable to the equipment held by the unit, per the references.

PERFORMANCE STEPS:

1. Identify equipment requiring Equipment Record Jackets.
2. Create required record jackets.
3. Update equipment record jackets, as required.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: LCpl

REFERENCE(S):

1. CMR, Consolidated Memorandum Report
  2. MCO P4790.2\_, MIMMS Field Procedures Manual
  3. SL 1-2/3, Index of Authorized Publications in Stock
  4. TM 4700-15/1, Equipment Record Procedures
  5. UM 4790-5, Users Manual MIMMS
  6. UNIT TO/E, Table of Organization/Equipment
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TASK: 2800.02.11 (CORE PLUS) REPORT QUALITY DEFICIENCY

CONDITION(S): Provided defective equipment and references.

STANDARD(S): To ensure equipment is received in an operational status, per the references.

PERFORMANCE STEPS:

1. Identify deficiencies in material.
2. Prepare an SF368.
3. Submit SF368.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: LCpl

REFERENCE(S):

1. Applicable Technical Publications/Manuals
  2. MCO 4855.10\_, Product Quality Deficiency Report (PQDR)
  3. TM 4700-15/1, Equipment Record Procedures
  4. UM 4790-5, Users Manual MIMMS
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Appendix A to  
ENCLOSURE (6)

TASK: 2800.02.12 (CORE PLUS) ADMINISTER COMMUNICATION-ELECTRONIC MAINTENANCE SHOP PROCEDURES

CONDITION(S): Provided a maintenance shop for an infantry battalion or comparable size unit, commander's guidance, required personnel, appropriate equipment, and references.

STANDARD(S): To ensure the efficient conduct of the unit's equipment maintenance program, per the references.

PERFORMANCE STEPS:

1. Review unit SOP, T/O, and mission statement.
2. Institute procedures for the following:
  - a. Corrective maintenance.
  - b. Preventive maintenance.
  - c. Supply support.
  - d. Maintenance related programs.
  - e. MIMMS/ATLASS.
  - f. Safety.
  - g. Shipping and receiving.
  - h. Field operations.
  - i. Training.
  - j. Equipment accountability.
  - k. Embarkation.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. MCO P4400.150\_, Consumer Level Supply Policy Manual
2. MCO P4790.2\_, MIMMS Field Procedures Manual
3. MCWP 6-22, Communications and Information Systems
4. UM 4790-5, Users Manual MIMMS
5. UNIT CMR, Consolidated Memorandum Report
6. UNIT SOP, Unit's Standing Operating Procedures
7. UNIT TO/E, Table of Organization/Equipment

DISTANCE LEARNING PRODUCT(S):

1. MCI 0414, Ground Maintenance Procedures for Supervisors

ADMINISTRATIVE INSTRUCTIONS: A detailed description of maintenance shop procedures can be found in MCO P4790.2\_, Appendix E, Shop administration procedures.

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TASK: 2800.02.13 (CORE PLUS) MAINTAIN PREVENTIVE MAINTENANCE SCHEDULE

CONDITION(S): Provided the requirement, unit SOP, applicable allowance lists, and references.

STANDARD(S): To ensure that preventive maintenance is accomplished, per the references.

PERFORMANCE STEPS:

1. Identify equipment requiring Preventive Maintenance (PM).
2. Determine PM frequency and requirements utilizing appropriate technical publications.
3. Ensure PM services are recorded.
4. Update PM schedule, as required.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: LCpl

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. CMR, Consolidated Memorandum Report
3. MCO P4790.2\_, MIMMS Field Procedures Manual
4. TM 4700-15/1, Equipment Record Procedures
5. UM 4790-5, Users Manual MIMMS

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TASK: 2800.02.14 (CORE PLUS) ADMINISTER QUALITY CONTROL PROGRAM

CONDITION(S): Provided designated equipment, TMDE, and references.

STANDARD(S): To ensure completion of maintenance actions, per the references.

PERFORMANCE STEPS:

1. Determine performance standards.
2. Verify completion of maintenance actions.
3. Verify operational condition.

4. Reject faulty equipment.
5. Verify equipment closeout.
6. Update desk top procedures.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. MCO P4790.2\_, MIMMS Field Procedures Manual
3. UM 4790-5, Users Manual MIMMS
4. UNIT TO/E, Table of Organization/Equipment

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TASK: 2800.02.15 (CORE PLUS) SUBMIT CHANGE TO TECHNICAL PUBLICATIONS

CONDITION(S): Provided technical publications requiring change, a NAVMC 10772, and references.

STANDARD(S): To ensure technical publications are complete and accurate, per the references.

PERFORMANCE STEPS:

1. Identify required changes.
2. Prepare NAVMC 10772 recommending change.
3. Submit NAVMC 10772.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. MCO P4790.2\_, MIMMS Field Procedures Manual
3. TM 4700-15/1, Equipment Record Procedures
4. UM 4790-5, Users Manual MIMMS
5. UNIT TO/E, Table of Organization/Equipment

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TASK: 2800.02.16 (CORE PLUS) ADMINISTER ELECTROMAGNETIC ENVIRONMENTAL EFFECTS (E3) PROGRAM

CONDITION(S): Provided mission, personnel, TMDE, and references.

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STANDARD(S): To ensure E3 are controlled and maintained, per the references.

PERFORMANCE STEPS:

1. Develop design/installation techniques that cover the following areas:
  - a. Indirect coupling.
  - b. Shielding.
  - c. Grounding.
  - d. Bonding.
  - e. Filtering.
  - f. Corrosion control.
2. Develop maintenance standards.
3. Identify E3 problems to the unit E3 coordinator.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Cpl

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. MCWP 6-22, Communications and Information Systems
3. TM 9406-15, Grounding Procedures
4. TM 9999-15/1, ESD Awareness Electro-Static Discharge

DUTY AREA 03 - MAINTENANCE ACTIONS

TASK: 2800.03.01 (CORE) PERFORM SOLDERING ON BASIC ELECTRONIC COMPONENTS

CONDITION(S): Given an electronic device, tools, TMDE, and references.

STANDARD(S): To ensure that components are soldered within specifications, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Select appropriate soldering tip for required application.
3. Set soldering iron to correct temperature.
4. Clean intended application area.
5. Tin wire, as required.
6. Solder connectors, as required.
7. Fabricate a cable, as required.
8. Splice a wire cable, as required.
9. Solder components, as required.
10. Clean flux from connection.
11. Visually inspect to verify soldering meets specifications.
12. Perform operational check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. MCO P5090.2\_, Environmental Compliance and Protection Manual
4. MSDS, Material Safety Data Sheets
5. TM 9999-15/1, ESD Awareness Electro-Static Discharge

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TASK: 2800.03.02 (CORE) PROTECT ELECTROSTATIC DISCHARGE (ESD) SENSITIVE DEVICES DURING HANDLING, STORAGE, AND TRANSPORTATION

CONDITION(S): Provided ESD sensitive devices, ESD protection materials, ESD labels, and references.

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STANDARD(S): To ensure protection of electronic equipment, per the references.

PERFORMANCE STEPS:

1. Review references.
2. Identify materials requiring ESD protection.
3. Perform actions necessary to protect ESD sensitive materials.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. SI 4400-15/5, SI
3. TI 4400-15/5, Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
4. TM 9406-15, Grounding Procedures
5. TM 9999-15/1, ESD Awareness Electro-Static Discharge

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TASK: 2800.03.03 (CORE) TEST GROUND COMMUNICATIONS/ELECTRONIC EQUIPMENT

CONDITION(S): Provided test measurement diagnostic equipment (TMDE), tools, cables, connectors, unit under test, and references.

STANDARD(S): To ensure all ground communications/electronic equipment is operating, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Fill sandbags, as required.
3. Connect TMDE to appropriate power source.
4. Perform equipment operational check.
5. Connect TMDE to equipment to be tested, aligned, or adjusted.
6. Operate controls of the TMDE to obtain the correct measurement/display.
7. Interpret/Calculate measurement obtained.
8. Disconnect TMDE from the circuit undergoing test.
9. Secure unit under test (UUT) and TMDE, as required.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

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REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. MCO P4790.2\_, MIMMS Field Procedures Manual
3. TM 10510-14/1, Electronic Test Equipment Listing
4. UM 4790-5, Users Manual MIMMS

DISTANCE LEARNING PRODUCT(S):

1. MCI 287, Introduction to Test Equipment

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TASK: 2800.03.04 (CORE PLUS) PERFORM LIMITED TECHNICAL INSPECTION (LTI) ON GROUND COMMUNICATIONS/ELECTRONIC EQUIPMENT

CONDITION(S): Provided a mission, equipment, and references.

STANDARD(S): To determine equipment condition, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Inventory equipment.
3. Check for SL-3 completeness, annotate as required.
4. Connect equipment to TMDE, as required.
5. Ensure proper handling of static sensitive components.
6. Record findings, as required.
7. Determine appropriate maintenance actions, as required.
8. Research authorized modifications.
9. Perform maintenance closeout procedures to include quality control check.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. CMS-5\_, COMSEC Material System Policy & Procedures Manual
3. FEDLOG, Federal Logistic Data on Compact Disk
4. MCO P4790.2\_, MIMMS Field Procedures Manual
5. SL 1-2/3, Index of Authorized Publications in Stock

6. TM 4700-15/1, Equipment Record Procedures
7. UM 4790-5, Users Manual MIMMS

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TASK: 2800.03.05 (CORE PLUS) DEPLOY A FIELD MAINTENANCE ACTIVITY

CONDITION(S): Provided a mission, equipment, personnel, and references.

STANDARD(S): To provide maintenance capabilities per concept of employment and the references.

PERFORMANCE STEPS:

1. Adhere to the safety requirements.
2. Ensure personnel are prepared for deployment, as required.
3. Establish load plans for personnel and equipment.
4. Arrange for special material handling and transportation equipment.
5. Select site location after considering:
  - a. Space requirements.
  - b. Terrain features.
  - c. Access routes.
  - d. Proximity to supported units.
  - e. Proximity to logistic support.
6. Determine power requirements, as required.
7. Install the maintenance facility.
8. Determine logistics/support procedures.
9. Maintain logistics/support procedures.
10. Maintain security.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: SSgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. CMR, Consolidated Memorandum Report
3. MCO P4790.2\_, MIMMS Field Procedures Manual

4. SECNAVINST 5510.36, Department of the Navy Information and Personnel Security Program Regulations
  5. SECNAVINST P5530.13, Security Instruction F/SEN Convention (AA&E)
  6. UNIT SOP, Unit's Standing Operating Procedures
  7. UNIT TO/E, Table of Organization/Equipment
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TASK: 2800.03.06 (CORE PLUS) DETERMINE MAINTENANCE SUPPORT REQUIREMENTS

CONDITION(S): Provided a mission, equipment, personnel, and references.

STANDARD(S): To ensure unit's maintenance support requirements are met, per the references.

PERFORMANCE STEPS:

1. Evaluate unit's support requirements.
2. Define supply support requirements.
3. Submit support requirements.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
  2. Higher Headquarters Directives
  3. Maintenance Float Catalog
  4. Operational Order
  5. MCO P4790.2\_, MIMMS Field Procedures Manual
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TASK: 2800.03.07 (CORE PLUS) DIRECT MAINTENANCE ACTIONS

CONDITION(S): Provided maintenance personnel, equipment, and the references.

STANDARD(S): To sustain the unit's ground communications/electronic equipment readiness, per the references.

PERFORMANCE STEPS:

1. Direct maintenance personnel.
2. Manage maintenance resources, e.g. Analyze Data: Basic Statistical Procedures (identify trends), Database and Spreadsheet utilization in the analysis of information using MC standard (COTS) software.

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3. Control maintenance production.
4. Maintain reports and records.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. MCO P4790.2\_, MIMMS Field Procedures Manual
3. UNIT SOP, Unit's Standing Operating Procedures

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TASK: 2800.03.08 (CORE PLUS) PREPARE FOR EQUIPMENT EMBARKATION

CONDITION(S): Provided equipment, personnel, a mission, and references.

STANDARD(S): To ensure serviceability of equipment at destination, per the references.

PERFORMANCE STEPS:

1. Inspect SL-3 completeness of maintenance/maintenance support equipment.
2. Determine requirements for embarkation materials, boxes, strapping, etc.
3. Inspect tactical marking of maintenance/maintenance support equipment.
4. Inspect packing and embark lists upon completion.
5. Inspect weather/waterproofing of maintenance/maintenance support equipment.
6. Determine special lifting/handling requirements for maintenance/maintenance support equipment.
7. Determine special security requirements for maintenance/maintenance support equipment.
8. Embark equipment.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Cpl

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. CMR, Consolidated Memorandum Report
3. MCO P4790.2\_, MIMMS Field Procedures Manual
4. SECNAVINST 5510.36, Department of the Navy Information and Personnel Security Program Regulations
5. SECNAVINST P5530.13, Security Instruction F/SEN Convention (AA&E)

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6. UNIT SOP, Unit's Standing Operating Procedures
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DUTY AREA 04 - MAINTENANCE OPERATIONS

TASK: 2800.04.01 (CORE PLUS) INSTALL ELECTROMAGNETIC INTERFERENCE (EMI) MAINTENANCE SHELTER FOR FIELD USE

CONDITION(S): Provided an EMI maintenance shelter, mission, and references.

STANDARD(S): To ensure installation and operation of a field maintenance activity, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Site the equipment.
3. Anchor the shelter.
4. Ground shelter.
5. Apply power.
6. Camouflage equipment.
7. Verify EMI procedures are adhered to.
8. Verify cable connections.
9. Verify antenna installation, as required.
10. Verify equipment operation.
11. Provide local security.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: LCpl

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. MCO P5090.2\_, Environmental Compliance and Protection Manual
4. MCWP 6-22, Communications and Information Systems
5. TM 9406-15, Grounding Procedures
6. TM 9999-15/1, ESD Awareness Electro-Static Discharge

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DUTY AREA 05 - MAINTENANCE TRAINING

TASK: 2800.05.01 (CORE PLUS) CONDUCT TRAINING FOR COMMUNICATIONS MAINTENANCE PERSONNEL

CONDITION(S): Provided the unit's training plan, personnel, equipment, training records, and references.

STANDARD(S): To ensure personnel are trained, per the references.

PERFORMANCE STEPS:

1. Identify training strengths and weaknesses of unit personnel.
2. Establish training priorities:
  - a. Mission oriented training.
  - b. Skill progression training.
  - c. Professional development training.
3. Devise training plan to increase skill level of personnel/unit:
  - a. Communication security.
  - b. Mission and organization of command.
  - c. Maintenance of files and logs.
  - d. Troubleshooting.
4. Determine type and frequency of training to be conducted on an individual/unit basis.
5. Provide supervision at all levels during conduct of training.
6. Evaluate skill levels attained against those established.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Higher Headquarters Directives
3. Unit Training Plan
4. MCO 5390.2\_, Leadership Training and Education
5. MCO P1200.7\_, MOS Manual
6. MCO P1500.40\_, Marine Corps Training Philosophy and Requirements
7. MCO P4790.2\_, MIMMS Field Procedures Manual
8. MCRP 3-0A, Unit Training Management Guide

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9. MCRP 3-0B, How to Conduct Training
10. MCWP 6-22, Communications and Information Systems
11. UNIT SOP, Unit's Standing Operating Procedures

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MOS 2802, ELECTRONICS MAINTENANCE OFFICER (GROUND)

DUTY AREA 01 - MAINTENANCE PLANNING

This MOS supervises all Marines in the Ground Electronics Maintenance OccFld.

TASK: 2802.01.01 (CORE PLUS) PLAN FOR DEPLOYMENT OF A MAINTENANCE UNIT

CONDITION(S): Provided a mission, Commander's guidance, and references.

STANDARD(S): To ensure maintenance personnel and equipment support the mission, per the references.

PERFORMANCE STEPS:

1. Review warning order.
2. Review Commander's guidance.
3. Review supported equipment density list.
4. Identify support requirements.
5. Recommend class 9 supply block, as required.
6. Recommend float block, as required.
7. Submit embarkation requirements.
8. Provide input for Operational Plan.
9. Determine and submit power requirements.
10. Provide input for load plans for personnel and equipment.
11. Arrange for special material handling and transportation of equipment, as required.
12. Project site requirements.
13. Determine Security/Defense requirements.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Capt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Operational Order
3. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
4. MCO P4400.150\_, Consumer Level Supply Policy Manual
5. MCO P4790.2\_, MIMMS Field Procedures Manual

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6. MCWP 5-1, Marine Corps Planning Process
7. MCWP 6-22, Communications and Information Systems
8. MPS, Load Plan
9. UM 4790-5, Users Manual MIMMS
10. UNIT SOP, Unit's Standing Operating Procedures
11. UNIT TO/E, Table of Organization/Equipment

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TASK: 2802.01.02 (CORE PLUS) MANAGE C4 CONTRACTOR LOGISTICAL SUPPORT (CLS) PROGRAM FOR THE MARINE CORPS

CONDITION(S): Provided a mission, Commander's guidance, and references.

STANDARD(S): To ensure effective C4 supply support at the MCLB Albany Depot Repair Facility, per the references.

PERFORMANCE STEPS:

1. Review Branch (Code 843) structure, TO/E, C4 systems supported, and billet description.
2. Attend meetings/conferences.
3. Manage the Information Intelligence, Processing and Production (I2P2) maintenance contract as the I2P2 Funding Manager for the Marine Corps.
4. Brief the Branch Head Manager on C4 supply support issues/challenges.
5. Provide guidance on C4 supply support.
6. Draft and release official message traffic.
7. Manage government employees.
8. Prepare and brief C4 supply support issues/challenges.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Capt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Higher Headquarters Directives
3. MCO P4400.150\_, Consumer Level Supply Policy Manual
4. MCO P4790.2\_, MIMMS Field Procedures Manual
5. TM 4700-15/1, Equipment Record Procedures

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TASK: 2802.01.03 (CORE PLUS) PERFORM THE DUTIES OF AN ELECTRONICS MAINTENANCE OFFICER FOR MARINE EXPEDITIONARY FORCE/MAJOR SUBORDINATE COMMAND (MSC) HQS

CONDITION(S): Provided a mission, Commander's guidance, and references.

STANDARD(S): To ensure timely and effective maintenance on the command's equipment, per the references.

PERFORMANCE STEPS:

1. Review duties.
2. Conduct subordinate unit inspections and staff assist visits.
3. Provide training to units.
4. Brief Commander/G-6 on maintenance issues/challenges.
5. Provide guidance to G-6 on maintenance.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Capt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Higher Headquarters Directives
3. MCO P4400.150\_, Consumer Level Supply Policy Manual
4. MCO P4790.2\_, MIMMS Field Procedures Manual
5. MCWP 4-24, Commander's Guide to Maintenance
6. TM 4700-15/1, Equipment Record Procedures
7. UNIT TO/E, Table of Organization/Equipment

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TASK: 2802.01.04 (CORE PLUS) MANAGE STAFF OF ACQUISITION AND EQUIPMENT SPECIALISTS FOR SECTION OF MARINE CORPS SYSTEMS COMMAND (MARCORSYSCOM)

CONDITION(S): Provided a mission, Commander's guidance, and references.

STANDARD(S): To ensure effective management of Test Measurement and Diagnostic Equipment (TMDE) within the Marine Corps, per the references.

PERFORMANCE STEPS:

1. Review duties.
2. Supervise staff of acquisition and equipment specialists.
3. Provide training to units.
4. Brief Commander on TMDE and maintenance issues/challenges.

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INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Capt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Higher Headquarters Directives
3. MCO 4733.1\_, Marine Corps TMDE CAMP
4. MCO P4400.150\_, Consumer Level Supply Policy Manual
5. MCO P4790.2\_, MIMMS Field Procedures Manual
6. TM 4700-15/1, Equipment Record Procedures

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TASK: 2802.01.05 (CORE PLUS) PERFORM THE DUTIES OF AN ELECTRONICS MAINTENANCE MANAGEMENT OFFICER FOR INSTALLATIONS & LOGISTICS (I&L)

CONDITION(S): Provided a mission, Commander's guidance, and references.

STANDARD(S): To ensure effective maintenance management policy, procedures, and validation of equipment requirements, per the references.

PERFORMANCE STEPS:

1. Review duties.
2. Review issues and policy.
3. Provide input on equipment requirements and maintenance capabilities.
4. Provide maintenance policy.
5. Attend meetings/conferences.
6. Brief OSD/Joint Staff/ACMC/DC, I&L/Department Head on maintenance issues/equipment/capabilities.
7. Provide guidance on the peculiarities of electronics maintenance and systems.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Maj

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Higher Headquarters Directives
3. MCO P4400.150\_, Consumer Level Supply Policy Manual
4. MCO P4790.2\_, MIMMS Field Procedures Manual
5. TM 4700-15/1, Equipment Record Procedures

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TASK: 2802.01.06 (CORE PLUS) PERFORM THE DUTIES OF AN ELECTRONIC MAINTENANCE REQUIREMENTS OFFICER

CONDITION(S): Provided a mission, Commander's guidance, and references.

STANDARD(S): To ensure policy and procedures are in place to effectively meet electronic maintenance requirements, per the references.

PERFORMANCE STEPS:

1. Review duties.
2. Review issues and policy.
3. Coordinate and manage the Marine Corps position on the operational requirements for electronic maintenance related systems, and maintenance aspects of other C4 systems.
4. Serve as the operating force sponsor and MCCDC liaison to MARCORSSYSCOM in matters of electronic maintenance and appropriate C4 operational requirements.
5. Coordinate with counterparts in other MCCDC divisions when C4 equipment requirements have implications for doctrine, training, and force structure.
6. Participate in the development of concepts of employment for C4 operational requirements documents.
7. Assist in Mission Area Analysis for mission areas impacted by electronic maintenance.
8. Coordinate the staffing of Marine Corps and other service C4 requirements documents.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Maj

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Higher Headquarters Directives
3. MCO P4400.150\_, Consumer Level Supply Policy Manual
4. MCO P4790.2\_, MIMMS Field Procedures Manual
5. TM 4700-15/1, Equipment Record Procedures

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TASK: 2802.01.07 (CORE PLUS) COMMAND AN ELECTRONICS MAINTENANCE COMPANY, SERVICE COMPANY, OR SCHOOLHOUSE TRAINING COMPANY

CONDITION(S): Provided a command, Commander's guidance, TO/E, and references.

STANDARD(S): To ensure combat and mission readiness, per the references.

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PERFORMANCE STEPS:

1. Review TO/E.
2. Review Commander's guidance.
3. Review present policies and procedures.
4. Establish/Revise policies and procedures, as required.
5. Supervise personnel and equipment maintenance.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Maj

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Higher Headquarters Directives
3. MCO P4400.150\_, Consumer Level Supply Policy Manual
4. MCO P4790.2\_, MIMMS Field Procedures Manual
5. MCWP 6-22, Communications and Information Systems
6. TM 4700-15/1, Equipment Record Procedures
7. UNIT TO/E, Table of Organization/Equipment

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TASK: 2802.01.08 (CORE PLUS) SPONSOR 2800 OCCUPATIONAL FIELD

CONDITION(S): Provided a mission, Commander's guidance, and references.

STANDARD(S): To ensure effective management of the 2800 Occupational Field, per the references.

PERFORMANCE STEPS:

1. Review duties.
2. Attend meetings/conferences.
3. Review strengths/weaknesses and issues of individual MOSs in the 2800 OCC FLD.
4. Manage strengths/weaknesses and issues of individual MOSs in the 2800 OccFld.
5. Brief 2800 issues to HQMC.
6. Provide guidance to the officer and enlisted monitors for 2800 Marines.
7. Brief the promotion boards on 2800 Marines.
8. Brief the Vice Commandant for C4 on maintenance issues/challenges.

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INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: LtCol

REFERENCE(S):

1. Higher Headquarters Directives
2. MCO 5311.1\_, Table of Manpower Requirements
3. UNIT TO/E, Table of Organization/Equipment

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DUTY AREA 02 - MAINTENANCE ADMINISTRATION

This MOS supervises all Marines in the Ground Electronics Maintenance OccFld.

TASK: 2802.02.01 (CORE PLUS) SUPERVISE ELECTRONIC MAINTENANCE SUPPORT PROGRAMS

CONDITION(S): Provided an electronic maintenance unit and references.

STANDARD(S): To ensure programs are effective, per the references.

PERFORMANCE STEPS:

1. Supervise the following programs:
  - a. Calibration/TMDE.
  - b. Publications.
  - c. Quality Control.
  - d. Modification Control.
  - e. Tool Control.
  - f. Pre-expended bin.
  - g. MIMMS.
  - h. Supply (maintenance).
  - i. Quality Deficiency Reporting.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Capt

REFERENCE(S):

1. MCO 4733.1\_, Marine Corps TMDE CAMP
2. MCO P4400.150\_, Consumer Level Supply Policy Manual
3. MCO P4790.2\_, MIMMS Field Procedures Manual
4. UM 4790-5, Users Manual MIMMS

DISTANCE LEARNING PRODUCT(S):

1. MCI 0414, Ground Maintenance Procedures for Supervisors

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TASK: 2802.02.02 (CORE PLUS) SUPERVISE MAINTENANCE PRODUCTION

CONDITION(S): Provided assigned maintenance area, electronic maintenance unit, a mission, Commader's guidance, and references.

STANDARD(S): To enhance maintenance efficiency and effectiveness, per the references.

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PERFORMANCE STEPS:

1. Conduct internal review.
2. Evaluate external analysis.
3. Determine action required.
4. Develop POA&M.
5. Execute plan.
6. Evaluate results.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Capt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. FSMAO Checklist
3. MCO 3000.11\_, Marine Corps Ground Equipment Resources Reporting
4. MCO 4400.82\_, MIMMS Controlled Item Management Manual
5. MCO 4733.1\_, Marine Corps TMDE CAMP
6. MCO P4105.3\_, ILS Manual
7. MCO P4400.150\_, Consumer Level Supply Policy Manual
8. MCO P4790.2\_, MIMMS Field Procedures Manual
9. MCO P5215.17\_, The USMC Tech Pub System
10. MCO P5215.1\_, Marine Corps Directives System
11. SECNAVINST 5510.30, Information and Personnel Security Program
12. SECNAVINST 5510.36, Department of the Navy Information and Personnel Security Program Regulations
13. SI 4400-15/5, SI
14. TI 4400-15/5, Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
15. TM 9999-15/1, ESD Awareness Electro-Static Discharge
16. UM 4790-5, Users Manual MIMMS
17. UNIT TO/E, Table of Organization/Equipment

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TASK: 2802.02.03 (CORE PLUS) PREPARE A BUDGET

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CONDITION(S): Provided Commander's guidance, personnel training requirements, maintenance contracts, and references.

STANDARD(S): To ensure a cost effective plan, per the references.

PERFORMANCE STEPS:

1. Review mission.
2. Determine operational and maintenance requirements.
3. Identify new project requirements.
4. Determine funding category (PMC or O&M).
5. Review maintenance contracts.
6. Determine cost for training for personnel.
7. Review existing funds available.
8. Determine installation/construction dates for new projects.
9. Develop cost estimates for projects, maintenance, and training.
10. Develop/Plan a budget based on preceding requirements.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Capt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Current Fiscal Budget for Base/Post/Station
3. Maintenance Contracts
4. MCO P4200.15\_, Marine Corps Purchasing Procedures Manual
5. MCO P7100.8\_, Field Budget Guidance Manual

Appendix B to  
ENCLOSURE (6)

DUTY AREA 03 - MAINTENANCE ACTIONS

This MOS supervises all Marines in the Ground Electronics Maintenance OccFld.

TASK: 2802.03.01 (CORE PLUS) SUPERVISE COMMUNICATION-ELECTRONIC MAINTENANCE

CONDITION(S): Provided a maintenance area, personnel, equipment, and references.

STANDARD(S): To ensure maintenance support requirements are met, per the references.

PERFORMANCE STEPS:

1. Determine maintenance capabilities.
2. Evaluate available personnel.
3. Evaluate organic equipment.
4. Develop shop procedures.
5. Analyze workload.
6. Establish maintenance priorities.
7. Assign individual maintenance actions.
8. Inspect completed maintenance actions.
9. Assist in the process of placing new equipment in service.
10. Conduct inspection of functional areas.
11. Assign corrective actions, as required.
12. Follow up corrective actions.
13. Update turnover folder.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Capt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. MCO P4790.2\_, MIMMS Field Procedures Manual
3. MCWP 4-24, Commander's Guide to Maintenance
4. UNIT SOP, Unit's Standing Operating Procedures
5. UNIT TO/E, Table of Organization/Equipment

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TASK: 2802.03.02 (CORE PLUS) BRIEF COMMANDER ON EQUIPMENT READINESS OF A MAINTENANCE/SERVICE COMPANY

MCO 1510.44C  
10 JAN 01

CONDITION(S): Provided maintenance reports, Commander's guidance, and references.

STANDARD(S): To ensure the commander is aware of all issues relative to the combat readiness of equipment, per the references.

PERFORMANCE STEPS:

1. Review Commander's guidance.
2. Review MARES management reports.
3. Review MIMMS reports.
4. Gather/Share specific information.
5. Evaluate equipment readiness.
6. Prepare the brief.
7. Deliver the brief.
8. Brief ATLASS II reports.
9. Brief C4 status.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Capt

REFERENCE(S):

1. DPR, Daily Processing Report
2. FMFM 3-1, Command and Staff Action
3. MCO P4790.2\_, MIMMS Field Procedures Manual
4. UNIT TO/E, Table of Organization/Equipment

DUTY AREA 04 - MAINTENANCE OPERATIONS

This MOS supervises all Marines in the Ground Electronics Maintenance OccFld.

TASK: 2802.04.01 (CORE PLUS) SUPERVISE THE DEPLOYMENT OF A FIELD MAINTENANCE ACTIVITY

CONDITION(S): Provided a mission, equipment, personnel, and references.

STANDARD(S): To provide maintenance capabilities per concept of employment and the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Verify security.
3. Conduct pre-deployment inspection.
4. Verify load plans.
5. Verify special material handling and transportation.
6. Validate and maintain logistics/support.
7. Supervise/Dispatch maintenance contact teams.
8. Verify data requirements.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Capt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. CMS-21, COMSEC Material System Policy & Procedures
3. MCO P4790.2\_, MIMMS Field Procedures Manual
4. MCWP 4-24, Commander's Guide to Maintenance
5. SECNAVINST 5510.30, Information and Personnel Security Program
6. SECNAVINST 5510.36, Department of the Navy Information and Personnel Security Program Regulations
7. SECNAVINST P5530.13, Security Instruction F/SEN Convention (AA&E)
8. UNIT TO/E, Table of Organization/Equipment

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TASK: 2802.04.02 (CORE PLUS) SUPERVISE OPERATIONS AND MAINTENANCE OF INTERGRATED TELECOMMUNICATIONS SYSTEM

CONDITION(S): Provided a mission, required personnel, equipment, and references.

MCO 1510.44C  
10 JAN 01

STANDARD(S): To ensure a fully operational Tactical Automated Switching System (TASS), per the references.

PERFORMANCE STEPS:

1. Verify personnel assignments.
2. Analyze/Maintain system.
3. Ensure compliance with unit E3 procedures.
4. Direct operations of TASS.
5. Direct operations of TECHCON.
6. Conduct coordination with SYSCON/TECHCON agencies.
7. Update/Revise telephone directory.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Capt

REFERENCE(S):

1. ANNEX K
2. Applicable Technical Publications/Manuals
3. Speed/Snap Program
4. UNIT SOP, Unit's Standing Operating Procedures
5. UNIT TO/E, Table of Organization/Equipment

Appendix B to  
ENCLOSURE (6)

DUTY AREA 05 - MAINTENANCE TRAINING

This MOS supervises all Marines in the Ground Electronics Maintenance OccFld.

TASK: 2802.05.01 (CORE PLUS) SUPERVISE TRAINING FOR COMMUNICATIONS MAINTENANCE PERSONNEL

CONDITION(S): Provided the unit's training plan, personnel, equipment, training records, and references.

STANDARD(S): To ensure personnel are trained, per the references.

PERFORMANCE STEPS:

1. Identify training strengths and weaknesses of unit personnel.
2. Establish training priorities:
  - a. Mission oriented training.
  - b. Skill progression training.
  - c. Professional development training.
3. Supervise training plan to increase skill level of personnel/unit:
  - a. Communication security.
  - b. Mission and organization of command.
  - c. Maintenance of files and logs.
  - d. Troubleshooting.
4. Supervise type and frequency of training to be conducted on an individual/unit basis.
5. Ensure supervision at all levels during conduct of training.
6. Evaluate skill levels attained against those established.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Capt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Higher Headquarters Directives
3. Unit Training Plan
4. MCO 5390.2\_, Leadership Training and Education
5. MCO P1200.7\_, MOS Manual
6. MCO P1500.40\_, Marine Corps Training Philosophy and Requirements

MCO 1510.44C  
10 JAN 01

7. MCO P4790.2\_, MIMMS Field Procedures Manual
8. MCRP 3-0A, Unit Training Management Guide
9. MCRP 3-0B, How to Conduct Training
10. MCWP 4-24, Commander's Guide to Maintenance
11. MCWP 6-22, Communications and Information Systems
12. UNIT SOP, Unit's Standing Operating Procedures

Appendix B to  
ENCLOSURE (6)

MOS 2805, GROUND ELECTRONICS/COMMUNICATIONS MAINTENANCE OFFICER

DUTY AREA 01 - MAINTENANCE PLANNING

This MOS supervises all enlisted Marines in the Ground Electronics Maintenance OccFld.

TASK: 2805.01.01 (CORE) WRITE A MAINTENANCE SOP

CONDITION(S): Provided a TO/E, Commander's guidance, and references.

STANDARD(S): To ensure standardization of the IOM procedures of the unit's organic equipment, per the references.

PERFORMANCE STEPS:

1. Analyze mission, directives, policy guidance, and references.
2. Outline and record:
  - a. Command and Control relationships.
  - b. Maintenance procedures (preventive and corrective).
  - c. Training requirements and procedures.
  - d. Security (physical, transmission, emission, and cryptographic).
  - e. Operational procedures.
  - f. Embarkation procedures.
  - g. Reports (administrative/operational).
  - h. ECCM.
  - j. Continuing actions of Marines.
3. Submit for inclusion in units SOP.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: W01

REFERENCE(S):

1. MCO P4790.2\_, MIMMS Field Procedures Manual
2. MCWP 6-22, Communications and Information Systems
3. TM 9406-15, Grounding Procedures

MCO 1510.44C  
10 JAN 01

DUTY AREA 02 - MAINTENACE ADMINISTRATION

This MOS supervises all enlisted Marines in the Ground Electronics Maintenance OccFld.

TASK: 2805.02.01 (CORE) DIRECT ELECTRONIC MAINTENANCE SUPPORT PROGRAMS

CONDITION(S): Provided an electronic maintenance platoon/section and references.

STANDARD(S): To ensure programs are effective, per the references.

PERFORMANCE STEPS:

1. Supervise the following programs:
  - a. Calibration/TMDE.
  - b. Publications.
  - c. Quality Control.
  - d. Modification Control.
  - e. Tool Control.
  - f. Pre-expended bin.
  - g. MIMMS/ATLASS.
  - h. Supply (maintenance).
  - i. Quality Deficiency Reporting.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: W01

REFERENCE(S):

1. MCO 4733.1\_, Marine Corps TMDE CAMP
2. MCO P4400.150\_, Consumer Level Supply Policy Manual
3. MCO P4790.2\_, MIMMS Field Procedures Manual
4. UM 4790-5, Users Manual MIMMS

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TASK: 2805.02.02 (CORE) VALIDATE REQUIREMENTS FOR SPECIAL PROGRAMS OF A MAINTENANCE FACILITY

CONDITION(S): Provided with program reports, Commander's guidance, mission statement, and references.

STANDARD(S): To ensure special programs support mission requirements, per the references.

Appendix C to  
ENCLOSURE (6)

PERFORMANCE STEPS:

1. Validate the following special programs:
  - a. MPS/FIE.
  - b. Pacing items.
  - c. Float Low Density (LD) Secondary Reparable (SECREP) review.
  - d. IROAN/R&R/WIR.
  - e. GENPAC and Class IX.
  - f. Operating stocks.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: W01

REFERENCE(S):

1. MCO 3000.11\_, Marine Corps Ground Equipment Resources Reporting
2. MCO 4733.1\_, Marine Corps TMDE CAMP
3. MCO P4105.3\_, ILS Manual
4. MCO P4400.150\_, Consumer Level Supply Policy Manual
5. MCO P4790.2\_, MIMMS Field Procedures Manual
6. MCWP 4-24, Commander's Guide to Maintenance
7. UM 4400-124, FMF SASSY Using Unit Procedures
8. UM 4790-5, Users Manual MIMMS

MCO 1510.44C  
10 JAN 01

DUTY AREA 03 - MAINTENANCE ACTIONS

This MOS supervises all enlisted Marines in the Ground Electronics Maintenance OccFld.

TASK: 2805.03.01 (CORE) DIRECT GROUND COMMUNICATIONS/ELECTRONIC MAINTENANCE

CONDITION(S): Provided a maintenance area, personnel, equipment, and references.

STANDARD(S): To ensure maintenance support requirement are met, per the references.

PERFORMANCE STEPS:

1. Determine maintenance capabilities.
2. Evaluate available personnel.
3. Evaluate organic equipment.
4. Develop shop procedures.
5. Analyze workload.
6. Establish maintenance priorities.
7. Assign individual maintenance actions.
8. Inspect completed maintenance actions.
9. Supervise maintenance readiness inspections.
10. Assist in the process of placing new equipment in service.
11. Conduct inspection of functional areas.
12. Assign corrective actions, as required.
13. Follow up corrective actions.
14. Update turnover folder.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: W01

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. MCO P4790.2\_, MIMMS Field Procedures Manual
3. MCWP 4-24, Commander's Guide to Maintenance
4. UNIT SOP, Unit's Standing Operating Procedures
5. UNIT TO/E, Table of Organization/Equipment

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TASK: 2805.03.02 (CORE) BRIEF COMMANDER ON EQUIPMENT READINESS

Appendix C to  
ENCLOSURE (6)

CONDITION(S): Provided maintenance reports, Commander's guidance, and references.

STANDARD(S): To ensure the Commander is aware of all issues relative to the combat readiness of equipment, per the references.

PERFORMANCE STEPS:

1. Review Commander's guidance.
2. Review MARES management reports.
3. Review MIMMS reports.
4. Gather/Share specific information.
5. Evaluate equipment readiness.
6. Prepare the brief.
7. Deliver the brief.
8. Brief ATLASS II reports, as required.
9. Brief C3 report, as required.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: W01

REFERENCE(S):

1. DPR, Daily Processing Report
2. FMFM 3-1, Command and Staff Action
3. MCO P4790.2\_, MIMMS Field Procedures Manual
4. MCWP 4-24, Commander's Guide to Maintenance
5. UNIT TO/E, Table of Organization/Equipment

MCO 1510.44C  
10 JAN 01

DUTY AREA 04 - MAINTENANCE OPERATIONS

This MOS supervises all enlisted Marines in the Ground Electronics Maintenance OccFld.

TASK: 2805.04.01 (CORE) DIRECT THE DEPLOYMENT OF A FIELD MAINTENANCE ACTIVITY

CONDITION(S): Provided a mission, equipment, personnel, and references.

STANDARD(S): Deploy maintenance personnel and equipment to meet mission requirements, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Verify security.
3. Conduct pre-deployment inspection.
4. Verify load plans.
5. Verify special material handling and transportation.
6. Validate/Maintain logistics/support.
7. Supervise/Dispatch maintenance contact teams.
8. Verify data requirements.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: W01

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. CMS-21, COMSEC Material System Policy & Procedures
3. MCO P4790.2\_, MIMMS Field Procedures Manual
4. MCWP 4-24, Commander's Guide to Maintenance
5. SECNAVINST 5510.30, Information and Personnel Security Program
6. SECNAVINST 5510.36, Department of the Navy Information and Personnel Security Program Regulations
7. SECNAVINST P5530.13, Security Instruction F/SEN Convention (AA&E)
8. UNIT TO/E, Table of Organization/Equipment

Appendix C to  
ENCLOSURE (6)

DUTY AREA 05 - MAINTENANCE TRAINING

This MOS supervises all enlisted Marines in the Ground Electronics Maintenance OccFld.

TASK: 2805.05.01 (CORE) MANAGE TRAINING FOR COMMUNICATIONS MAINTENANCE PERSONNEL

CONDITION(S): Provided the unit's training plan, personnel, equipment, training records, and references.

STANDARD(S): To ensure personnel are trained, per the references.

PERFORMANCE STEPS:

1. Identify training strengths and weaknesses of unit personnel.
2. Establish training priorities:
  - a. Mission oriented training.
  - b. Skill progression training.
  - c. Professional development training.
3. Supervise training plan to increase skill level of personnel/unit:
  - a. Communication security.
  - b. Mission and organization of command.
  - c. Maintenance of files and logs.
  - d. Troubleshooting.
4. Supervise type and frequency of training to be conducted on an individual/unit basis.
5. Ensure supervision at all levels during conduct of training.
6. Evaluate skill levels attained against those established.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: W01

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Higher Headquarters Directives
3. Unit Training Plan
4. MCO P1200.7\_, MOS Manual
5. MCO P1500.40\_, Marine Corps Training Philosophy and Requirements
6. MCO P4790.2\_, MIMMS Field Procedures Manual
7. MCRP 3-0A, Unit Training Management Guide

MCO 1510.44C  
10 JAN 01

8. MCRP 3-0B, How to Conduct Training
9. MCWP 4-24, Commander's Guide to Maintenance
10. MCWP 6-22, Communications and Information Systems
11. UNIT SOP, Unit's Standing Operating Procedures

Appendix C to  
ENCLOSURE (6)

MOS 2810, TELEPHONE SYSTEMS MAINTENANCE OFFICER

DUTY AREA 01 - MAINTENANCE PLANNING

This MOS supervises all enlisted Marines in the Ground Electronics Maintenance OccFld.

TASK: 2810.01.01 (CORE) DRAFT THE TELEPHONE/WIRE CONSTRUCTION PLATOON SOP

CONDITION(S): Provided a TO/E, Commander's guidance, and references.

STANDARD(S): To ensure standardization of the Installation, Operation, and Maintenance (IOM) procedures of the unit's organic equipment, per the references.

PERFORMANCE STEPS:

1. Analyze mission, directives, policy guidance, and references.
2. Outline and record:
  - a. Command and Control relationships.
  - b. Maintenance procedures (preventive and corrective).
  - c. Training requirements and procedures.
  - d. Security (physical, transmission, emission, and cryptographic).
  - e. Operational procedures.
  - f. Embarkation procedures.
  - g. Reports (administrative/operational).
  - h. ECCM.
  - i. Continuing actions of Marines.
3. Submit for inclusion in units SOP.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: W01

REFERENCE(S):

1. MCO P4790.2\_, MIMMS Field Procedures Manual
2. MCWP 6-22, Communications and Information Systems
3. TM 9406-15, Grounding Procedures

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TASK: 2810.01.02 (CORE) DEVELOP A TACTICAL AUTOMATED SWITCHING SYSTEM (TASS) PLAN

CONDITION(S): Provided a mission, unit TO/E, Commander's guidance, warning order, and references.

MCO 1510.44C  
10 JAN 01

STANDARD(S): To ensure the TASS plan meets the mission requirements, per the references.

PERFORMANCE STEPS:

1. Review warning order.
2. Determine capabilities of tactical and commercial equipment.
3. Identify requirements for:
  - a. Tactical telephone directory.
  - b. Personnel.
  - c. Equipment.
  - d. Power requirements.
  - e. Transportation.
  - f. Configuration and programing.
  - g. Interoperability and distribution.
4. Coordinate with local telephone exchange to establish:
  - a. Installation and maintenance procedures.
  - b. Unique operating characteristics.
5. Coordinate with appropriate SYSCON/TECHCON
6. Identify embarkation requirements.
7. Project site requirements.
8. Submit plan for review and inclusion.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: W01

REFERENCE(S):

1. ANNEX K
2. Applicable Technical Publications/Manuals
3. Higher Headquarters Directives
4. Operational Order
5. UNIT SOP, Unit's Standing Operating Procedures
6. UNIT TO/E, Table of Organization/Equipment

Appendix D to  
ENCLOSURE (6)

DUTY AREA 02 - MAINTENANCE ADMINISTRATION

This MOS supervises all enlisted Marines in the Ground Electronics Maintenance OccFld.

TASK: 2810.02.01 (CORE PLUS) PREPARE A BUDGET FOR BASE/POST/STATION TELEPHONE SECTION

CONDITION(S): Provided Commander's guidance, personnel training requirements, maintenance contracts, and references.

STANDARD(S): To ensure a cost effective plan, per the references.

PERFORMANCE STEPS:

1. Review mission.
2. Determine operational and maintenance requirements.
3. Identify new project requirements.
4. Determine funding category (PMC or O&M).
5. Review maintenance contracts.
6. Determine cost for training for personnel.
7. Review existing funds available.
8. Determine installation/construction dates for new projects.
9. Develop cost estimates for projects, maintenance, and training.
10. Develop/Plan a budget based on preceding requirements.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: W01

REFERENCE(S):

1. Current Fiscal Budget for Base/Post/Station
2. Maintenance Contracts
3. MCO P4200.15\_, Marine Corps Purchasing Procedures Manual
4. MCO P7100.8\_, Field Budget Guidance Manual

MCO 1510.44C  
10 JAN 01

DUTY AREA 03 - MAINTENANCE ACTIONS

This MOS supervises all enlisted Marines in the Ground Electronics Maintenance OccFld.

TASK: 2810.03.01 (CORE) BRIEF COMMANDER ON READINESS OF WIRE/CONSTRUCTION EQUIPMENT

CONDITION(S): Provided personnel and equipment status reports and references.

STANDARD(S): To ensure the commander is aware of all issues relative to the combat readiness of equipment, per the references.

PERFORMANCE STEPS:

1. Review equipment status reports.
2. Coordinate with the CEMO to verify equipment status.
3. Prepare the brief.
4. Deliver the brief.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: W01

REFERENCE(S):

1. DPR, Daily Processing Report
2. MCWP 4-24, Commander's Guide to Maintenance
3. UNIT TO/E, Table of Organization/Equipment

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TASK: 2810.03.02 (CORE) COORDINATE WITH THE COMMUNICATIONS ELECTRONICS MAINTENANCE OFFICER (CEMO) ON INTEGRATED TELECOMMUNICATIONS SYSTEMS MAINTENANCE

CONDITION(S): Provided a mission, personnel, equipment, and references.

STANDARD(S): To ensure equipment readiness by keeping the CEMO informed on all issues, per the references.

PERFORMANCE STEPS:

1. Supervise organizational maintenance.
2. Advise CEMO on intermediate level repairs.
3. Analyze maintenance reports.
4. Coordinate equipment fieldings.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: W01

REFERENCE(S):

1. MCWP 4-24, Commander's Guide to Maintenance

Appendix D to  
ENCLOSURE (6)

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TASK: 2810.03.03 (CORE PLUS) DIRECT FIXED-PLANT TELEPHONE OPERATIONS

CONDITION(S): Provided personnel, equipment, and references.

STANDARD(S): To ensure reliable telecommunications, per the references.

PERFORMANCE STEPS:

1. Supervise the operation of telephone dial central office.
2. Monitor following areas:
  - a. Trunk usage.
  - b. Switch usage.
  - c. Off base line usage.
3. Maintain fixed plant telephone records.
4. Manage payment/collection of telephone bills.
5. Supervise compilation, input, and publishing of base/post/station telephone directory.
6. Provide coordination and supervision of investigations into fraudulent use of telephone services.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: W01

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Plant SOP
3. MCO P4400.150\_, Consumer Level Supply Policy Manual
4. MCO P5090.2\_, Environmental Compliance and Protection Manual

MCO 1510.44C  
10 JAN 01

DUTY AREA 04 - MAINTENANCE OPERATIONS

This MOS supervises all enlisted Marines in the Ground Electronics Maintenance OccFld.

TASK: 2810.04.01 (CORE) SUPERVISE TACTICAL AUTOMATED SWITCHING SYSTEM (TASS) DEPLOYMENT

CONDITION(S): Provided a mission, Commanders guidance, equipment, personnel, and references.

STANDARD(S): Deploy a TASS that meets the mission requirements, per the references.

PERFORMANCE STEPS:

1. Adhere to the safety requirements.
2. Ensure adherence to cryptographic security regulations.
3. Verify load plans for personnel and equipment.
4. Verify special material handling and transportation requirements.
5. Conduct site survey.
6. Verify power installation.
7. Advise/Manage intermediate maintenance of the TASS.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: W01

REFERENCE(S):

1. ANNEX K
2. CMS-21, COMSEC Material System Policy & Procedures
3. MCO P4790.2\_, MIMMS Field Procedures Manual
4. SECNAVINST 5510.30, Information and Personnel Security Program
5. SECNAVINST 5510.36, Department of the Navy Information and Personnel Security Program Regulations
6. SECNAVINST P5530.13, Security Instruction F/SEN Convention (AA&E)
7. UNIT SOP, Unit's Standing Operating Procedures
8. UNIT TO/E, Table of Organization/Equipment

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TASK: 2810.04.02 (CORE) DIRECT OPERATIONS/MAINTENANCE OF INTEGRATED TELECOMMUNICATIONS SYSTEM

CONDITION(S): Provided a mission, required personnel, equipment, and references.

STANDARD(S): To ensure a fully operational TASS, per the references.

Appendix D to  
ENCLOSURE (6)

PERFORMANCE STEPS:

1. Verify personnel assignments.
2. Analyze/Maintain system.
3. Ensure compliance with unit E3 procedures.
4. Direct operations of TASS.
5. Direct operations of TECHCON.
6. Conduct coordination with SYSCON/TECHCON agencies.
7. Update/Revise telephone directory.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: W01

REFERENCE(S):

1. ANNEX K
2. Applicable Technical Publications/Manuals
3. Speed/Snap Program
4. MCWP 4-24, Commander's Guide to Maintenance
5. UNIT SOP, Unit's Standing Operating Procedures
6. UNIT TO/E, Table of Organization/Equipment

MCO 1510.44C  
10 JAN 01

DUTY AREA 05 - MAINTENANCE TRAINING

This MOS supervises all enlisted Marines in the Ground Electronics Maintenance OccFld.

TASK: 2810.05.01 (CORE) DIRECT WIRE/CONSTRUCTION PLATOON/SECTION TRAINING

CONDITION(S): Provided the unit's training plan, personnel by MOS and rank, training records, and references.

STANDARD(S): To ensure personnel are trained, per the references.

PERFORMANCE STEPS:

1. Identify training strengths and weaknesses of unit personnel.
2. Establish training priorities:
  - a. Mission oriented training.
  - b. Skill progression training.
  - c. Professional development training.
3. Devise training plan to increase skill level of personnel/unit:
  - a. Communication security.
  - b. Mission and organization of command.
  - c. Maintenance of files and logs.
  - d. Troubleshooting.
4. Determine type and frequency of training to be conducted on an individual/unit basis.
5. Provide supervision at all levels during conduct of training.
6. Evaluate skill levels attained against those established.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: W01

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. MCO P1200.7\_, MOS Manual
3. MCO P1500.40\_, Marine Corps Training Philosophy and Requirements
4. MCWP 4-24, Commander's Guide to Maintenance
5. MCWP 6-22, Communications and Information Systems

Appendix D to  
ENCLOSURE (6)

MOS 2822, ELECTRONIC SWITCHING EQUIPMENT TECHNICIAN

DUTY AREA 01 - MAINTENANCE PLANNING

For a complete task list in this duty area for MOS 2822 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 1.

MCO 1510.44C  
10 JAN 01

DUTY AREA 02 - MAINTENANCE ADMINISTRATION

For a complete task list in this duty area for MOS 2822 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 2.

Appendix E to  
ENCLOSURE (6)

DUTY AREA 03 - MAINTENANCE ACTIONS

For a complete task list in this duty area for MOS 2822 include all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 3.

TASK: 2822.03.01 (CORE) DIAGNOSE BASIC ELECTRONIC CIRCUITS

CONDITION(S): Given a faulty electronic device, tools, Test Measurement and Diagnostic Equipment (TMDE), and references.

STANDARD(S): To identify faulty components, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Research applicable technical data pertaining to faulty equipment.
3. Read schematic diagrams for basic electronic circuits.
4. Calculate basic electronic circuit parameters.
5. Ensure proper handling of Static Sensitive Components/Printed Circuit Cards.
6. Measure basic electronic circuit performance.
7. Trace signal paths in basic electronic circuits.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. MSDS, Material Safety Data Sheets
4. TM 9999-15/1, ESD Awareness Electro-Static Discharge

TRAINING MATERIEL:

1. \* 2000 Semiconductor Device Test Set
2. \* 2246A Oscilloscope
3. \* 28 Volt Power Supply
4. \* 33120A Function Generator
5. \* 34401A Digital Multimeter
6. \* 4410 Bird Wattmeter
7. \* 54825N Digital O'Scope
8. \* 8643A Signal Generator

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9. \* AN/GSM-317 Optical Communications Test Set
10. AN/USM-657(V2) Third Echelon Test System (TETS)
11. \* J-4843A/GRM Test Adapter
12. \* TS-4317/GRM Radio Test Set

DISTANCE LEARNING PRODUCT(S):

1. MCI 2820, Electronics Mathematics for Marines
2. MCI 286, Fundamentals of Digital Logic
3. MCI 287, Introduction to Test Equipment

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**TASK:** 2822.03.02 (CORE) PERFORM CORRECTIVE MAINTENANCE ON ELECTRONIC DIGITAL SWITCHING EQUIPMENT

**CONDITION(S):** Provided faulty equipment, assigned maintenance area, tools, TMDE, and references.

**STANDARD(S):** To ensure faulty electronic digital switching equipment is returned to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Research applicable technical data pertaining to faulty equipment.
3. Read schematic diagrams.
4. Calculate circuit parameters.
5. Ensure proper handling of static sensitive components/printed circuit cards.
6. Measure basic circuit performance.
7. Perform alignments.
8. Trace signal paths.
9. Trace current/voltage paths.
10. Identify faulty component(s).
11. Remove/Replace faulty component(s), as required.
12. Research authorized Modification and Technical Instructions (MI & TI).
13. Perform maintenance close-out procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

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REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Maintenance Float Catalog
3. FEDLOG, Federal Logistic Data on Compact Disk
4. MCO P4790.2\_, MIMMS Field Procedures Manual
5. SL 1-2/3, Index of Authorized Publications in Stock
6. SL-4, Repair Parts for End Items
7. TM 9999-15/1, ESD Awareness Electro-Static Discharge
8. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 2000 Semiconductor Device Test Set
2. \* 2246A Oscilloscope
3. \* 2430A Oscilloscope
4. \* 33120A Function Generator
5. \* 34401A Digital Multimeter
6. \* 4410 Bird Wattmeter
7. \* 54825N Digital O'Scope
8. AN/TTC-42 Automatic Telephone Central Office
9. AN/USM-657(V2) Third Echelon Test System (TETS)
10. TA-1042/U Digital Non-Secure Voice Terminal
11. TSEC/KY-68 Digital Subscriber Voice Terminal (DSVT)

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TASK: 2822.03.03 (CORE) PERFORM ADVANCED CORRECTIVE MAINTENANCE ON ELECTRONIC DIGITAL SWITCHING EQUIPMENT

CONDITION(S): Provided faulty equipment, assigned maintenance area, tools, TMDE, and references.

STANDARD(S): To ensure faulty electronic digital switching equipment is returned to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.

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2. Research applicable technical data pertaining to faulty equipment.
3. Read schematic diagrams.
4. Calculate circuit parameters.
5. Ensure proper handling of static sensitive components/printed circuit cards.
6. Measure basic circuit performance.
7. Perform alignments.
8. Trace signal paths.
9. Trace current/voltage paths.
10. Identify faulty component(s).
11. Remove/Replace faulty component(s).
12. Research authorized Modification and Technical Instructions (MI & TI).
13. Perform maintenance close-out procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Maintenance Float Catalog
3. FEDLOG, Federal Logistic Data on Compact Disk
4. MCO P4790.1\_, Marine Corps Integrated Maintenance Management System (MIMMS) MANUAL
5. MCO P4790.2\_, MIMMS Field Procedures Manual
6. SL 1-2/3, Index of Authorized Publications in Stock
7. SL-4, Repair Parts for End Items
8. TM 9999-15/1, ESD Awareness Electro-Static Discharge
9. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 2246A Oscilloscope
2. \* 2430A Oscilloscope
3. \* 34401A Digital Multimeter
4. \* 4410 Bird Wattmeter

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5. \* 54825N Digital O'Scope
6. \* 8643A Signal Generator
7. TA-1042/U Digital Non-Secure Voice Terminal
8. \* TS-4317/GRM Radio Test Set

ADMINISTRATIVE INSTRUCTIONS: This task applies to promina 800/400 transmission resource controller, red com IGX, compact digital switch/single row nest, CV/2048M, multi-rate voice card.

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TASK: 2822.03.04 (CORE PLUS) PERFORM CERTIFICATION PROCEDURES ON KGX-93 AND KT-83

CONDITION(S): Provided a KGX-93 and certified KT-83, assigned maintenance area, tools, and references.

STANDARD(S): To ensure KGX-93 and KT-83 are certified, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Connect equipment to be certified to special test equipment.
3. Ensure proper handling of static sensitive components/printed circuit cards.
4. Perform certification procedures in accordance with current regulations.
5. Evacuate to higher echelon, as required.
6. Perform maintenance close-out procedures to include quality assurance check, as required.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. CMS-21, COMSEC Material System Policy & Procedures
3. CMS-5\_, COMSEC Material System Policy & Procedures Manual
4. MCO P4790.2\_, MIMMS Field Procedures Manual
5. SECNAVINST 5510.30, Information and Personnel Security Program
6. SECNAVINST 5510.36, Department of the Navy Information and Personnel Security Program Regulations
7. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. TSEC/KGX-93 Automatic Key Distribution Center

ADMINISTRATIVE INSTRUCTIONS: This task only applies to MOS 2822 after elimination of MOS 2881.

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TASK: 2822.03.05 (CORE PLUS) PERFORM CORRECTIVE MAINTENANCE ON COMMERCIAL ELECTRONIC DIGITAL SWITCHING EQUIPMENT

CONDITION(S): Provided equipment, operational plan, and references.

STANDARD(S): To restore equipment to an operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Read schematic diagrams.
3. Calculate circuit parameters.
4. Measure basic circuit performance.
5. Ensure proper handling of static sensitive components/printed circuit cards.
6. Perform alignments.
7. Trace signal paths.
8. Trace Current/Voltage paths.
9. Identify faulty SRU's.
10. Remove/Replace faulty SRU'S.
11. Research authorized Modification and Technical Instructions (MI&TI).
12. Perform maintenance close-out procedures to include quality assurance check.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: LCpl

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. MCO P5090.2\_, Environmental Compliance and Protection Manual
4. MSDS, Material Safety Data Sheets

TASK: 2822.03.06 (CORE PLUS) PERFORM LIMITED MAINTENANCE ON COMSEC EQUIPMENT USED IN DIGITAL SWITCHING SYSTEMS

CONDITION(S): Provided faulty COMSEC equipment, an assigned maintenance area, tools, spare kits, TMDE, and references.

STANDARD(S): To ensure faulty COMSEC equipment is returned to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Connect faulty equipment to special test equipment.
3. Ensure proper handling of static sensitive components/printed circuit cards.
4. Trace functional block diagrams.
5. Isolate fault to the line replaceable unit (LRU).
6. Restore equipment to a fully operational status by substitution of LRU.
7. Research authorized Modifications and Technical Instructions (MI & TI).
8. Evacuate to higher echelon, as required.
9. Perform maintenance close-out procedures to include quality assurance check, as required.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. CMS-21, COMSEC Material System Policy & Procedures
3. CMS-5\_, COMSEC Material System Policy & Procedures Manual
4. FEDLOG, Federal Logistic Data on Compact Disk
5. MCO P4790.2\_, MIMMS Field Procedures Manual
6. SL 1-2/3, Index of Authorized Publications in Stock
7. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* TSEC/KG-82 Loop Key Generator
2. \* TSEC/KG-94/94A/194/194A Trunk Encryption Device
3. \* TSEC/KGX-93 Automatic Key Distribution Center
4. \* TSEC/KY-57 Speech Security Equipment (VINSON)

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5. \* TSEC/KY-68 Digital Subscriber Voice Terminal (DSVT)

ADMINISTRATIVE INSTRUCTIONS: Task applies only after the elimination of the 2881 MOS.

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DUTY AREA 04 - MAINTENANCE OPERATIONS

For a complete task list in this duty area for MOS 2822 include all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 4.

TASK: 2822.04.01 (CORE) PROVIDE TECHNICAL ASSISTANCE DURING THE INSTALLATION OF ELECTRONIC DIGITAL SWITCHING EQUIPMENT

CONDITION(S): Provided an operational plan, equipment, and references.

STANDARD(S): To ensure electronic digital switching equipment is installed and functioning, per the references.

PERFORMANCE STEPS:

1. Adhere to all safety requirements.
2. Verify equipment connected to a grounding system.
3. Verify power source.
4. Verify remote capabilities, as required.
5. Verify hardware and software configuration.
6. Verify equipment operating procedures.
7. Perform EMI troubleshooting to include checking for proper grounds, cable connections, power connections, etc.
8. Provide guidance to correct any discrepancies noted during EMI troubleshooting.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Operational Order
3. TM 9406-15, Grounding Procedures
4. TM 9999-15/1, ESD Awareness Electro-Static Discharge

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DUTY AREA 05 - MAINTENANCE TRAINING

For a complete task list in this duty area for MOS 2822 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 5.

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MOS 2823, TECHNICAL CONTROLLER

DUTY AREA 01 - MAINTENANCE PLANNING

For a complete task list in this duty area for MOS 2823 include all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 1.

TASK: 2823.01.01 (CORE) ASSIST COMMUNICATIONS CHIEF IN EVALUATING THE COMMUNICATIONS PLAN

CONDITION(S): Provided a mission, equipment, personnel, Commander's guidance, and references.

STANDARD(S): To provide technical advice to the communications chief in developing the communications plan, per the references.

PERFORMANCE STEPS:

1. Assess unit capabilities.
2. Assess higher/supported/adjacent unit capabilities and requirements.
3. Analyze locations of interfacing communication equipment.
4. Verify circuit requirements with subscribers.
5. Assist in drafting/editing communication plan.
6. Coordinate the assignment of designations for transmission links and circuits.
7. Verify circuit and link priorities with SYSCON.
8. Advise on any technical deficiencies in communications plan, as required.
9. Prepare technical control associated paperwork.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. ANNEX K
2. Applicable Technical Publications/Manuals
3. Operational Order
4. CJCSM 6231, Manual for Employed Joint Communications
5. JCS PUB 6-05.1 THROUGH 6-05.7, Employment of Joint Tactical Communication Systems: Joint Tactical Communications System Management
6. MCWP 6-22, Communications and Information Systems

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DUTY AREA 02 - MAINTENANCE ADMINISTRATION

For a complete task list in this duty area for MOS 2823 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 2.

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ENCLOSURE (6)

DUTY AREA 03 - MAINTENANCE ACTIONS

For a complete task list in this duty area for MOS 2823 include all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 3.

TASK: 2823.03.01 (CORE) REPAIR FAULTS OR DEGRADATION IN COMMUNICATION NETWORKS

CONDITION(S): Provided a communication network, designated circuit outage, tools, Test Measurement and Diagnostic Equipment (TMDE), and references.

STANDARD(S): To return the network to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Coordinate with circuit users to determine status of terminal devices.
3. Diagnose transmission media.
4. Condition circuits with amplifiers, attenuators, or filters to restore circuit, as required.
5. Reroute or activate backup circuit according to priority dictated by SYSCON/TECHCON.
6. Maintain log entries on all circuit actions.
7. Notify SYSCON/TECHCON with the reason for outage and corrective action taken.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Operational Order

TRAINING MATERIEL:

1. \* 2000 Semiconductor Device Test Set
2. \* 2246A Oscilloscope
3. \* 2430A Oscilloscope
4. \* 33120A Function Generator
5. \* 34401A Digital Multimeter
6. \* 4410 Bird Wattmeter
7. \* 54825N Digital O'Scope
8. \* 6556 Power Supply
9. \* 8431 Electrical Dummy Load

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10. \* 8643A Signal Generator
11. \* AN/CYZ-10 Digital Transfer Device
12. \* AN/GSC-54 Fiber Optic Converter
13. AN/TRC-170 Radio Terminal Set
14. \* AN/TTC-42 Automatic Telephone Central Office
15. \* AN/USM-657(V2) Third Echelon Test System (TETS)
16. \* CX-4566A/G Telephone Cable Assembly 100 Ft
17. \* CX-4566A/G Telephone Cable Assembly 25Ft
18. \* CX-4566A/G Telephone Cable Assembly 500Ft
19. \* CX-4760A/U Telephone Cable Assembly
20. \* Cable Tester
21. Fiber Optic Fault Finder
22. \* HP8562A Spectrum Analyzer
23. \* HYP-71 Auxillary Power Supply
24. \* RL-159 Hand Reel
25. \* RL-31-E Hand Reel
26. SB-22/PT Manual Telephone Switchboard
27. \* SB-3614/TT Telephone Switch
28. \* SB-3865 (P)/TTC Telephone Switchboard
29. \* SB-4097/U Communication Patching Panel
30. \* TA-1042/U Digital Non-Secure Voice Terminal
31. TA-312/PT Telephone Set
32. \* TD-1234 Multiplexer Combiner
33. \* TSEC/KG-84C General Purpose Encryption Equipment
34. \* TSEC/KG-94/94A/194/194A Trunk Encryption Device

DISTANCE LEARNING PRODUCT(S):

1. MCI 287, Introduction to Test Equipment
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Appendix F to  
ENCLOSURE (6)

TASK: 2823.03.02 (CORE) PERFORM CORRECTIVE MAINTENANCE ON DIGITAL TECHNICAL CONTROL (DTC) FACILITY TO THE LINE REPLACEABLE UNIT (LRU) AND CHASSIS MOUNTED COMPONENT LEVEL

CONDITION(S): Provided designated faulty equipment, assigned maintenance area, tools, TMDE, and references.

STANDARD(S): To return a faulty DTC facility to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Adhere to cryptographic security regulations.
3. Research applicable technical data pertaining to faulty equipment.
4. Read schematic diagrams.
5. Calculate circuit parameters.
6. Ensure proper handling of static sensitive components/printed circuit cards.
7. Measure circuit performance.
8. Perform alignments, as required.
9. Trace signal paths.
10. Trace current/voltage paths.
11. Requisition repair parts, as required.
12. Isolate faulty LRU's/chassis mounted components.
13. Remove/Replace faulty LRU's/Chassis mounted components.
14. Research authorized Modification and Technical Instructions (MI & TI).
15. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Maintenance Float Catalog
3. CMS-21, COMSEC Material System Policy & Procedures
4. FEDLOG, Federal Logistic Data on Compact Disk
5. MCO P4790.1\_, Marine Corps Integrated Maintenance Management System (MIMMS) MANUAL
6. MCO P4790.2\_, MIMMS Field Procedures Manual

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7. SECNAVINST 5510.30, Information and Personnel Security Program
8. SECNAVINST 5510.36, Department of the Navy Information and Personnel Security Program Regulations
9. SL 1-2/3, Index of Authorized Publications in Stock
10. SL-4, Repair Parts for End Items
11. TM 9999-15/1, ESD Awareness Electro-Static Discharge
12. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 2000 Semiconductor Device Test Set
2. \* 2246A Oscilloscope
3. \* 33120A Function Generator
4. \* 34401A Digital Multimeter
5. \* 6556 Power Supply
6. \* 8643A Signal Generator
7. AN/MRC-142 Radio Set
8. AN/TRC-170 Radio Terminal Set
9. AN/TTC-42 Automatic Telephone Central Office
10. \* J-1077A Distribution Box
11. MW9070NV Optical Time Domain Reflectometer

DISTANCE LEARNING PRODUCT(S):

1. MCI 2820, Electronics Mathematics for Marines
2. MCI 286, Fundamentals of Digital Logic
3. MCI 287, Introduction to Test Equipment

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DUTY AREA 04 - MAINTENANCE OPERATIONS

For a complete task list in this duty area for MOS 2823 include all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 4.

TASK: 2823.04.01 (CORE) INSTALL DTC FACILITY

CONDITION(S): Provided an operational plan, equipment, and references.

STANDARD(S): To ensure proper connection and equipment operation, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Verify power source.
3. Perform EMI checks to include proper grounds, cable connections, power connections, etc.
4. Verify equipment operation.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Operational Order
3. CMS-21, COMSEC Material System Policy & Procedures
4. MCWP 6-22, Communications and Information Systems
5. SECNAVINST 5510.30, Information and Personnel Security Program
6. SECNAVINST 5510.36, Department of the Navy Information and Personnel Security Program Regulations
7. SL 1-2/3, Index of Authorized Publications in Stock
8. TM 9406-15, Grounding Procedures
9. TM 9999-15/1, ESD Awareness Electro-Static Discharge

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TASK: 2823.04.02 (CORE) COORDINATE ACTIVATION OF COMMUNICATIONS CIRCUITS

CONDITION(S): Provided an operational plan, equipment, and references.

STANDARD(S): To ensure the circuits of a communications system are operational, per the references.

PERFORMANCE STEPS:

1. Verify circuit requirements with SYSCON/TECHCON.

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2. Update SYSCON/TECHCON continually throughout installation of communications system.
3. Verify correct incoming and outgoing signaling for each circuit.
4. Coordinate activation of circuits once communications links test reliable in prioritized fashion dictated by SYSCON/TECHCON.
5. Condition circuits to optimal operating levels.
6. Maintain records on activation/deactivation of links and circuits.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. ANNEX K
2. Applicable Technical Publications/Manuals
3. CJCSM 6231, Manual for Employed Joint Communications
4. FM 24-16, Communication-Electronic Operations Orders, Records and Reports
5. JCS PUB 6-05.1 THROUGH 6-05.7, Employment of Joint Tactical Communication Systems: Joint Tactical Communications System Management
6. MCWP 6-22, Communications and Information Systems

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DUTY AREA 05 - MAINTENANCE TRAINING

For a complete task list in this duty area for MOS 2823 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 5.

MOS 2826, AN/MS-63A MAINTENANCE TECHNICIAN

DUTY AREA 01 - MAINTENANCE PLANNING

MOS 2826 is an additional MOS only, assigned to qualified Marines with a primary MOS of 2847 or 2862. For a complete task list of MOS 2826 use all tasks for the Marine's primary MOS.

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DUTY AREA 02 - MAINTENANCE ADMINISTRATION

MOS 2826 is an additional MOS only, assigned to qualified Marines with a primary MOS of 2847 or 2862. For a complete task list of MOS 2826 use all tasks for the Marine's primary MOS.

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DUTY AREA 03 - MAINTENANCE ACTIONS

MOS 2826 is an additional MOS only, assigned to qualified Marines with a primary MOS of 2847 or 2862. For a complete task list of MOS 2826 include all tasks for the Marine's primary MOS.

TASK: 2826.03.01 (CORE) PERFORM CORRECTIVE MAINTENANCE ON THE AN/MSC-63A AND RELATED EQUIPMENT

CONDITION(S): Provided faulty equipment, assigned maintenance area, tools, Test Measurement and Diagnostic Equipment (TMDE), and references.

STANDARD(S): To return faulty AN/MSC-63A equipment to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Verify operation of system.
3. Isolate faults in power distribution system.
4. Isolate faults in signal cable distribution.
5. Interface each communication channel in system for operation.
6. Operate diagnostic software to diagnose/isolate faults in system.
7. Ensure proper handling of static sensitive components/printed circuit cards.
8. Identify faulty component(s).
9. Perform repairs on system.
10. Repair/Replace faulty component(s).
11. Research authorized Modification and Technical Instructions (MI & TI).
12. Perform maintenance close-out procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Maintenance Float Catalog
3. FEDLOG, Federal Logistic Data on Compact Disk
4. MCO P4790.2\_, MIMMS Field Procedures Manual
5. SL 1-2/3, Index of Authorized Publications in Stock
6. SL-4, Repair Parts for End Items

7. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 2000 Semiconductor Device Test Set
2. \* 2246A Oscilloscope
3. \* 2430A Oscilloscope
4. \* 33120A Function Generator
5. \* 34401A Digital Multimeter
6. \* 54825N Digital O'Scope
7. \* 8643A Signal Generator
8. \* AN/MSC-63A Communications Central

DISTANCE LEARNING PRODUCT(S):

1. MCI 2820, Electronics Mathematics for Marines
2. MCI 286, Fundamentals of Digital Logic
3. MCI 287, Introduction to Test Equipment

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TASK: 2826.03.02 (CORE PLUS) PERFORM LIMITED MAINTENANCE ON COMSEC EQUIPMENT USED IN THE AN/MSC-63A

CONDITION(S): Provided faulty COMSEC equipment, an assigned maintenance area, tools, spares kits, TMDE, and references.

STANDARD(S): To ensure faulty COMSEC equipment is returned to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Connect faulty equipment to special test equipment.
3. Ensure proper handling of static sensitive components/printed circuit cards.
4. Trace functional block diagrams.
5. Isolate fault to the line replaceable unit (LRU).
6. Restore equipment to a fully operational status by substitution of LRU.
7. Research authorized Modification and Technical Instructions (MI & TI).
8. Evacuate to higher echelon, as required.

9. Perform maintenance close-out procedures to include quality assurance check.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. CMS-21, COMSEC Material System Policy & Procedures
3. CMS-5\_, COMSEC Material System Policy & Procedures Manual
4. FEDLOG, Federal Logistic Data on Compact Disk
5. MCO P4790.2\_, MIMMS Field Procedures Manual
6. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 34401A Digital Multimeter
2. \* AN/MS-63A Communications Central
3. \* TSEC/KG-84C General Purpose Encryption Equipment
4. \* TSEC/KG-94/94A/194/194A Trunk Encryption Device
5. TSEC/KY-57 Speech Security Equipment (VINSON)

ADMINISTRATIVE INSTRUCTIONS: Task applies only after the elimination of the 2881 MOS.

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10 JAN 01

DUTY AREA 04 - MAINTENANCE OPERATIONS

MOS 2826 is an additional MOS only, assigned to qualified Marines with a primary MOS of 2847 or 2862. For a complete task list of MOS 2826 include all tasks for the Marine's primary MOS.

TASK: 2826.04.01 (CORE) PROVIDE TECHNICAL ASSISTANCE DURING THE INSTALLATION OF THE AN/MSC-63A

CONDITION(S): Provided an operational plan, equipment, and references.

STANDARD(S): To ensure the AN/MSC-63A is installed and functioning correctly, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Verify power source.
3. Verify remote capabilities, as required.
4. Verify equipment operation.
5. Verify equipment operating procedures.
6. Perform EMI troubleshooting to include checking for proper grounds, cable connections, etc.
7. Provide guidance to correct any discrepancies noted.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Operational Order
3. TM 9406-15, Grounding Procedures
4. TM 9999-15/1, ESD Awareness Electro-Static Discharge

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DUTY AREA 05 - MAINTENANCE TRAINING

MOS 2826 is an additional MOS only, assigned to qualified Marines with a primary MOS of 2847 or 2862. For a complete task list of MOS 2826 use all tasks for the Marine's primary MOS.

MOS 2827, TACTICAL ELECTRONIC RECONNAISSANCE/EVALUATION SYSTEM (TERPES) TECHNICIAN

DUTY AREA 01 - MAINTENANCE PLANNING

MOS 2827 is an additional MOS only, assigned to qualified Marines with a primary MOS of 2847 or 2862. For a complete task list of MOS 2827 use all tasks for the Marine's primary MOS.

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DUTY AREA 02 - MAINTENANCE ADMINISTRATION

MOS 2827 is an additional MOS only, assigned to qualified Marines with a primary MOS of 2847 or 2862. For a complete task list of MOS 2827 use all tasks for the Marine's primary MOS.

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DUTY AREA 03 - MAINTENANCE ACTIONS

MOS 2827 is an additional MOS only, assigned to qualified Marines with a primary MOS of 2847 or 2862. For a complete task list of MOS 2827 include all tasks for the Marine's primary MOS.

**TASK:** 2827.03.01 (CORE) PERFORM CORRECTIVE MAINTENANCE ON THE TACTICAL ELECTRONIC RECONNAISSANCE PROCESSING EVALUATION SYSTEM (TERPES)

**CONDITION(S):** Provided faulty equipment, assigned maintenance area, tools, TMDE, and the references.

**STANDARD(S):** To return faulty TERPES to an operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to all safety requirements.
2. Verify operation of system.
3. Ensure proper handling of static sensitive components/printed circuit cards.
4. Research applicable technical data pertaining to faulty equipment.
5. Read schematic diagrams.
6. Operate diagnostic software to diagnose/isolate faults in system.
7. Isolate faults in power distribution system.
8. Isolate faults in signal cable distribution.
9. Isolate faulty component(s).
10. Requisition repair parts, as required.
11. Remove/Replace faulty component(s).
12. Research authorized Modification and Technical Instructions (MI & TI).
13. Perform maintenance close-out procedures to include quality assurance check.

**INITIAL TRAINING SETTING:** FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. FEDLOG, Federal Logistic Data on Compact Disk
3. MCO P4790.2\_, MIMMS Field Procedures Manual
4. SL 1-2/3, Index of Authorized Publications in Stock
5. SL-4, Repair Parts for End Items
6. TM 9999-15/1, ESD Awareness Electro-Static Discharge

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7. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 2000 Semiconductor Device Test Set
2. \* 2246A Oscilloscope
3. \* 2430A Oscilloscope
4. \* 33120A Function Generator
5. \* 34401A Digital Multimeter
6. 4410 Bird Wattmeter
7. \* 54825N Digital O'Scope
8. \* 6556 Power Supply
9. \* 8643A Signal Generator
10. \* AN/TSQ-90 Tactical Electronic Reconnaissance Processing & Evaluation System (TERPES)
11. \* J-4843A/GRM Test Adapter
12. \* TS-4291/P Radio Test Set
13. \* TS-4317/GRM Radio Test Set

DISTANCE LEARNING PRODUCT(S):

1. MCI 287, Introduction to Test Equipment

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ENCLOSURE (6)

DUTY AREA 04 - MAINTENANCE OPERATIONS

MOS 2827 is an additional MOS only, assigned to qualified Marines with a primary MOS of 2847 or 2862. For a complete task list of MOS 2827 include all tasks for the Marine's primary MOS.

TASK: 2827.04.01 (CORE) PROVIDE TECHNICAL ASSISTANCE DURING THE INSTALLATION OF THE TACTICAL ELECTRONIC RECONNAISSANCE PROCESSING EVALUATION SYSTEM (TERPES)

CONDITION(S): Provided an operational plan, equipment, and references.

STANDARD(S): To ensure the TERPES is installed and functioning correctly, per the references.

PERFORMANCE STEPS:

1. Verify equipment connected to a ground system.
2. Verify power source.
3. Verify remote capabilities, as required.
4. Verify equipment operation.
5. Verify equipment operating procedures.
6. Perform EMI troubleshooting to include checking for proper grounds, cable connections, power connections, etc.
7. Provide guidance to correct any discrepancies noted.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. TM 9406-15, Grounding Procedures

TRAINING MATERIEL:

1. \* AN/TSQ-90 Tactical Electronic Reconnaissance Processing & Evaluation System (TERPES)

MOS 2831, AN/TRC-170 REPAIRER

DUTY AREA 01 - MAINTENANCE PLANNING

For a complete task list in this duty area for MOS 2831 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 1.

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DUTY AREA 02 - MAINTENANCE ADMINISTRATION

For a complete task list in this duty area for MOS 2831 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 2.

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ENCLOSURE (6)

DUTY AREA 03 - MAINTENANCE ACTIONS

For a complete task list in this duty area for MOS 2831 include all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 3.

TASK: 2831.03.01 (CORE) DIAGNOSE BASIC ELECTRONIC CIRCUITS

CONDITION(S): Given a faulty electronic device, tools, Test Measurement and Diagnostic Equipment (TMDE), and references.

STANDARD(S): To identify faulty components, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Research applicable technical data pertaining to faulty equipment.
3. Read schematic diagrams for basic electronic circuits.
4. Calculate basic electronic circuit parameters.
5. Ensure proper handling of static sensitive components/printed circuit cards.
6. Measure basic electronic circuit performance.
7. Trace signal paths in basic electronic circuits.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. MSDS, Material Safety Data Sheets
4. TM 9999-15/1, ESD Awareness Electro-Static Discharge

TRAINING MATERIEL:

1. \* 2000 Semiconductor Device Test Set
2. \* 2246A Oscilloscope
3. \* 28 Volt Power Supply
4. \* 33120A Function Generator
5. \* 34401A Digital Multimeter
6. \* 8643A Signal Generator
7. \* J-4843A/GRM Test Adapter
8. \* TS-4317/GRM Radio Test Set

DISTANCE LEARNING PRODUCT(S):

1. MCI 2820, Electronics Mathematics for Marines
  2. MCI 286, Fundamentals of Digital Logic
  3. MCI 287, Introduction to Test Equipment
- 

TASK: 2831.03.02 (CORE) PERFORM CORRECTIVE MAINTENANCE ON MULTICHANNEL RADIO SYSTEMS

CONDITION(S): Provided designated faulty equipment, assigned maintenance area, tools, TMDE, and references.

STANDARD(S): To return faulty systems to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Research applicable technical data pertaining to faulty equipment.
3. Read schematic diagrams.
4. Calculate circuit parameters.
5. Ensure proper handling of static sensitive components/printed circuit cards.
6. Measure circuit performance.
7. Perform alignments, as required.
8. Trace signal paths.
9. Trace current/voltage paths.
10. Isolate faulty components, as required.
11. Requisition repair parts, as required.
12. Remove/Replace faulty components.
13. Research authorized Modification and Technical Instructions (MI & TI).
14. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. FEDLOG, Federal Logistic Data on Compact Disk
3. MCO P4790.2\_, MIMMS Field Procedures Manual

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4. SL 1-2/3, Index of Authorized Publications in Stock
5. SL-4, Repair Parts for End Items
6. TM 9999-15/1, ESD Awareness Electro-Static Discharge
7. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 2000 Semiconductor Device Test Set
2. \* 2246A Oscilloscope
3. \* 28 Volt Power Supply
4. \* 34401A Digital Multimeter
5. 4410 Bird Wattmeter
6. \* 8643A Signal Generator
7. AN/MRC-142 Radio Set
8. \* AN/TRC-170 Radio Terminal Set

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TASK: 2831.03.03 (CORE PLUS) PERFORM LIMITED MAINTENANCE ON COMSEC EQUIPMENT USED IN MULTICHANNEL SYSTEMS

CONDITION(S): Provided faulty COMSEC equipment, an assigned maintenance area, tools, spare kits, TMDE, and references.

STANDARD(S): To ensure faulty COMSEC equipment is returned to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Adhere to cryptographic security regulations.
3. Connect faulty equipment to special test equipment.
4. Ensure proper handling of static sensitive components/printed circuit cards.
5. Trace functional block diagrams.
6. Isolate fault to the LRU/chassis mounted components.
7. Requisition repair parts, as required.
8. Remove/Replace faulty components.
9. Evacuate to higher echelon, as required.

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10. Research modifications both mandatory and optional and repair actions.
11. Perform maintenance close-out procedures to include quality assurance check.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. CMS-21, COMSEC Material System Policy & Procedures
3. CMS-5\_, COMSEC Material System Policy & Procedures Manual
4. FEDLOG, Federal Logistic Data on Compact Disk
5. MCO P4790.2\_, MIMMS Field Procedures Manual
6. SECNAVINST 5510.30, Information and Personnel Security Program
7. SECNAVINST 5510.36, Department of the Navy Information and Personnel Security Program Regulations
8. TM 9999-15/1, ESD Awareness Electro-Static Discharge
9. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* TSEC/KG-94/94A/194/194A Trunk Encryption Device
2. \* TSEC/KY-58 Speech Security Equipment (VINSON)

ADMINISTRATIVE INSTRUCTIONS: Task applies only after the elimination of the 2881 MOS.

DUTY AREA 04 - MAINTENANCE OPERATIONS

For a complete task list in this duty area for MOS 2831 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 4.

TASK: 2831.04.01 (CORE) PROVIDE TECHNICAL ASSISTANCE DURING THE INSTALLATION OF MULTICHANNEL EQUIPMENT

CONDITION(S): Provided a mission, equipment, and references.

STANDARD(S): To ensure all multichannel communications equipment is installed and operates, per the references.

PERFORMANCE STEPS:

1. Verify equipment connection to a grounding system.
2. Verify power source.
3. Verify antenna installation, as required.
4. Verify remote capabilities, as required.
5. Verify COMSEC connection, as required.
6. Verify equipment operation:
  - a. Equipment configuration.
  - b. Equipment programing.
7. Verify equipment operating procedures to include COMSEC.
8. Perform Electromagnetic Interference (EMI) troubleshooting.
9. Provide guidance to correct discrepancies noted.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Operational Order
3. CMS-21, COMSEC Material System Policy & Procedures
4. TM 9406-15, Grounding Procedures
5. TM 9999-15/1, ESD Awareness Electro-Static Discharge

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DUTY AREA 05 - MAINTENANCE TRAINING

For a complete task list in this duty area for MOS 2831 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 5.

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MOS 2832, AN/TRC-170 TECHNICIAN

DUTY AREA 01 - MAINTENANCE PLANNING

For a complete task list in this duty area for MOS 2832 use all of the tasks for the appropriate grade from MOS 2831, Duty Area 1.

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DUTY AREA 02 - MAINTENANCE ADMINISTRATION

For a complete task list in this duty area for MOS 2832 use all of the tasks for the appropriate grade from MOS 2831, Duty Area 2.

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DUTY AREA 03 - MAINTENANCE ACTIONS

For a complete task list in this duty area for MOS 2832 include all of the tasks for the appropriate grade from MOS 2831, Duty Area 3.

TASK: 2832.03.01 (CORE) PERFORM CORRECTIVE MAINTENANCE ON MULTICHANNEL RADIO SYSTEMS LINE REPLACEABLE UNITS (LRU'S) TO THE SECONDARY REPLACEABLE UNIT (SRU) OR CHASSIS MOUNTED COMPONENT LEVEL

CONDITION(S): Provided designated faulty equipment, assigned maintenance area, tools, TMDE, and references.

STANDARD(S): To return a faulty Multichannel Radio System to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Research applicable technical data pertaining to faulty equipment.
3. Read schematic diagrams.
4. Calculate circuit parameters.
5. Ensure proper handling of static sensitive components/printed circuit cards.
6. Measure circuit performance.
7. Perform alignments, as required.
8. Trace signal paths.
9. Trace current/voltage paths.
10. Identify faulty SRU's/chassis mounted components.
11. Remove/Replace faulty components, as required.
12. Research authorized Modification and Technical Instructions (MI & TI).
13. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Maintenance Float Catalog
3. FEDLOG, Federal Logistic Data on Compact Disk
4. MCO P4790.1\_, Marine Corps Integrated Maintenance Management System (MIMMS) MANUAL
5. MCO P4790.2\_, MIMMS Field Procedures Manual

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6. SL 1-2/3, Index of Authorized Publications in Stock
7. SL-4, Repair Parts for End Items
8. TM 9999-15/1, ESD Awareness Electro-Static Discharge
9. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 2000 Semiconductor Device Test Set
2. \* 2246A Oscilloscope
3. \* 28 Volt Power Supply
4. \* 33120A Function Generator
5. \* 34401A Digital Multimeter
6. \* 8643A Signal Generator
7. AN/MRC-142 Radio Set
8. \* AN/TRC-170 Radio Terminal Set
9. \* AN/USM-459A Universal Counter
10. \* J-1077A Distribution Box

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TASK: 2832.03.02 (CORE) PERFORM ADVANCED CORRECTIVE MAINTENANCE ON MULTICHANNEL RADIO SYSTEMS

CONDITION(S): Provided designated faulty equipment, personnel, assigned maintenance area, tools, TMDE, and references.

STANDARD(S): To return a faulty system to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Research applicable technical data pertaining to faulty equipment.
3. Read schematic diagrams.
4. Calculate circuit parameters.
5. Ensure proper handling of static sensitive components/printed circuit cards.
6. Verify circuit performance.
7. Supervise alignments, as required.

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8. Trace signal paths.
9. Trace current/voltage paths.
10. Verify faulty components.
11. Ensure removal/replacement faulty components.
12. Research authorized Modification and Technical Instructions (MI & TI).
13. Perform quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Maintenance Float Catalog
3. FEDLOG, Federal Logistic Data on Compact Disk
4. MCO P4790.1\_, Marine Corps Integrated Maintenance Management System (MIMMS) MANUAL
5. MCO P4790.2\_, MIMMS Field Procedures Manual
6. SL 1-2/3, Index of Authorized Publications in Stock
7. SL-4, Repair Parts for End Items
8. TM 9999-15/1, ESD Awareness Electro-Static Discharge
9. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 2000 Semiconductor Device Test Set
2. \* 2246A Oscilloscope
3. \* 2430A Oscilloscope
4. \* 33120A Function Generator
5. \* 34401A Digital Multimeter
6. 4410 Bird Wattmeter
7. \* 54825N Digital O'Scope
8. \* 8643A Signal Generator
9. AN/MRC-142 Radio Set
10. \* AN/TRC-170 Radio Terminal Set

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11. \* AN/USM-459A Universal Counter

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DUTY AREA 04 - MAINTENANCE OPERATIONS

For a complete task list in this duty area for MOS 2832 include all of the tasks for the appropriate grade from MOS 2831, Duty Area 4.

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DUTY AREA 05 - MAINTENANCE TRAINING

For a complete task list in this duty area for MOS 2832 use all of the tasks for the appropriate grade from MOS 2831, Duty Area 5.

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MOS 2833, FLEET SATELLITE TERMINAL TECHNICIAN

DUTY AREA 01 - MAINTENANCE PLANNING

MOS 2833 is an additional MOS only, assigned to qualified Marines with a primary MOS of 2834. For a complete task list of MOS 2833 use all tasks for the Marine's primary MOS.

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DUTY AREA 02 - MAINTENANCE ADMINISTRATION

MOS 2833 is an additional MOS only, assigned to qualified Marines with a primary MOS of 2834. For a complete task list of MOS 2833 use all tasks for the Marine's primary MOS.

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DUTY AREA 03 - MAINTENANCE ACTIONS

MOS 2833 is an additional MOS only, assigned to qualified Marines with a primary MOS of 2834. For a complete task list of MOS 2833 include all tasks for the Marine's primary MOS.

TASK: 2833.03.01 (CORE) PERFORM CORRECTIVE MAINTENANCE ON FLEET SATELLITE TERMINAL EQUIPMENT

CONDITION(S): Provided designated faulty equipment, assigned maintenance area, tools, TMDE, and references.

STANDARD(S): To return a faulty system to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Research applicable technical data pertaining to faulty equipment.
3. Read schematic diagrams.
4. Calculate circuit parameters.
5. Ensure proper handling of static sensitive components/printed circuit cards.
6. Measure circuit performance.
7. Perform alignments, as required.
8. Trace signal paths.
9. Trace current/voltage paths.
10. Isolate faulty components.
11. Requisition repair parts, as required.
12. Remove/Replace faulty components, as required.
13. Research authorized Modification and Technical Instructions (MI & TI).
14. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. FEDLOG, Federal Logistic Data on Compact Disk
3. MCO 3000.11\_, Marine Corps Ground Equipment Resources Reporting
4. MCO 4400.82\_, MIMMS Controlled Item Management Manual

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5. MCO P4400.150\_, Consumer Level Supply Policy Manual
6. MCO P4790.2\_, MIMMS Field Procedures Manual
7. SL 1-2/3, Index of Authorized Publications in Stock
8. SL-4, Repair Parts for End Items
9. TM 9999-15/1, ESD Awareness Electro-Static Discharge
10. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 2000 Semiconductor Device Test Set
2. \* 2246A Oscilloscope
3. \* 28 Volt Power Supply
4. \* 33120A Function Generator
5. \* 34401A Digital Multimeter
6. 4410 Bird Wattmeter
7. \* 8643A Signal Generator
8. AN/GSC-54 Fiber Optic Converter
9. \* AN/TSC-96A Satellite Communications Central
10. TSEC/KG-84A General Purpose Encryption Equipment
11. TSEC/KG-84C General Purpose Encryption Equipment
12. TSEC/KY-57 Speech Security Equipment (VINSON)

DISTANCE LEARNING PRODUCT(S):

1. MCI 2820, Electronics Mathematics for Marines
2. MCI 286, Fundamentals of Digital Logic
3. MCI 287, Introduction to Test Equipment

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TASK: 2833.03.02 (CORE PLUS) PERFORM LIMITED MAINTENANCE ON COMSEC EQUIPMENT USED IN FLEET SATELLITE TERMINAL SYSTEMS

CONDITION(S): Provided faulty COMSEC equipment, an assigned maintenance area, tools, spare kits, TMDE, and references.

STANDARD(S): To ensure faulty COMSEC equipment is returned to a fully operational status, per the references.

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PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Adhere to cryptographic security regulations.
3. Connect faulty equipment to special test equipment.
4. Ensure proper handling of static sensitive components/printed circuit cards.
5. Trace functional block diagrams.
6. Isolate fault to the line replaceable unit (LRU).
7. Restore equipment to a fully operational status.
8. Evacuate to higher echelon, as required.
9. Research modifications both mandatory and optional, and repair actions.
10. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. CMS-21, COMSEC Material System Policy & Procedures
3. CMS-5\_, COMSEC Material System Policy & Procedures Manual
4. FEDLOG, Federal Logistic Data on Compact Disk
5. MCO P4790.2\_, MIMMS Field Procedures Manual
6. TM 9999-15/1, ESD Awareness Electro-Static Discharge
7. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* AN/TSC-96A Satellite Communications Central
2. TSEC/KG-84A General Purpose Encryption Equipment
3. TSEC/KG-84C General Purpose Encryption Equipment
4. TSEC/KY-57 Speech Security Equipment (VINSON)

ADMINISTRATIVE INSTRUCTIONS: Task applies only after the elimination of the 2881 MOS.

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10 JAN 01

DUTY AREA 04 - MAINTENANCE OPERATIONS

MOS 2833 is an additional MOS only, assigned to qualified Marines with a primary MOS of 2834. For a complete task list of MOS 2833 include all tasks for the Marine's primary MOS.

TASK: 2833.04.01 (CORE) PROVIDE TECHNICAL ASSISTANCE DURING THE INSTALLATION OF FLEET SATELLITE TERMINAL EQUIPMENT

CONDITION(S): Provided a mission, equipment, and references.

STANDARD(S): To ensure all communications equipment is installed and functioning correctly, per the references.

PERFORMANCE STEPS:

1. Verify equipment connection to a grounding system.
2. Verify power source.
3. Verify antenna installation, as required.
4. Verify remote capabilities, as required.
5. Verify COMSEC connection, as required.
6. Verify equipment operation:
  - a. Equipment configuration.
  - b. Equipment programming.
7. Verify equipment operating procedures to include COMSEC.
8. Perform Electromagnetic Interference (EMI) troubleshooting.
9. Provide guidance to correct noted discrepancies.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Operational Order
3. CMS-21, COMSEC Material System Policy & Procedures
4. TM 9406-15, Grounding Procedures
5. TM 9999-15/1, ESD Awareness Electro-Static Discharge

TRAINING MATERIEL:

1. AN/TSC-96A Satellite Communications Central
2. TSEC/KG-84A General Purpose Encryption Equipment

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3. TSEC/KG-84C General Purpose Encryption Equipment
4. TSEC/KY-57 Speech Security Equipment (VINSON)

MOS 2834, SATELLITE COMMUNICATIONS TECHNICIAN

DUTY AREA 01 - MAINTENANCE PLANNING

For a complete task list in this duty area for MOS 2834 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 1.

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DUTY AREA 02 - MAINTENANCE ADMINISTRATION

For a complete task list in this duty area for MOS 2834 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 2.

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ENCLOSURE (6)

DUTY AREA 03 - MAINTENANCE ACTIONS

For a complete task list in this duty area for MOS 2834 include all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 3.

TASK: 2834.03.01 (CORE) PERFORM CORRECTIVE MAINTENANCE ON GROUND MOBILE FORCES (GMF) SATCOM EQUIPMENT TO THE COMPONENT LEVEL

CONDITION(S): Provided designated faulty equipment, assigned maintenance area, tools, TMDE, and references.

STANDARD(S): To return a faulty equipment to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Research applicable technical data pertaining to faulty equipment.
3. Read schematic diagrams.
4. Calculate circuit parameters.
5. Ensure proper handling of static sensitive components/printed circuit cards.
6. Measure circuit performance.
7. Perform alignments.
8. Trace signal paths.
9. Trace current/voltage paths.
10. Isolate faulty components.
11. Requisition repair parts, as required.
12. Remove/Replace faulty components.
13. Research authorized Modification and Technical Instructions (MI & TI).
14. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Maintenance Float Catalog
3. FEDLOG, Federal Logistic Data on Compact Disk
4. MCO P4790.1\_, Marine Corps Integrated Maintenance Management System (MIMMS) MANUAL

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5. MCO P4790.2\_, MIMMS Field Procedures Manual
6. SL 1-2/3, Index of Authorized Publications in Stock
7. SL-4, Repair Parts for End Items
8. TM 9999-15/1, ESD Awareness Electro-Static Discharge
9. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 2000 Semiconductor Device Test Set
2. \* 2246A Oscilloscope
3. \* 28 Volt Power Supply
4. \* 34401A Digital Multimeter
5. 4410 Bird Wattmeter
6. \* 54825N Digital O'Scope
7. \* 8431 Electrical Dummy Load
8. \* 8643A Signal Generator
9. AN/GSC-54 Fiber Optic Converter
10. AN/PSC-5 Satellite Communications Radio System
11. \* AN/TSC-85B Ground Mobile Forces Satellite Communications Terminal
12. \* AN/TSC-93B Ground Mobile Forces Satellite Communications Terminal
13. TSEC/KG-94/94A/194/194A Trunk Encryption Device
14. TSEC/KY-57 Speech Security Equipment (VINSON)

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TASK: 2834.03.02 (CORE PLUS) PERFORM LIMITED MAINTENANCE ON COMSEC EQUIPMENT USED IN GROUND MOBILE FORCES (GMF) SATCOM SYSTEMS

CONDITION(S): Provided faulty COMSEC equipment, an assigned maintenance area, tools, spare kits, TMDE, and references.

STANDARD(S): To ensure faulty COMSEC equipment is returned to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Adhere to cryptographic security regulations.

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3. Connect faulty equipment to special test equipment.
4. Ensure proper handling of static sensitive components/printed circuit cards.
5. Trace functional block diagrams.
6. Isolate fault to the line replaceable unit (LRU).
7. Restore equipment to a fully operational status.
8. Evacuate to higher echelon, as required.
9. Research modifications, both mandatory and optional, and repair actions.
10. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. CMS-21, COMSEC Material System Policy & Procedures
3. CMS-5\_, COMSEC Material System Policy & Procedures Manual
4. FEDLOG, Federal Logistic Data on Compact Disk
5. MCO P4790.2\_, MIMMS Field Procedures Manual
6. TM 9999-15/1, ESD Awareness Electro-Static Discharge
7. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. AN/TSC-96A Satellite Communications Central
2. TSEC/KG-94/94A/194/194A Trunk Encryption Device
3. TSEC/KY-57 Speech Security Equipment (VINSON)

ADMINISTRATIVE INSTRUCTIONS: Task applies only after the elimination of the 2881 MOS.

MCO 1510.44C  
10 JAN 01

DUTY AREA 04 - MAINTENANCE OPERATIONS

For a complete task list in this duty area for MOS 2823 include all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 4.

TASK: 2834.04.01 (CORE) PROVIDE TECHNICAL ASSISTANCE DURING THE INSTALLATION OF GROUND MOBILE FORCES (GMF) SATCOM EQUIPMENT

CONDITION(S): Provided a mission, equipment, and references.

STANDARD(S): To ensure all communications equipment is installed and functioning correctly, per the references.

PERFORMANCE STEPS:

1. Verify equipment is connected to a grounding system.
2. Verify power source.
3. Verify antenna installation, as required.
4. Verify remote capabilities, as required.
5. Verify COMSEC connection, as required.
6. Verify equipment operation:
  - a. Equipment configuration.
  - b. Equipment programing.
7. Verify equipment operating procedures to include COMSEC.
8. Perform Electromagnetic Interference (EMI) troubleshooting.
9. Provide guidance to correct discrepancies noted.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Operational Order
3. CMS-21, COMSEC Material System Policy & Procedures
4. TM 9406-15, Grounding Procedures
5. TM 9999-15/1, ESD Awareness Electro-Static Discharge

TRAINING MATERIEL:

1. AN/TSC-85B Ground Mobile Forces Satellite Communications Terminal
2. AN/TSC-93B Ground Mobile Forces Satellite Communications Terminal

Appendix L to  
ENCLOSURE (6)

3. TSEC/KG-94/94A/194/194A Trunk Encryption Device
4. TSEC/KY-57 Speech Security Equipment (VINSON)

MCO 1510.44C  
10 JAN 01

DUTY AREA 05 - MAINTENANCE TRAINING

For a complete task list in this duty area for MOS 2834 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 5.

Appendix L to  
ENCLOSURE (6)

MOS 2842, ENHANCED POSITION LOCATION REPORTING SYSTEM (EPLRS) MAINTENANCE TECHNICIAN

DUTY AREA 01 - PLANNING

MOS 2842 is an additional MOS only, assigned to qualified Marines with a primary MOS of 2847 or 2862. For a complete task list of MOS 2842 include all tasks for the Marine's primary MOS.

TASK: 2842.01.01 (CORE) PLAN AN/TSQ-158(V)4 ENHANCED POSITION LOCATION REPORTING SYSTEM (EPLRS) MASTER STATION MAINTENANCE SUPPORT

CONDITION(S): Provided a mission, equipment, personnel, Commander's guidance, and references.

STANDARD(S): To ensure intermediate maintenance support requirements are met, per the references.

PERFORMANCE STEPS:

1. Determine unit capabilities.
2. Determine supported unit maintenance requirements.
3. Determine required logistics support.
4. Determine required facilities.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. MCO P5090.2\_, Environmental Compliance and Protection Manual
3. MCWP 6-22, Communications and Information Systems
4. TM 9406-15, Grounding Procedures
5. TM 9999-15/1, ESD Awareness Electro-Static Discharge
6. UNIT TO/E, Table of Organization/Equipment

MCO 1510.44C  
10 JAN 01

DUTY AREA 02 - MAINTENANCE ADMINISTRATION

MOS 2842 is an additional MOS only, assigned to qualified Marines with a primary MOS of 2847 or 2862. For a complete task list of MOS 2842 use all tasks for the Marine's primary MOS.

Appendix M to  
ENCLOSURE (6)

DUTY AREA 03 - MAINTENANCE ACTIONS

MOS 2842 is an additional MOS only, assigned to qualified Marines with a primary MOS of 2847 or 2862. For a complete task list of MOS 2842 include all tasks for the Marine's primary MOS.

TASK: 2842.03.01 (CORE) DIRECT THE INSTALLATION OF THE ENHANCED POSITION LOCATION REPORTING SYSTEM (EPLRS) NET CONTROL STATION (NCS)

CONDITION(S): Provided an EPLRS NCS, Commander's guidance, and references.

STANDARD(S): To ensure proper installation of the EPLRS NCS, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Adhere to cryptographic security regulations.
3. Site equipment.
4. Assign personnel.
5. Inspect installation procedures to include the following:
  - a. Primary antenna connection.
  - b. Optional voice antenna connection, as required.
  - c. Power connection.
6. Conduct operational checks.
7. Correct discrepancies.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. CMS-21, COMSEC Material System Policy & Procedures
4. MCO P5090.2\_, Environmental Compliance and Protection Manual
5. MCWP 6-22, Communications and Information Systems
6. SECNAVINST 5510.30, Information and Personnel Security Program
7. SECNAVINST 5510.36, Department of the Navy Information and Personnel Security Program Regulations
8. TM 9406-15, Grounding Procedures

TRAINING MATERIEL:

1. \* AN/TSQ-158(V)4 Net Control Station (EPLRS)
- 

TASK: 2842.03.02 (CORE) INITIALIZE THE EPLRS NCS

CONDITION(S): Provided an EPLRS NCS, Commander's guidance, and references.

STANDARD(S): To ensure complete initialization, per the references.

PERFORMANCE STEPS:

1. Adhere to safety procedures.
2. Adhere to COMSEC procedures.
3. Verify need line library and unit library.
4. Input need line library and unit library.
5. Load crypto variable.
6. Hook EPLRS user units by keyboard action.
7. Hook EPLRS user units by trackball action.
8. Display EPLRS user unit data.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. ANNEX K
2. Applicable Technical Publications/Manuals
3. Operational Order
4. MCWP 6-22, Communications and Information Systems

TRAINING MATERIEL:

1. \* AN/TSQ-158(V)4 Net Control Station (EPLRS)
  2. \* PP-7641/VSQ-1 Power Adaptor
  3. \* TK-17/G Tool Kit Electronic
- 

TASK: 2842.03.03 (CORE) PERFORM CORRECTIVE MAINTENANCE ON EPLRS NCS

CONDITION(S): Provided faulty equipment, assigned maintenance area, tools, TMDE, and references.

STANDARD(S): To ensure equipment is returned to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Adhere to cryptographic security regulations.
3. Research applicable technical data pertaining to faulty equipment.
4. Read schematic diagrams.
5. Calculate circuit parameters.
6. Measure circuit performance.
7. Perform malfunction diagnostics.
8. Ensure proper handling of static sensitive components/printed circuit cards.
9. Isolate faulty LRU/SRU.
10. Requisition repair parts, as required.
11. Remove/Replace faulty LRU/SRU.
12. Research authorized Modification and Technical Instructions (MI & TI).
13. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. CMS-21, COMSEC Material System Policy & Procedures
4. FEDLOG, Federal Logistic Data on Compact Disk
5. MCO P4790.2\_, MIMMS Field Procedures Manual
6. MCO P5090.2\_, Environmental Compliance and Protection Manual
7. MCWP 6-22, Communications and Information Systems
8. TM 9406-15, Grounding Procedures
9. TM 9999-15/1, ESD Awareness Electro-Static Discharge
10. UM 4790-5, Users Manual MIMMS

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10 JAN 01

TRAINING MATERIEL:

1. \* 2000 Semiconductor Device Test Set
2. \* 2430A Oscilloscope
3. \* 33120A Function Generator
4. \* 34401A Digital Multimeter
5. \* 54825N Digital O'Scope
6. \* 8643A Signal Generator
7. \* AN/TSQ-158(V)4 Net Control Station (EPLRS)
8. \* PP-7641/VSQ-1 Power Adaptor
9. \* TK-17/G Tool Kit Electronic

Appendix M to  
ENCLOSURE (6)

DUTY AREA 04 - OPERATIONS

MOS 2842 is an additional MOS only, assigned to qualified Marines with a primary MOS of 2847 or 2862. For a complete task list of MOS 2842 include all tasks for the Marine's primary MOS.

TASK: 2842.04.01 (CORE) PROVIDE TECHNICAL ASSISTANCE DURING THE INSTALLATION OF ENHANCED POSITION LOCATION REPORTING SYSTEM (EPLRS) AND THE EPLRS NCS

CONDITION(S): Provided a mission, equipment, and references.

STANDARD(S): To ensure all communications equipment is installed and operates, per the references.

PERFORMANCE STEPS:

1. Verify equipment connection to a grounding system.
2. Verify power source.
3. Verify antenna installation, as required.
4. Verify remote capabilities, as required.
5. Verify COMSEC connection, as required.
6. Verify equipment operation:
  - a. Equipment configuration.
  - b. Equipment programing.
7. Verify equipment operating procedures to include COMSEC.
8. Perform Electromagnetic Interference (EMI) troubleshooting.
9. Provide guidance to correct discrepancies noted.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Operational Order
3. CMS-21, COMSEC Material System Policy & Procedures
4. TM 9406-15, Grounding Procedures
5. TM 9999-15/1, ESD Awareness Electro-Static Discharge

TRAINING MATERIEL:

1. \* AN/TSQ-158(V)4 Net Control Station (EPLRS)
2. \* PP-7641/VSQ-1 Power Adaptor

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3. \* TK-17/G Tool Kit Electronic

Appendix M to  
ENCLOSURE (6)

DUTY AREA 05 - MAINTENANCE TRAINING

MOS 2842 is an additional MOS only, assigned to qualified Marines with a primary MOS of 2847 or 2862. For a complete task list of MOS 2842 use all tasks for the Marine's primary MOS.

MOS 2844, GROUND COMMUNICATIONS ORGANIZATIONAL REPAIRER

DUTY AREA 01 - MAINTENANCE PLANNING

For a complete task list in this duty area for MOS 2844 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 1.

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10 JAN 01

DUTY AREA 02 - MAINTENANCE ADMINISTRATION

For a complete task list in this duty area for MOS 2844 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 2.

Appendix N to  
ENCLOSURE (6)

DUTY AREA 03 - MAINTENANCE ACTIONS

For a complete task list in this duty area for MOS 2844 include all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 3.

TASK: 2844.03.01 (CORE) PERFORM SINGLE CHANNEL RADIOS (SCR) SYSTEMS TROUBLESHOOTING

CONDITION(S): Provided designated faulty equipment, tools, TMDE, and references.

STANDARD(S): To return a faulty SCR system to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Research applicable technical data pertaining to faulty equipment.
3. Read basic systems diagrams.
4. Measure basic circuit performance.
5. Perform alignments, as required.
6. Isolate faulty systems component.
7. Remove/Replace faulty systems component, as required.
8. Research authorized Modification and Technical Instructions (MI & TI).
9. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. FEDLOG, Federal Logistic Data on Compact Disk
3. MCO P4790.2\_, MIMMS Field Procedures Manual
4. SL 1-2/3, Index of Authorized Publications in Stock
5. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 4410 Bird Wattmeter
2. \* AN/CYZ-10 Digital Transfer Device
3. AN/GRC-193 Radio Set
4. \* AN/MRC-138A Radio Set
5. AN/MRC-145 Radio Set

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6. \* AN/PRC-104B Radio Set
7. \* AN/PRC-113 (V)3 Radio Set
8. \* AN/PRC-119A Radio Set
9. \* AN/PRC-119D Radio Set
10. AN/PSC-2A EM Digital Message System
11. AN/PSC-5 Satellite Communications Radio System
12. \* AN/VRC-88 Radio Set
13. AN/VRC-88D Radio Set (SINCGARS)
14. AN/VRC-89D Radio Set (SINCGARS)
15. \* AN/VRC-90D Radio Set (SINCGARS)
16. AN/VRC-92D Radio Set (SINCGARS)
17. \* AS-2259
18. \* HYP-57/TSEC Vehicular Power Adapter
19. \* HYX-57/TSEC Wireline Adapter
20. \* J-1077A Distribution Box
21. \* TSEC/KY-99 Advanced Narrowband Digital Voice Terminal (ANDVT/MINTERM)

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TASK: 2844.03.02 (CORE) PERFORM TACTICAL TELEPHONE SYSTEMS TROUBLESHOOTING

CONDITION(S): Provided designated faulty equipment, tools, TMDE, and references.

STANDARD(S): To return tactical telephone systems to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Research applicable technical data pertaining to faulty equipment.
3. Read basic systems diagrams.
4. Measure basic circuit performance.
5. Perform alignments, as required.
6. Isolate faulty systems components.
7. Remove/Replace faulty system components, as required.

Appendix N to  
ENCLOSURE (6)

8. Research authorized Modification and Technical Instructions (MI & TI).
9. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Operational Order
3. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
4. MCO P4790.2\_, MIMMS Field Procedures Manual
5. MCWP 6-22, Communications and Information Systems
6. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* SB-22/PT Manual Telephone Switchboard
2. SB-3614/TT Telephone Switch
3. SB-3865 (P)/TTC Telephone Switchboard
4. \* SB-4097/U Communication Patching Panel
5. \* TA-1/PT Telephone Set
6. \* TA-312/PT Telephone Set
7. \* TA-838-TT Telephone Set
8. \* TA-977/PT Tone Signaling Adapter
9. \* TS-4291/P Radio Test Set
10. \* TS-4317/GRM Radio Test Set

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TASK: 2844.03.03 (CORE) PERFORM CORRECTIVE MAINTENANCE ON TACTICAL SWITCHBOARDS TO THE LINE REPLACEABLE UNIT (LRU) LEVEL

CONDITION(S): Provided designated faulty equipment, tools, TMDE, and references.

STANDARD(S): To return faulty equipment to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Research applicable technical data pertaining to faulty equipment.

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3. Read basic schematic diagrams.
4. Measure basic circuit performance.
5. Perform alignments, as required.
6. Isolate faulty LRU.
7. Remove/Replace faulty LRU, as required.
8. Research authorized Modification and Technical Instructions (MI & TI).
9. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. FEDLOG, Federal Logistic Data on Compact Disk
4. MCO P4790.2\_, MIMMS Field Procedures Manual
5. SL 1-2/3, Index of Authorized Publications in Stock
6. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* SB-22/PT Manual Telephone Switchboard
2. \* SB-3614/TT Telephone Switch
3. SB-3865 (P)/TTC Telephone Switchboard
4. \* TA-1/PT Telephone Set
5. \* TA-1042/U Digital Non-Secure Voice Terminal
6. \* TA-312/PT Telephone Set
7. \* TA-838-TT Telephone Set
8. \* TA-977/PT Tone Signaling Adapter

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TASK: 2844.03.04 (CORE) PERFORM CORRECTIVE MAINTENANCE ON SINGLE CHANNEL RADIOS (SCR) TO THE LINE REPLACEABLE UNIT (LRU) LEVEL

CONDITION(S): Provided designated faulty equipment, tools, TMDE, and references.

STANDARD(S): To return a faulty SCR to a fully operational status, per the references.

Appendix N to  
ENCLOSURE (6)

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Research applicable technical data pertaining to faulty equipment.
3. Read basic schematic diagrams.
4. Measure basic circuit performance.
5. Perform alignments, as required.
6. Isolate faulty LRU.
7. Remove/Replace faulty LRU, as required.
8. Research authorized Modification and Technical Instructions (MI/TI).
9. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. FEDLOG, Federal Logistic Data on Compact Disk
3. MCO P4790.2\_, MIMMS Field Procedures Manual
4. SL 1-2/3, Index of Authorized Publications in Stock
5. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 4410 Bird Wattmeter
2. \* AN/GRC-193 Radio Set
3. AN/MRC-142 Radio Set
4. AN/MRC-145 Radio Set
5. \* AN/PRC-104B Radio Set
6. AN/PRC-113 (V)3 Radio Set
7. AN/PRC-119A Radio Set
8. AN/PSC-5 Satellite Communications Radio System

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TASK: 2844.03.05 (CORE) PERFORM CORRECTIVE MAINTENANCE ON TACTICAL TELEPHONES TO THE LINE REPLACEABLE UNIT (LRU) LEVEL

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10 JAN 01

CONDITION(S): Provided designated faulty equipment, tools, TMDE, and references.

STANDARD(S): To return faulty equipment to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Research applicable technical data pertaining to faulty equipment.
3. Read basic schematic diagrams.
4. Measure basic circuit performance.
5. Perform alignments, as required.
6. Isolate faulty LRU.
7. Remove/Replace faulty LRU, as required.
8. Research authorized Modification and Technical Instructions (MI & TI).
9. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. FEDLOG, Federal Logistic Data on Compact Disk
3. MCO P4790.2\_, MIMMS Field Procedures Manual
4. SL 1-2/3, Index of Authorized Publications in Stock
5. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. TA-1/PT Telephone Set
2. \* TA-312/PT Telephone Set
3. \* TA-838-TT Telephone Set

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TASK: 2844.03.06 (CORE PLUS) PERFORM CORRECTIVE MAINTENANCE ON AN/MRC-142 TO THE LINE REPLACEABLE UNIT (LRU) LEVEL

CONDITION(S): Provided designated faulty equipment, tools, TMDE, and references.

STANDARD(S): To return the AN/MRC-142 to a fully operational status, per the references.

Appendix N to  
ENCLOSURE (6)

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Research applicable technical data pertaining to faulty equipment.
3. Read basic schematic diagrams.
4. Measure basic circuit performance.
5. Perform alignments, as required.
6. Isolate faulty LRU.
7. Remove/Replace faulty LRU, as required.
8. Research authorized Modification and Technical Instructions (MI & TI).
9. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. FEDLOG, Federal Logistic Data on Compact Disk
3. MCO P4790.2\_, MIMMS Field Procedures Manual
4. SL 1-2/3, Index of Authorized Publications in Stock
5. UM 4790-5, Users Manual MIMMS

DISTANCE LEARNING PRODUCT(S):

1. TBD, AN/MRC-142 Maintenance Course

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10 JAN 01

DUTY AREA 04 - MAINTENANCE OPERATIONS

For a complete task list in this duty area for MOS 2844 include all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 4.

TASK: 2844.04.01 (CORE) PROVIDE TECHNICAL ASSISTANCE DURING THE INSTALLATION OF GROUND COMMUNICATIONS EQUIPMENT

CONDITION(S): Provided a mission, equipment, and references.

STANDARD(S): To ensure all communications equipment is installed and operating, per the references.

PERFORMANCE STEPS:

1. Adhere to all safety requirements.
2. Verify power source.
3. Verify antenna installation, as required.
4. Verify remote capabilities, as required.
5. Verify COMSEC connection, as required.
6. Verify equipment operation.
7. Verify equipment operating procedures to include COMSEC.
8. Perform Electromagnetic Interference (EMI) troubleshooting to include checking for proper ground, cable connections, etc.
9. Provide guidance to correct discrepancies.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. MCRP 6-22A, Multi-Service Communications Procedures for the Single-Channel Ground Radio
3. TI-5820-25/22, Electromagnetic Environmental Effects (E3) Procedures
4. TM 9406-15, Grounding Procedures
5. TM 9999-15/1, ESD Awareness Electro-Static Discharge

TRAINING MATERIEL:

1. AN/GRA-39 Radio Set Control Group
2. AN/GRC-193 Radio Set
3. AN/MRC-110A Radio Terminal Set

Appendix N to  
ENCLOSURE (6)

4. AN/MRC-138A Radio Set
5. AN/MRC-140 Radio Set
6. AN/MRC-142 Radio Set
7. AN/MRC-145 Radio Set
8. AN/PRC-104 Radio Set
9. AN/PRC-113 (V)3 Radio Set
10. AN/PSC-2A EM Digital Message System
11. AN/PSC-5 Satellite Communications Radio System
12. AN/UXC-7 Lightweight Facsimile
13. SB-22/PT Manual Telephone Switchboard
14. SB-3614/TT Telephone Switch
15. SB-3865 (P)/TTC Telephone Switchboard
16. SB-4097/U Communication Patching Panel
17. TSEC/KY-57 Speech Security Equipment (VINSON)
18. TSEC/KY-65 Tactical Speech Security Equipment (PARKHILL)
19. TSEC/KY-99 Advanced Narrowband Digital Voice Terminal (ANDVT/MINTERM)
20. TSEC/KYK-13 Electronic Transfer Device
21. TSEC/KYX-15 Net Control Device

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10 JAN 01

DUTY AREA 05 - MAINTENANCE TRAINING

For a complete task list in this duty area for MOS 2844 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 5.

Appendix N to  
ENCLOSURE (6)

MOS 2846, GROUND ELECTRONICS INTERMEDIATE REPAIRER

DUTY AREA 01 - MAINTENANCE PLANNING

For a complete task list in this duty area for MOS 2846 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 1.

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10 JAN 01

DUTY AREA 02 - MAINTENANCE ADMINISTRATION

For a complete task list in this duty area for MOS 2846 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 2.

Appendix O to  
ENCLOSURE (6)

DUTY AREA 03 - MAINTENANCE ACTIONS

For a complete task list in this duty area for MOS 2846 include all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 3.

TASK: 2846.03.01 (CORE) DIAGNOSE BASIC ELECTRONIC CIRCUITS

CONDITION(S): Given a faulty electronic device, tools, TMDE, and references.

STANDARD(S): To identify faulty components, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Research applicable technical data pertaining to faulty equipment.
3. Read schematic diagrams for basic electronic circuits.
4. Calculate basic electronic circuit parameters.
5. Ensure proper handling of static sensitive components/printed circuit cards.
6. Measure basic electronic circuit performance.
7. Trace signal paths in basic electronic circuits.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. MSDS, Material Safety Data Sheets
4. TM 9999-15/1, ESD Awareness Electro-Static Discharge

TRAINING MATERIEL:

1. \* 2246A Oscilloscope
2. \* 28 Volt Power Supply
3. \* 33120A Function Generator
4. \* 34401A Digital Multimeter
5. \* 8643A Signal Generator
6. \* AN/CYZ-10 Digital Transfer Device
7. \* AN/GRC-193 Radio Set
8. AN/MRC-140 Radio Set

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9. AN/MRC-142 Radio Set
10. AN/MRC-145 Radio Set
11. \* AN/PRC-104 Radio Set
12. AN/PRC-119A Radio Set
13. \* AN/VRC-89A Radio Set (SINGARS)
14. \* AN/VRC-89D Radio Set (SINGARS)
15. \* AN/VRC-90A Radio Set (SINGARS)
16. \* AN/VRC-92A Radio Set (SINGARS)
17. \* PP-7333/GRC Power Supply
18. \* PP-8436/P Power Supply
19. TS-4291/P Radio Test Set
20. \* TS-4317/GRM Radio Test Set

DISTANCE LEARNING PRODUCT(S):

1. MCI 2820, Electronics Mathematics for Marines
2. MCI 286, Fundamentals of Digital Logic
3. MCI 287, Introduction to Test Equipment

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TASK: 2846.03.02 (CORE) PERFORM CORRECTIVE MAINTENANCE ON SINGLE CHANNEL RADIO (SCR) LINE REPLACEABLE UNITS (LRU) TO THE SECONDARY REPLACEABLE UNIT (SRU) OR CHASSIS MOUNTED COMPONENT LEVEL

CONDITION(S): Provided designated faulty equipment, assigned maintenance area, tools, TMDE, and references.

STANDARD(S): To return a faulty SCR LRU or chassis to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Research applicable technical data pertaining to faulty equipment.
3. Read schematic diagrams.
4. Calculate circuit parameters.
5. Ensure proper handling of static sensitive components/printed circuit cards.
6. Measure circuit performance.

Appendix O to  
ENCLOSURE (6)

7. Perform alignments, as required.
8. Trace signal paths.
9. Trace current/voltage paths.
10. Identify faulty SRU's/chassis mounted components.
11. Remove/Replace faulty components, as required.
12. Research authorized Modification and Technical Instructions (MI & TI).
13. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Maintenance Float Catalog
3. FEDLOG, Federal Logistic Data on Compact Disk
4. MCO P4790.1\_, Marine Corps Integrated Maintenance Management System (MIMMS) MANUAL
5. MCO P4790.2\_, MIMMS Field Procedures Manual
6. SL 1-2/3, Index of Authorized Publications in Stock
7. SL-4, Repair Parts for End Items
8. TM 9999-15/1, ESD Awareness Electro-Static Discharge
9. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 2246A Oscilloscope
2. \* 28 Volt Power Supply
3. \* 33120A Function Generator
4. \* 34401A Digital Multimeter
5. 4410 Bird Wattmeter
6. \* 77/BN Multimeter
7. \* 8643A Signal Generator
8. \* AN/CYZ-10 Digital Transfer Device
9. \* AN/MRC-110A Radio Terminal Set

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10. AN/MRC-140 Radio Set
11. AN/MRC-142 Radio Set
12. AN/MRC-145 Radio Set
13. \* AN/PRC-104 Radio Set
14. AN/PRC-113 (V)3 Radio Set
15. \* AN/PRC-119 Radio Set
16. AN/PRC-119A Radio Set
17. AN/PSC-2A EM Digital Message System
18. AN/PSC-5 Satellite Communications Radio System
19. \* AN/VRC-88A Radio Set (SINGARS)
20. \* AN/VRC-88D Radio Set (SINGARS)
21. \* AN/VRC-90 Radio Set

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TASK: 2846.03.03 (CORE PLUS) PERFORM CORRECTIVE MAINTENANCE ON AN/MRC-142 LINE REPLACEABLE UNITS (LRU) TO THE SECONDARY REPLACEABLE UNIT (SRU) OR CHASSIS MOUNTED COMPONENT LEVEL

CONDITION(S): Provided a mission, equipment, personnel, Commander's guidance, and references.

STANDARD(S): To return a faulty AN/MRC-142 LRU or chassis to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Research applicable technical data pertaining to faulty equipment.
3. Read schematic diagrams.
4. Calculate circuit parameters.
5. Measure circuit performance.
6. Ensure proper handling of static sensitive components/printed circuit cards.
7. Perform alignments, as required.
8. Trace signal paths.
9. Trace current/voltage paths.
10. Identify faulty SRU's/Chassis mounted devices.

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ENCLOSURE (6)

11. Remove/Replace faulty components, as required.
12. Research authorized Modification and Technical Instructions (MI & TI).
13. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Maintenance Float Catalog
3. CMR, Consolidated Memorandum Report
4. FEDLOG, Federal Logistic Data on Compact Disk
5. MCO P4400.150\_, Consumer Level Supply Policy Manual
6. MCO P4790.1\_, Marine Corps Integrated Maintenance Management System (MIMMS) MANUAL
7. MCO P4790.2\_, MIMMS Field Procedures Manual
8. SL 1-2/3, Index of Authorized Publications in Stock
9. SL-4, Repair Parts for End Items
10. TM 9406-15, Grounding Procedures
11. UM 4400-124, FMF SASSY Using Unit Procedures
12. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. 2246A Oscilloscope
2. 28 Volt Power Supply
3. 33120A Function Generator
4. 34401A Digital Multimeter
5. 8643A Signal Generator
6. AN/MRC-142 Radio Set
7. TS-4317/GRM Radio Test Set

DISTANCE LEARNING PRODUCT(S):

1. TBD, AN/MRC-142 Maintenance Course

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DUTY AREA 04 - MAINTENANCE OPERATIONS

For a complete task list in this duty area for MOS 2846 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 4.

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DUTY AREA 05 - MAINTENANCE TRAINING

For a complete task list in this duty area for MOS 2846 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 5.

MOS 2847, TELEPHONE SYSTEMS/PERSONAL COMPUTER INTERMEDIATE REPAIRER

DUTY AREA 01 - MAINTENANCE PLANNING

For a complete task list in this duty area for MOS 2847 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 1.

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DUTY AREA 02 - MAINTENANCE ADMINISTRATION

For a complete task list in this duty area for MOS 2847 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 2.

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DUTY AREA 03 - MAINTENANCE ACTIONS

For a complete task list in this duty area for MOS 2847 include all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 3.

TASK: 2847.03.01 (CORE) DIAGNOSE BASIC ELECTRONIC CIRCUITS

CONDITION(S): Given a faulty electronic device, tools, Test Measurement and Diagnostic Equipment (TMDE), and references.

STANDARD(S): To identify faulty components, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Research applicable technical data pertaining to faulty equipment.
3. Read schematic diagrams for basic electronic circuits.
4. Calculate basic electronic circuit parameters.
5. Ensure proper handling of static sensitive components/printed circuit cards.
6. Measure basic electronic circuit performance.
7. Trace signal paths in basic electronic circuits.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. MSDS, Material Safety Data Sheets
4. TM 9999-15/1, ESD Awareness Electro-Static Discharge

TRAINING MATERIEL:

1. \* 2000 Semiconductor Device Test Set
2. \* 2246A Oscilloscope
3. \* 28 Volt Power Supply
4. \* 33120A Function Generator
5. \* 34401A Digital Multimeter
6. \* 6556 Power Supply
7. \* 8643A Signal Generator
8. \* PP-7333/GRC Power Supply

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9. PP-8436/P Power Supply
10. SB-22/PT Manual Telephone Switchboard
11. SB-3614/TT Telephone Switch
12. SB-3865 (P)/TTC Telephone Switchboard
13. SB-4097/U Communication Patching Panel
14. \* TS-4291/P Radio Test Set
15. \* TS-4317/GRM Radio Test Set

DISTANCE LEARNING PRODUCT(S):

1. MCI 2820, Electronics Mathematics for Marines
2. MCI 286, Fundamentals of Digital Logic
3. MCI 287, Introduction to Test Equipment

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**TASK:** 2847.03.02 (CORE) PERFORM CORRECTIVE MAINTENANCE ON TACTICAL TELEPHONES AND SWITCHBOARD LINE REPLACEABLE UNITS (LRU) TO THE SECONDARY REPLACEABLE UNIT (SRU) LEVEL OR CHASSIS MOUNTED COMPONENT LEVEL

**CONDITION(S):** Provided designated faulty equipment, assigned maintenance area, tools, TMDE, and references.

**STANDARD(S):** To return a faulty Tactical Telephone or Switchboard LRU to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Research applicable technical data pertaining to faulty equipment.
3. Read schematic diagrams.
4. Calculate circuit parameters.
5. Ensure proper handling of static sensitive components/printed circuit cards.
6. Measure circuit performance.
7. Perform alignments, as required.
8. Identify faulty SRU/chassis mounted components.
9. Remove/Replace faulty components, as required.
10. Research authorized Modification and Technical Instructions (MI & TI).
11. Perform maintenance closeout procedures to include quality assurance check.

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ENCLOSURE (6)

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Maintenance Float Catalog
3. FEDLOG, Federal Logistic Data on Compact Disk
4. SL 1-2/3, Index of Authorized Publications in Stock
5. TM 9999-15/1, ESD Awareness Electro-Static Discharge
6. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 2246A Oscilloscope
2. \* 28 Volt Power Supply
3. \* 33120A Function Generator
4. \* 34401A Digital Multimeter
5. \* 8643A Signal Generator
6. AN/CYZ-10 Digital Transfer Device
7. \* CX-11230 AG CX-11230A/G Special Cable Assembly (100 FT)
8. \* KELTEC Power Supply for SB-3614(V)/TT
9. \* PP-8436/P Power Supply
10. SB-22/PT Manual Telephone Switchboard
11. \* SB-3614/TT Telephone Switch
12. \* SB-3865 (P)/TTC Telephone Switchboard
13. SB-4097/U Communication Patching Panel
14. \* TA-312/PT Telephone Set
15. \* TA-838 TT Telephone Set
16. \* TA-938G Telephone Set
17. TS-4291/P Radio Test Set
18. \* TS-4317/GRM Radio Test Set
19. \* TSEC/KG-94/94A/194/194A Trunk Encryption Device
20. \* TSEC/KY-68 Digital Subscriber Voice Terminal (DSVT)

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ENCLOSURE (6)

TASK: 2847.03.03 (CORE) PERFORM CORRECTIVE MAINTENANCE ON COMPUTER EQUIPMENT

CONDITION(S): Provided designated faulty equipment, assigned maintenance area, tools, TMDE, and references.

STANDARD(S): To return faulty computer equipment to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Research applicable technical data pertaining to faulty equipment.
3. Read schematic diagram.
4. Calculate circuit parameters.
5. Measure circuit performance.
6. Ensure proper handling of static sensitive components/printed circuit cards.
7. Perform alignments, as required.
8. Identify faulty components.
9. Remove/Replace faulty components, as required.
10. Research authorized Modification and Technical Instructions (MI & TI).
11. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. FEDLOG, Federal Logistic Data on Compact Disk
3. SL 1-2/3, Index of Authorized Publications in Stock
4. SL-4, Repair Parts for End Items
5. TM 9999-15/1, ESD Awareness Electro-Static Discharge
6. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 2246A Oscilloscope
2. \* 34401A Digital Multimeter
3. \* 6556 Power Supply

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4. \* 8643A Signal Generator
5. \* Computer Suite
6. \* Multimeter (Model 87)
7. \* Network HUB
8. \* Network Server
9. \* PC Commander Work Station
10. \* Printers
11. TS-4291/P Radio Test Set
12. \* TS-4317/GRM Radio Test Set

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TASK: 2847.03.04 (CORE) PERFORM CORRECTIVE MAINTENANCE ON COMPUTER PERIPHERAL EQUIPMENT

CONDITION(S): Provided designated faulty equipment, assigned maintenance area, tools, TMDE, and references.

STANDARD(S): To return faulty equipment to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Research applicable technical data pertaining to faulty equipment.
3. Read schematic diagrams.
4. Calculate circuit parameters.
5. Ensure proper handling of static sensitive components/printed circuit cards.
6. Measure circuit performance.
7. Perform alignments.
8. Identify faulty LRU/SRU, components.
9. Remove/Replace faulty components, as required.
10. Research authorized Modification and Technical Instructions (MI & TI).
11. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals

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2. Maintenance Float Catalog
3. FEDLOG, Federal Logistic Data on Compact Disk
4. SL 1-2/3, Index of Authorized Publications in Stock
5. SL-4, Repair Parts for End Items
6. TM 9999-15/1, ESD Awareness Electro-Static Discharge
7. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 2246A Oscilloscope
2. \* 28 Volt Power Supply
3. \* 33120A Function Generator
4. \* 34401A Digital Multimeter
5. \* 77/BN Multimeter
6. \* 8643A Signal Generator
7. ASAPS-4 Power Supply
8. \* Computer Suite
9. \* Network HUB
10. \* Network Server
11. \* PC Commander Work Station
12. \* Printers

ADMINISTRATIVE INSTRUCTIONS: This task applies to computer monitors/printers/multi-media devices and input/output devices.

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TASK: 2847.03.05 (CORE) PERFORM CORRECTIVE MAINTENANCE ON STAND ALONE TACTICAL POWER SUPPLIES TO THE PIECE PART COMPONENT LEVEL

CONDITION(S): Provided designated faulty equipment, assigned maintenance area, tools, TMDE, and references.

STANDARD(S): To return a faulty power supply to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Research applicable technical data pertaining to faulty equipment.

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3. Read schematic diagrams.
4. Calculate circuit parameters.
5. Measure circuit performance.
6. Ensure proper handling of static sensitive components/printed circuit cards.
7. Isolate faulty components.
8. Perform alignments, as required.
9. Remove/Replace faulty components, as required.
10. Research authorized Modification and Technical Instructions (MI & TI).
11. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Maintenance Float Catalog
3. FEDLOG, Federal Logistic Data on Compact Disk
4. SL 1-2/3, Index of Authorized Publications in Stock
5. SL-4, Repair Parts for End Items
6. TM 9999-15/1, ESD Awareness Electro-Static Discharge
7. UM 4400-124, FMF SASSY Using Unit Procedures
8. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 2246A Oscilloscope
2. \* 28 Volt Power Supply
3. \* 34401A Digital Multimeter
4. \* 6556 Power Supply
5. \* 77/BN Multimeter
6. \* 8643A Signal Generator
7. ASAPS-4 Power Supply
8. HP6274B Power Supply
9. HP6291A Power Supply

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10. HYP-71 Auxillary Power Supply
11. PP-7333/GRC Power Supply
12. PP-8034 DC Power Converter
13. PP-8035 AC Power Converter
14. PP-8436/P Power Supply

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TASK: 2847.03.06 (CORE) PERFORM CORRECTIVE MAINTENANCE ON FIBER OPTIC CABLE

CONDITION(S): Provided faulty cable, assigned maintenance area, tools, TMDE, and references.

STANDARD(S): To restore faulty cable to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety regulations.
2. Research appropriate technical data.
3. Measure cable performance.
4. Isolate faulty components/areas.
5. Requisition repair parts, as required.
6. Remove/Replace faulty components, as required.
7. Splice cable, as required.
8. Research authorized Modification and Technical Instructions (MI & TI).
9. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. FEDLOG, Federal Logistic Data on Compact Disk

TRAINING MATERIEL:

1. \* 2430A Oscilloscope
2. \* 34401A Digital Multimeter
3. \* 77/BN Multimeter
4. \* AN/GSM-317 Optical Communications Test Set

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5. Cable Tester
6. \* Fiber Optic Fault Finder
7. \* TS-4335/G Fiber Optic Cable Test Set

ADMINISTRATIVE INSTRUCTIONS: This task applies to general fiber optic cable, ST connector, 3M fiber splice, and rotary splice.

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DUTY AREA 04 - MAINTENANCE OPERATIONS

For a complete task list in this duty area for MOS 2847 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 4.

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DUTY AREA 05 - MAINTENANCE TRAINING

For a complete task list in this duty area for MOS 2847 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 5.

MOS 2848, TACTICAL REMOTE SENSOR SYSTEM MAINTENANCE TECHNICIAN

DUTY AREA 01 - MAINTENANCE PLANNING

MOS 2848 is an additional MOS only, assigned to qualified Marines with a primary MOS of 2846 or 2862. For a complete task list of MOS 2848 use all tasks for the Marine's primary MOS.

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DUTY AREA 02 - MAINTENANCE ADMINISTRATION

MOS 2848 is an additional MOS only, assigned to qualified Marines with a primary MOS of 2846 or 2862. For a complete task list of MOS 2848 use all tasks for the Marine's primary MOS.

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ENCLOSURE (6)

DUTY AREA 03 - MAINTENANCE ACTIONS

MOS 2848 is an additional MOS only, assigned to qualified Marines with a primary MOS of 2846 or 2862. For a complete task list of MOS 2848 include all tasks for the Marine's primary MOS.

TASK: 2848.03.01 (CORE) PERFORM CORRECTIVE MAINTENANCE ON TACTICAL REMOTE SENSOR SYSTEM (TRSS)

CONDITION(S): Provided designated faulty equipment, special test equipment, assigned maintenance area, tools, TMDE, and references.

STANDARD(S): To ensure faulty TRSS is returned to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Research applicable technical data pertaining to faulty equipment.
3. Read schematic diagrams.
4. Calculate circuit parameters.
5. Ensure proper handling of static sensitive components/printed circuit cards.
6. Measure basic circuit performance.
7. Perform alignments, as required.
8. Trace signal paths.
9. Trace current/voltage paths.
10. Isolate faulty component(s).
11. Requisition repair parts, as required.
12. Remove/Replace faulty component(s), as required.
13. Research authorized Modification and Technical Instructions (MI & TI).
14. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Maintenance Float Catalog
3. FEDLOG, Federal Logistic Data on Compact Disk
4. MCO P4790.2\_, MIMMS Field Procedures Manual

5. SL 1-2/3, Index of Authorized Publications in Stock
6. SL-4, Repair Parts for End Items
7. TM 9999-15/1, ESD Awareness Electro-Static Discharge
8. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 2000 Semiconductor Device Test Set
2. \* 2246A Oscilloscope
3. \* 33120A Function Generator
4. \* 34401A Digital Multimeter
5. \* 4410 Bird Wattmeter
6. \* 8643A Signal Generator
7. \* AN/GSQ-261 Tactical Remote Sensor System (TRSS)
8. AN/USM-657(V2) Third Echelon Test System (TETS)
9. \* HP8562A Spectrum Analyzer
10. \* J-4843A/GRM Test Adapter
11. \* TS-4317/GRM Radio Test Set

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TASK: 2848.03.02 (CORE) PERFORM CORRECTIVE MAINTENANCE ON TRSS LINE REPLACEABLE UNITS (LRU) TO THE SECONDARY REPLACEABLE UNIT (SRU) OR CHASSIS MOUNTED COMPONENT LEVEL

CONDITION(S): Provided designated faulty equipment, special test equipment, assigned maintenance area, tools, TMDE, and references.

STANDARD(S): To return a faulty LRU or chassis to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Research applicable technical data pertaining to faulty equipment.
3. Read schematic diagrams.
4. Calculate circuit parameters.
5. Ensure proper handling of static sensitive components/printed circuit cards.
6. Measure circuit performance.

7. Perform alignments, as required.
8. Trace signal paths.
9. Trace current/voltage paths.
10. Isolate faulty SRU's/chassis mounted components.
11. Requisition repair parts, as required.
12. Remove/Replace faulty components, as required.
13. Research authorized Modification and Technical Instructions (MI & TI).
14. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. FEDLOG, Federal Logistic Data on Compact Disk
3. MCO P4790.2\_, MIMMS Field Procedures Manual
4. SL 1-2/3, Index of Authorized Publications in Stock
5. SL-4, Repair Parts for End Items
6. TM 9999-15/1, ESD Awareness Electro-Static Discharge
7. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 2246A Oscilloscope
2. \* 28 Volt Power Supply
3. \* 34401A Digital Multimeter
4. \* 77/BN Multimeter
5. \* 8643A Signal Generator
6. \* AN/GSQ-261 Tactical Remote Sensor System (TRSS)
7. \* HP8562A Spectrum Analyzer
8. \* J-4843A/GRM Test Adapter
9. \* TS-4317/GRM Radio Test Set

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DUTY AREA 04 - MAINTENANCE OPERATIONS

MOS 2848 is an additional MOS only, assigned to qualified Marines with a primary MOS of 2846 or 2862. For a complete task list of MOS 2848 include all tasks for the Marine's primary MOS.

TASK: 2848.04.01 (CORE) PROVIDE TECHNICAL ASSISTANCE DURING THE INSTALLATION OF THE TACTICAL REMOTE SENSOR SYSTEM (TRSS)

CONDITION(S): Given an operational plan, equipment, and references.

STANDARD(S): To ensure that the TRSS is installed and functions correctly, per the references.

PERFORMANCE STEPS:

1. Verify power source.
2. Verify antenna installation, as required.
3. Verify relay operations.
4. Verify remote capabilities, as required.
5. Verify equipment operation.
6. Verify equipment operating procedures.
7. Perform Electromagnetic Interference (EMI) troubleshooting to include checking for proper grounds, cable connections, power connections, etc.
8. Provide guidance to correct any discrepancies noted.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. TM 9406-15, Grounding Procedures
3. TM 9999-15/1, ESD Awareness Electro-Static Discharge

TRAINING MATERIEL:

1. \* AN/GSQ-261 Tactical Remote Sensor System (TRSS)

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DUTY AREA 05 - MAINTENANCE TRAINING

MOS 2848 is an additional MOS only, assigned to qualified Marines with a primary MOS of 2846 or 2862. For a complete task list of MOS 2848 use all tasks for the Marine's primary MOS.

MOS 2862, ELECTRONICS MAINTENANCE TECHNICIAN

DUTY AREA 01 - MAINTENANCE PLANNING

For a complete task list in this duty area for MOS 2862 use all of the tasks for the appropriate grade from MOS 2844, 2846, & 2847, Duty Area 1.

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DUTY AREA 02 - MAINTENANCE ADMINISTRATION

For a complete task list in this duty area for MOS 2862 use all of the tasks for the appropriate grade from MOS 2844, 2846, & 2847, Duty Area 2.

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DUTY AREA 03 - MAINTENANCE ACTIONS

For a complete task list in this duty area for MOS 2862 include all of the tasks for the appropriate grade from MOS 2844, 2846, & 2847, Duty Area 3.

TASK: 2862.03.01 (CORE) PERFORM ADVANCED CORRECTIVE MAINTENANCE ON SINGLE CHANNEL RADIOS (SCR) AND ANCILLARY EQUIPMENT TO THE PIECE PART COMPONENT LEVEL

CONDITION(S): Provided faulty equipment, assigned maintenance area, tools, Test Measurement and Diagnostic Equipment (TMDE), and references.

STANDARD(S): To return faulty components or electronic device to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Ensure proper handling of static sensitive components/printed circuit cards.
3. Verify proper grounding.
4. Research applicable technical data pertaining to faulty equipment.
5. Read schematic diagrams.
6. Calculate electronic circuit parameters.
7. Measure electronic circuit performance.
8. Trace signal paths, e.g., current/voltage.
9. Perform alignments, as required.
10. Isolate faulty components.
11. Requisition repair parts, as required.
12. Remove/Replace faulty components, as required.
13. Research authorized Modification and Technical Instructions (MI & TI).
14. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. FEDLOG, Federal Logistic Data on Compact Disk
4. MCO P4790.2\_, MIMMS Field Procedures Manual
5. SL 1-2/3, Index of Authorized Publications in Stock

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6. SL-4, Repair Parts for End Items
7. TM 9999-15/1, ESD Awareness Electro-Static Discharge
8. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 2246A Oscilloscope
2. \* 2430A Oscilloscope
3. \* 28 Volt Power Supply
4. \* 33120A Function Generator
5. \* 34401A Digital Multimeter
6. \* 4410 Bird Wattmeter
7. \* 54825N Digital O'Scope
8. \* 6556 Power Supply
9. \* 8431 Electrical Dummy Load
10. \* 8643A Signal Generator
11. AN/CYZ-10 Digital Transfer Device
12. \* AN/GRC-193 Radio Set
13. \* AN/GSM-317 Optical Communications Test Set
14. AN/MRC-110A Radio Terminal Set
15. AN/MRC-140 Radio Set
16. AN/MRC-142 Radio Set
17. AN/MRC-145 Radio Set
18. \* AN/PRC-104 Radio Set
19. AN/PRC-113 (V)3 Radio Set
20. \* AN/PRC-119 Radio Set
21. AN/PSC-2A EM Digital Message System
22. AN/PSC-5 Satellite Communications Radio System
23. AN/PSN-8 Global Positioning System (GPS) NAVSTAR
24. \* AN/USM-459A Universal Counter
25. AN/UXC-7 Lightweight Facsimile

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26. \* AN/VRC-88A Radio Set (SINGGARS)
27. AN/VRC-90A Radio Set (SINGGARS)
28. C-11561 SINGGARS Control Unit
29. \* J-4843A/GRM Test Adapter
30. \* PP-7333/GRC Power Supply
31. SB-22/PT Manual Telephone Switchboard
32. \* SB-3614/TT Telephone Switch
33. \* SB-3865 (P)/TTC Telephone Switchboard
34. \* TA-1042/U Digital Non-Secure Voice Terminal
35. \* TA-312/PT Telephone Set
36. \* TA-838 TT Telephone Set
37. \* TD-1234 Multiplexer Combiner
38. TS-4291/P Radio Test Set
39. \* TS-4317/GRM Radio Test Set

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TASK: 2862.03.02 (CORE) PERFORM ADVANCED CORRECTIVE MAINTENANCE ON TACTICAL TELEPHONES, SWITCHBOARDS, AND ANCILLARY EQUIPMENT TO THE PIECE PART COMPONENT LEVEL

CONDITION(S): Provided faulty equipment, assigned maintenance area, tools, TMDE, and references.

STANDARD(S): To return a faulty equipment to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Ensure proper handling of static sensitive components/printed circuit cards.
3. Verify proper grounding.
4. Research applicable technical data pertaining to faulty equipment.
5. Read schematic diagrams.
6. Calculate circuit parameters.
7. Measure circuit performance.
8. Trace signal paths, e.g., current/voltage.

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9. Perform alignments, as required.
10. Isolate faulty components.
11. Requisition repair parts, as required.
12. Remove/Replace faulty components, as required.
13. Research authorized Modification and Technical Instructions (MI & TI)
14. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. FEDLOG, Federal Logistic Data on Compact Disk
4. MCO P4790.2\_, MIMMS Field Procedures Manual
5. SL 1-2/3, Index of Authorized Publications in Stock
6. SL-4, Repair Parts for End Items
7. TM 9999-15/1, ESD Awareness Electro-Static Discharge
8. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 2000 Semiconductor Device Test Set
2. \* 2246A Oscilloscope
3. \* 28 Volt Power Supply
4. \* 33120A Function Generator
5. \* 34401A Digital Multimeter
6. \* 6556 Power Supply
7. \* 8643A Signal Generator
8. \* AN/GRA-39 Radio Set Control Group
9. SB-22/PT Manual Telephone Switchboard
10. \* SB-3614/TT Telephone Switch
11. \* SB-3865 (P)/TTC Telephone Switchboard
12. SB-4097/U Communication Patching Panel

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13. \* TA-1042/U Digital Non-Secure Voice Terminal
14. \* TA-312/PT Telephone Set
15. \* TA-838 TT Telephone Set
16. TA-938G Telephone Set
17. TA-954 Digital Non-Secure Voice Terminal
18. TA-977/PT Tone Signaling Adapter
19. TD-1234 Multiplexer Combiner

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TASK: 2862.03.03 (CORE) PERFORM ADVANCED CORRECTIVE MAINTENANCE ON COMPUTERS AND PERIPHERAL EQUIPMENT TO THE PIECE PART COMPONENT LEVEL

CONDITION(S): Provided faulty equipment, assigned maintenance area, tools, TMDE, and references.

STANDARD(S): To return faulty equipment to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Ensure proper handling of static sensitive components/printed circuit cards.
3. Verify proper grounding.
4. Research applicable technical data pertaining to faulty equipment.
5. Read schematic diagrams.
6. Calculate circuit parameters.
7. Measure circuit performance.
8. Trace signal path.
9. Perform alignments, as required.
10. Isolate faulty components.
11. Requisition repair parts, as required.
12. Remove/Replace faulty components, as required.
13. Research authorized Modification and Technical Instructions (MI & TI).
14. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

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REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. FEDLOG, Federal Logistic Data on Compact Disk
4. MCO P4790.2\_, MIMMS Field Procedures Manual
5. SL 1-2/3, Index of Authorized Publications in Stock
6. SL-4, Repair Parts for End Items
7. TM 9999-15/1, ESD Awareness Electro-Static Discharge
8. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 2246A Oscilloscope
2. \* 28 Volt Power Supply
3. \* 34401A Digital Multimeter
4. \* 6556 Power Supply
5. \* 8643A Signal Generator
6. \* ASAPS-4 Power Supply
7. \* Computer Suite
8. \* Network HUB
9. \* Network Server
10. \* Printers
11. \* RJ-45 Connector Kits

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DUTY AREA 04 - MAINTENANCE OPERATIONS

For a complete task list in this duty area for MOS 2862 include all of the tasks for the appropriate grade from MOS 2844, 2846, & 2847, Duty Area 4.

TASK: 2862.04.01 (CORE) PROVIDE ADVANCED TECHNICAL ASSISTANCE DURING THE INSTALLATION OF GROUND COMMUNICATIONS EQUIPMENT

CONDITION(S): Provided a mission, equipment, and references.

STANDARD(S): To ensure all communications equipment is installed and operating, per the references.

PERFORMANCE STEPS:

1. Adhere to all safety requirements.
2. Verify power source.
3. Verify antenna installation, as required.
4. Verify remote capabilities, as required.
5. Verify COMSEC connection, as required.
6. Verify equipment operation.
7. Verify equipment operating procedures to include COMSEC.
8. Perform Electromagnetic Interference (EMI) troubleshooting to include checking for proper ground, cable connections, ETC.
9. Provide guidance to correct discrepancies.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. TM 9406-15, Grounding Procedures
3. TM 9999-15/1, ESD Awareness Electro-Static Discharge

TRAINING MATERIEL:

1. AN/CYZ-10 Digital Transfer Device
2. AN/GRA-39 Radio Set Control Group
3. AN/MRC-110A Radio Terminal Set
4. AN/MRC-138A Radio Set
5. AN/MRC-138B Radio Set
6. AN/MRC-140 Radio Set

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7. AN/MRC-142 Radio Set
8. AN/MRC-145 Radio Set
9. AN/PRC-104 Radio Set
10. AN/PRC-113 (V)3 Radio Set
11. AN/PRC-119A Radio Set
12. AN/PSC-2A EM Digital Message System
13. AN/PSC-5 Satellite Communications Radio System
14. AN/TSC-120 Communications Central
15. AN/VRC-88 Radio Set
16. AN/VRC-88D Radio Set (SINCGARS)
17. AN/VRC-89 Radio Set
18. AN/VRC-90 Radio Set

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DUTY AREA 05 - MAINTENANCE TRAINING

For a complete task list in this duty area for MOS 2862 use all of the tasks for the appropriate grade from MOS 2844, 2846, & 2847, Duty Area 5.

MOS 2867, AN/TSC-120 RADIO TECHNICIAN

DUTY AREA 01 - MAINTENANCE PLANNING

MOS 2867 is an additional MOS only, assigned to qualified Marines with a primary MOS of 2846, or 2862. For a complete task list of MOS 2867 use all tasks for the Marine's primary MOS.

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DUTY AREA 02 - MAINTENANCE ADMINISTRATION

MOS 2867 is an additional MOS only, assigned to qualified Marines with a primary MOS of 2846, or 2862. For a complete task list of MOS 2867 use all tasks for the Marine's primary MOS.

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DUTY AREA 03 - MAINTENANCE ACTIONS

MOS 2867 is an additional MOS only, assigned to qualified Marines with a primary MOS of 2846, or 2862. For a complete task list of MOS 2867 include all tasks for the Marine's primary MOS.

TASK: 2867.03.01 (CORE) PERFORM CORRECTIVE MAINTENANCE ON AN/TSC-120 RADIO EQUIPMENT

CONDITION(S): Provided designated faulty equipment, assigned maintenance area, tools, TMDE, and references.

STANDARD(S): To return a faulty system to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Research applicable technical data pertaining to faulty equipment.
3. Read schematic diagrams.
4. Calculate circuit parameters.
5. Measure circuit performance.
6. Ensure proper handling of static sensitive components/printed circuit cards.
7. Perform alignments, as required.
8. Trace signal paths.
9. Trace current/voltage paths.
10. Isolate faulty components.
11. Requisition repair parts, as required.
12. Remove/Replace faulty components, as required.
13. Research authorized Modification and Technical Instructions (MI & TI).
14. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Maintenance Float Catalog
3. FEDLOG, Federal Logistic Data on Compact Disk
4. MCO P4790.2\_, MIMMS Field Procedures Manual
5. SL 1-2/3, Index of Authorized Publications in Stock

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6. SL-4, Repair Parts for End Items
7. TM 9999-15/1, ESD Awareness Electro-Static Discharge
8. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 2246A Oscilloscope
2. \* 28 Volt Power Supply
3. \* 33120A Function Generator
4. \* 34401A Digital Multimeter
5. \* 4410 Bird Wattmeter
6. \* 54825N Digital O'Scope
7. \* 8431 Electrical Dummy Load
8. \* 8643A Signal Generator
9. \* AN/TSC-120 Communications Central
10. \* J-4843A/GRM Test Adapter
11. \* MK-2569/P Electronic System Tool Kit
12. \* TS-4291/P Radio Test Set
13. \* TS-4317/GRM Radio Test Set

DISTANCE LEARNING PRODUCT(S):

1. MCI 2820, Electronics Mathematics for Marines
2. MCI 286, Fundamentals of Digital Logic
3. MCI 287, Introduction to Test Equipment

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TASK: 2867.03.02 (CORE) PERFORM CORRECTIVE MAINTENANCE ON AN/TSC-120 LINE REPLACEABLE UNITS (LRU) TO THE SECONDARY REPLACEABLE UNIT (SRU) OR CHASSIS MOUNTED COMPONENT LEVEL

CONDITION(S): Provided designated faulty equipment, assigned maintenance area, tools, TMDE, and references.

STANDARD(S): To return a faulty LRU or chassis to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.

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2. Research applicable technical data pertaining to faulty equipment.
3. Read schematic diagrams.
4. Calculate circuit parameters.
5. Ensure proper handling of static sensitive components/printed circuit cards.
6. Measure circuit performance.
7. Perform alignments, as required.
8. Trace signal paths.
9. Trace current/voltage paths.
10. Isolate faulty SRU's/chassis mounted components.
11. Requisition repair parts, as required.
12. Remove/Replace faulty components, as required.
13. Research authorized Modification and Technical Instructions (MI & TI).
14. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Maintenance Float Catalog
3. FEDLOG, Federal Logistic Data on Compact Disk
4. MCO P4790.2\_, MIMMS Field Procedures Manual
5. SL 1-2/3, Index of Authorized Publications in Stock
6. SL-4, Repair Parts for End Items
7. TM 9999-15/1, ESD Awareness Electro-Static Discharge
8. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 2000 Semiconductor Device Test Set
2. \* 2246A Oscilloscope
3. \* 2430A Oscilloscope
4. \* 28 Volt Power Supply
5. \* 33120A Function Generator

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6. \* 34401A Digital Multimeter
7. \* 8643A Signal Generator
8. \* AN/TSC-120 Communications Central
9. \* J-4843A/GRM Test Adapter
10. \* TS-4291/P Radio Test Set
11. \* TS-4317/GRM Radio Test Set

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TASK: 2867.03.03 (CORE PLUS) PERFORM LIMITED MAINTENANCE ON COMSEC EQUIPMENT USED IN AN/TSC-120

CONDITION(S): Provided faulty COMSEC equipment, an assigned maintenance area, tools, spare kits, special test equipment, TMDE, and references.

STANDARD(S): To ensure faulty COMSEC equipment is returned to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Adhere to cryptographic security regulations.
3. Connect faulty equipment to special test equipment.
4. Ensure proper handling of static sensitive components/printed circuit cards.
5. Trace functional block diagrams.
6. Isolate fault to the line replaceable unit (LRU).
7. Evacuate to higher echelon, as required.
8. Research modifications both mandatory and optional, and repair actions.
9. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. CMS-21, COMSEC Material System Policy & Procedures
3. CMS-5\_, COMSEC Material System Policy & Procedures Manual
4. FEDLOG, Federal Logistic Data on Compact Disk
5. MCO P4790.2\_, MIMMS Field Procedures Manual

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6. TM 9999-15/1, ESD Awareness Electro-Static Discharge
7. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. 2246A Oscilloscope
2. 28 Volt Power Supply
3. 77/BN Multimeter
4. 8431 Electrical Dummy Load
5. 8643A Signal Generator
6. AN/TSC-120 Communications Central
7. TSEC/KYV-5 ANDVT COMSEC Module (VACTOR)

ADMINISTRATIVE INSTRUCTIONS: Task applies only after the elimination of the 2881 MOS.

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DUTY AREA 04 - MAINTENANCE OPERATIONS

MOS 2867 is an additional MOS only, assigned to qualified Marines with a primary MOS of 2846, or 2862. For a complete task list of MOS 2867 include all tasks for the Marine's primary MOS.

TASK: 2867.04.01 (CORE) PROVIDE TECHNICAL ASSISTANCE DURING THE INSTALLATION OF AN/TSC-120 RADIO EQUIPMENT

CONDITION(S): Given an operational plan, equipment, and references.

STANDARD(S): To ensure that the AN/TSC-120 radio equipment is installed and operates, per the references.

PERFORMANCE STEPS:

1. Verify power source.
2. Verify antenna installation, as required.
3. Verify remote capabilities, as required.
4. Verify equipment operation.
5. Verify equipment operating procedures.
6. Perform Electromagnetic Interference (EMI) troubleshooting to include checking for proper grounds, cable connections, power connections, etc.
7. Provide guidance to correct any discrepancies noted.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. TM 9406-15, Grounding Procedures
3. TM 9999-15/1, ESD Awareness Electro-Static Discharge

TRAINING MATERIEL:

1. AN/TSC-120 Communications Central

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DUTY AREA 05 - MAINTENANCE TRAINING

MOS 2867 is an additional MOS only, assigned to qualified Marines with a primary MOS of 2846 or 2862. For a complete task list of MOS 2867 use all tasks for the Marine's primary MOS.

MOS 2871, TEST MEASUREMENT AND DIAGNOSTIC EQUIPMENT TECHNICIAN

DUTY AREA 01 - MAINTENANCE PLANNING

For a complete task list in this duty area for MOS 2871 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 1.

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DUTY AREA 02 - MAINTENANCE ADMINISTRATION

For a complete task list in this duty area for MOS 2871 include all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 2.

TASK: 2871.02.01 (CORE) COMPLETE CALIBRATION MAINTENANCE FORMS AND DOCUMENTS

CONDITION(S): Provided applicable maintenance management forms, documents, equipment, software, and references.

STANDARD(S): To ensure proper recording of calibration maintenance actions, per the references.

PERFORMANCE STEPS:

1. Input information into the Computer Assisted Logistics and Test Equipment Calibration System (CALTECS).
2. Reconcile CALTECS information.
3. Produce induction label(s).
4. Perform maintenance closeout procedures.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. FEDLOG, Federal Logistic Data on Compact Disk
3. MCO P4400.150\_, Consumer Level Supply Policy Manual
4. MCO P4400.84\_, Special Programs Manual
5. MCO P4790.1\_, Marine Corps Integrated Maintenance Management System (MIMMS) MANUAL
6. MCO P4790.2\_, MIMMS Field Procedures Manual
7. UM 4400-124, FMF SASSY Using Unit Procedures
8. UM 4790-5, Users Manual MIMMS

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DUTY AREA 03 - MAINTENANCE ACTIONS

For a complete task list in this duty area for MOS 2871 include all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 3.

TASK: 2871.03.01 (CORE) TROUBLESHOOT TEST MEASUREMENT AND DIAGNOSTIC EQUIPMENT/GENERAL PURPOSE TEST EQUIPMENT (TMDE/GPTE)

CONDITION(S): Provided assigned maintenance area, faulty equipment, tools, TMDE, and references,

STANDARD(S): To locate faulty components or determine the accuracy, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Research applicable technical data pertaining to equipment.
3. Read schematic diagrams for basic electronic circuits.
4. Calculate basic electronic circuit performance.
5. Ensure proper handling of static sensitive components/printed circuit cards.
6. Measure basic electronic circuit performance.
7. Trace signal paths in basic electronic circuits.
8. Trace current/voltage paths in basic electronic circuits.
9. Perform alignments, as required.
10. Isolate faulty components, as required.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. MCO P4790.2\_, MIMMS Field Procedures Manual
4. MCO P5090.2\_, Environmental Compliance and Protection Manual
5. MSDS, Material Safety Data Sheets
6. TM 10510-14/1, Electronic Test Equipment Listing
7. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 33120A Function Generator

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2. \* 34401A Digital Multimeter
3. \* 54825N Digital O'Scope
4. \* 8643A Signal Generator
5. \* AN/USM-459A Universal Counter
6. AN/USM-657(V2) Third Echelon Test System (TETS)
7. \* TS-4317/GRM Radio Test Set

DISTANCE LEARNING PRODUCT(S):

1. MCI 2820, Electronics Mathematics for Marines
2. MCI 286, Fundamentals of Digital Logic
3. MCI 287, Introduction to Test Equipment

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TASK: 2871.03.02 (CORE) REPAIR TMDE/GPTE

CONDITION(S): Provided tools, materials, equipment, and references,

STANDARD(S): To restore equipment to an operational condition, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Research applicable technical data pertaining to faulty equipment.
3. Read schematic diagrams.
4. Ensure proper handling of static sensitive components/printed circuit cards.
5. Measure circuit performance.
6. Perform alignments, as required.
7. Isolate faulty components.
8. Requisition repair parts, as required.
9. Remove/Replace faulty components.
10. Research authorized Modification and Technical Instructions (MI & TI).
11. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals

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2. Maintenance Float Catalog
3. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
4. FEDLOG, Federal Logistic Data on Compact Disk
5. MCO P4790.2\_, MIMMS Field Procedures Manual
6. MCO P5090.2\_, Environmental Compliance and Protection Manual
7. TM 10510-14/1, Electronic Test Equipment Listing
8. TM 9999-15/1, ESD Awareness Electro-Static Discharge
9. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 33120A Function Generator
2. \* 34401A Digital Multimeter
3. \* 54825N Digital O'Scope
4. \* 8643A Signal Generator
5. \* AN/USM-459A Universal Counter

DISTANCE LEARNING PRODUCT(S):

1. MCI 2820, Electronics Mathematics for Marines
2. MCI 286, Fundamentals of Digital Logic
3. MCI 287, Introduction to Test Equipment

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TASK: 2871.03.03 (CORE) VERIFY ACCURACY OF TMDE/GPTE

CONDITION(S): Provided tools, materials, equipment, and references.

STANDARD(S): To authenticate accuracy, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Adhere to connector care requirements.
3. Perform operational check and repair, as required.
4. Read Instrument Calibration Procedure (ICP) introduction and description.
5. Read ICP equipment requirements.
6. Perform preliminary operations.

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7. Perform calibration.
8. Affix appropriate calibration label.
9. Track appropriate changes on the Equipment Repair Order (ERO).
10. Research authorized Modification and Technical Instructions (MI & TI).
11. Perform maintenance closeout procedures, to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. FEDLOG, Federal Logistic Data on Compact Disk
3. SL 1-2/3, Index of Authorized Publications in Stock
4. SL-4, Repair Parts for End Items
5. TM 10510-14/1, Electronic Test Equipment Listing
6. TM 9999-15/1, ESD Awareness Electro-Static Discharge
7. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 33120A Function Generator
2. \* 34401A Digital Multimeter
3. \* 54825N Digital O'Scope
4. \* 8643A Signal Generator
5. \* AN/USM-459A Universal Counter
6. \* AN/USM-657(V2) Third Echelon Test System (TETS)
7. \* TS-4317/GRM Radio Test Set

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TASK: 2871.03.04 (CORE) ADJUST TMDE/GPTE

CONDITION(S): Provided tools, materials, equipment, and references.

STANDARD(S): To restore equipment to an accurate operational condition, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.

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2. Adhere to connector care requirements.
3. Ensure proper handling of static sensitive components/printed circuit cards.
4. Read schematic diagrams.
5. Calculate circuit parameters.
6. Perform calibration measurement.
7. Identify out-of-tolerance indication.
8. Perform alignments.
9. Repeat calibration measurement.
10. Evacuate for repair, as required.
11. Research authorized MI & TI.
12. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. MCO 4733.1\_, Marine Corps TMDE CAMP
4. MCO P4790.2\_, MIMMS Field Procedures Manual
5. TM 10510-14/1, Electronic Test Equipment Listing
6. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 33120A Function Generator
2. \* 34401A Digital Multimeter
3. \* 54825N Digital O'Scope
4. \* 8643A Signal Generator
5. \* AN/USM-459A Universal Counter
6. \* TS-4317/GRM Radio Test Set

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DUTY AREA 04 - MAINTENANCE OPERATIONS

For a complete task list in this duty area for MOS 2871 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 4.

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DUTY AREA 05 - MAINTENANCE TRAINING

For a complete task list in this duty area for MOS 2871 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 5.

MOS 2874, METROLOGY TECHNICIAN

DUTY AREA 01 - MAINTENANCE PLANNING

For a complete task list in this duty area for MOS 2874 include all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 1.

TASK: 2874.01.01 (CORE) PLAN METROLOGY EQUIPMENT MAINTENANCE SUPPORT

CONDITION(S): Provided a mission, equipment, personnel, Commander's guidance, and references.

STANDARD(S): To ensure intermediate maintenance support requirements are met, per the references.

PERFORMANCE STEPS:

1. Determine unit capabilities.
2. Determine support unit requirements.
3. Determine locations of supported equipment.
4. Determine supply support.
5. Determine maintenance float support.
6. Determine logistical support.
7. Determine personnel requirements.
8. Determine facilities (consider environmental conditions).
9. Determine security requirements.
10. Draft the plan.
11. Submit the plan for review and signature by the EMO.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. CMR, Consolidated Memorandum Report
3. MCO P4790.2\_, MIMMS Field Procedures Manual
4. MCO P5090.2\_, Environmental Compliance and Protection Manual
5. MCWP 5-1, Marine Corps Planning Process
6. TM 9406-15, Grounding Procedures
7. UNIT SOP, Unit's Standing Operating Procedures

8. UNIT TO/E, Table of Organization/Equipment

ADMINISTRATIVE INSTRUCTIONS: This task applies to the equipment noted in the most current edition of TM 10510-14/1.

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TASK: 2874.01.02 (CORE) PLAN TEST MEASUREMENT AND DIAGNOSTIC EQUIPMENT (TMDE) MAINTENANCE SUPPORT

CONDITION(S): Provided a mission, equipment, personnel, Commander's guidance, and references.

STANDARD(S): To ensure intermediate maintenance support requirements are met, per the references.

PERFORMANCE STEPS:

1. Determine unit capabilities.
2. Determine support unit requirements.
3. Determine locations of supported equipment.
4. Determine supply support.
5. Determine maintenance float support.
6. Determine logistical support.
7. Determine personnel requirements.
8. Determine facilities (consider environmental conditions).
9. Determine security requirements.
10. Draft the plan.
11. Submit the plan for review and signature by the EMO.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. CMR, Consolidated Memorandum Report
3. MCO P4790.2\_, MIMMS Field Procedures Manual
4. MCO P5090.2\_, Environmental Compliance and Protection Manual
5. MCWP 5-1, Marine Corps Planning Process
6. TM 9406-15, Grounding Procedures
7. UNIT SOP, Unit's Standing Operating Procedures

8. UNIT TO/E, Table of Organization/Equipment

ADMINISTRATIVE INSTRUCTIONS: This task applies to the equipment noted in the most current edition of TM 10510-14/1.

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TASK: 2874.01.03 (CORE) MANAGE STANDARDS TRACEABILITY PROGRAM

CONDITION(S): Provided tools, materials, equipment, and references.

STANDARD(S): To restore the standard to an accurate operational condition, per the references.

PERFORMANCE STEPS:

1. Coordinate the transfer of standards with the MCTSP coordinator at MCLB, Barstow, CA.
2. Receive transfer standards.
3. Perform operational check on transfer standards.
4. Calibrate local standards using transfer standards.
5. Complete standard calibration documentation.
6. Repackage and ship transfer standards.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. MCO 4733.1\_, Marine Corps TMDE CAMP
4. MCO P4790.2\_, MIMMS Field Procedures Manual
5. MSDS, Material Safety Data Sheets
6. TM 10510-14/1, Electronic Test Equipment Listing
7. UM 4790-5, Users Manual MIMMS

ADMINISTRATIVE INSTRUCTIONS: This task applies to the equipment noted in the most current edition of TM 10510-14/1.

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DUTY AREA 02 - MAINTENANCE ADMINISTRATION

For a complete task list in this duty area for MOS 2874 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 2.

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DUTY AREA 03 - MAINTENANCE ACTIONS

For a complete task list in this duty area for MOS 2874 include all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 3.

TASK: 2874.03.01 (CORE) TROUBLESHOOT TEST MEASUREMENT AND DIAGNOSTIC EQUIPMENT (TMDE)

CONDITION(S): Provided assigned maintenance area, TMDE, tools, materials, equipment, and references.

STANDARD(S): To locate faulty components and determine the accuracy, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Research applicable technical data pertaining to equipment.
3. Read schematic diagrams.
4. Calculate circuit parameters.
5. Ensure proper handling of static sensitive components/printed circuit cards.
6. Measure electronic circuit performance.
7. Trace signal paths.
8. Trace current/voltage paths.
9. Perform alignments, as required.
10. Isolate faulty components, as required.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. FEDLOG, Federal Logistic Data on Compact Disk
3. MCO 4733.1\_, Marine Corps TMDE CAMP
4. MCO P4790.2\_, MIMMS Field Procedures Manual
5. SL 1-2/3, Index of Authorized Publications in Stock
6. TM 10510-14/1, Electronic Test Equipment Listing
7. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 11582A Attenuator Set

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2. \* 123EMZ-12 Vernier Caliper
3. \* 1531-AB Strobotac
4. \* 2246A Oscilloscope
5. \* 2465B Oscilloscope
6. \* 254EMZ-18 Master Vernier Height Gage
7. \* 3000-40 Directional Coupler
8. \* 34401A Digital Multimeter
9. \* 432A HP Power Meter
10. \* 439 Personnel Scale
11. \* 4410 Bird Wattmeter
12. 4800 Tachometer
13. \* 53132A HP Frequency Counter
14. 5700A Fluke Meter Calibrator
15. \* 8340B HP Synthesized Sweeper
16. \* 8510B Vector Network Analyzer
17. \* 8562A HP Spectrum Analyzer
18. \* 8644A HP Signal Generator
19. \* 8902AE04 HF Signal Generator
20. \* 8903B HP Audio Analyzer
21. \* DT-205 Digital Tachometer
22. \* DT-301 Digital Stroboscope
23. \* M1A1 Powder Thermometer
24. \* M20-P100 Thermometer
25. \* MD400 2K lb Wheel Scale
26. \* MW9070NV Optical Time Domain Reflectometer
27. \* S133 Scale, Weighing
28. \* S253Z Dial Indicator Set
29. \* TETS Third Echelon Test Set

DISTANCE LEARNING PRODUCT(S):

1. MCI 2820, Electronics Mathematics for Marines
2. MCI 286, Fundamentals of Digital Logic
3. MCI 287, Introduction to Test Equipment

ADMINISTRATIVE INSTRUCTIONS: This task applies to the equipment noted in the most current edition of TM 10510-14/1.

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TASK: 2874.03.02 (CORE) REPAIR TMDE

CONDITION(S): Provided tools, materials, equipment, and references.

STANDARD(S): To restore equipment to an operational condition, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Research applicable technical data pertaining to faulty equipment.
3. Read schematic diagrams.
4. Ensure proper handling of Static Sensitive Components/Printed Circuit Cards.
5. Measure circuit performance.
6. Perform alignments, as required.
7. Isolate faulty components.
8. Requisition repair parts.
9. Remove/Replace faulty components.
10. Research authorized Modification and Technical Instructions (MI & TI).
11. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Maintenance Float Catalog
3. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
4. FEDLOG, Federal Logistic Data on Compact Disk
5. MCO P4790.2\_, MIMMS Field Procedures Manual

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6. MCO P5090.2\_, Environmental Compliance and Protection Manual
7. TM 10510-14/1, Electronic Test Equipment Listing
8. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 11582A Attenuator Set
2. \* 123EMZ-12 Vernier Caliper
3. \* 1531-AB Strobotac
4. \* 2246A Oscilloscope
5. \* 2465B Oscilloscope
6. \* 254EMZ-18 Master Vernier Height Gage
7. \* 3000-40 Directional Coupler
8. \* 34401A Digital Multimeter
9. \* 432A HP Power Meter
10. \* 439 Personnel Scale
11. \* 4410 Bird Wattmeter
12. 4800 Tachometer
13. \* 53132A HP Frequency Counter
14. 5700A Fluke Meter Calibrator
15. \* 8340B HP Synthesized Sweeper
16. \* 8510B Vector Network Analyzer
17. \* 8562A HP Spectrum Analyzer
18. \* 8644A HP Signal Generator
19. \* 8902AE04 HF Signal Generator
20. \* 8903B HP Audio Analyzer
21. \* DT-205 Digital Tachometer
22. \* DT-301 Digital Stroboscope
23. \* M1A1 Powder Thermometer
24. \* M20-P100 Thermometer
25. \* MD400 2K lb Wheel Scale

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26. \* MW9070NV Optical Time Domain Reflectometer
27. \* S133 Scale, Weighing
28. \* S253Z Dial Indicator Set
29. \* TETS Third Echelon Test Set

DISTANCE LEARNING PRODUCT(S):

1. MCI 2820, Electronics Mathematics for Marines
2. MCI 286, Fundamentals of Digital Logic
3. MCI 287, Introduction to Test Equipment

ADMINISTRATIVE INSTRUCTIONS: This task applies to the equipment noted in the most current edition of TM 10510-14/1.

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TASK: 2874.03.03 (CORE) VERIFY ACCURACY OF TMDE

CONDITION(S): Provided tools, materials, equipment, and references.

STANDARD(S): To authenticate accuracy, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Adhere to connector care requirements.
3. Perform operational check and repair, as required.
4. Read Instrument Calibration Procedure (ICP) introduction, description, and equipment requirements.
5. Perform preliminary operations.
6. Perform calibration.
7. Research authorized Modification and Technical Instructions (MI & TI).
8. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. MCO 4733.1\_, Marine Corps TMDE CAMP
4. MCO P4790.2\_, MIMMS Field Procedures Manual

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5. TM 10510-14/1, Electronic Test Equipment Listing
6. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 11582A Attenuator Set
2. \* 123EMZ-12 Vernier Caliper
3. \* 1531-AB Strobotac
4. \* 2246A Oscilloscope
5. \* 2465B Oscilloscope
6. \* 254EMZ-18 Master Vernier Height Gage
7. \* 3000-40 Directional Coupler
8. 34401A Digital Multimeter
9. 432A HP Power Meter
10. 439 Personnel Scale
11. 4410 Bird Wattmeter
12. \* 4800 Tachometer
13. \* 53132A HP Frequency Counter
14. \* 5700A Fluke Meter Calibrator
15. \* 8340B HP Synthesized Sweeper
16. \* 8510B Vector Network Analyzer
17. \* 8562A HP Spectrum Analyzer
18. \* 8644A HP Signal Generator
19. \* 8902AE04 HF Signal Generator
20. \* 8903B HP Audio Analyzer
21. \* DT-205 Digital Tachometer
22. \* DT-301 Digital Stroboscope
23. \* M1A1 Powder Thermometer
24. \* M20-P100 Thermometer
25. \* MD400 2K lb Wheel Scale
26. \* MW9070NV Optical Time Domain Reflectometer

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27. \* S133 Scale, Weighing
28. \* S253Z Dial Indicator Set
29. \* TETS Third Echelon Test Set

ADMINISTRATIVE INSTRUCTIONS: This task applies to the equipment noted in the most current edition of TM 10510-14/1.

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TASK: 2874.03.04 (CORE) ADJUST TMDE

CONDITION(S): Provided tools, materials, equipment, and references.

STANDARD(S): To restore equipment to an accurate operational condition, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Adhere to connector care requirements.
3. Ensure proper handling of static sensitive components/printed circuit cards.
4. Read schematic diagrams.
5. Calculate circuit parameters.
6. Perform calibration measurement.
7. Identify out-of-tolerance indication.
8. Perform alignments.
9. Repeat calibration measurement.
10. Evacuate for repair, as required.
11. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. MCO 4733.1\_, Marine Corps TMDE CAMP
4. MCO P4790.2\_, MIMMS Field Procedures Manual
5. TM 10510-14/1, Electronic Test Equipment Listing
6. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 11582A Attenuator Set
2. \* 123EMZ-12 Vernier Caliper
3. \* 1531-AB Strobotac
4. \* 2246A Oscilloscope
5. \* 2465B Oscilloscope
6. \* 254EMZ-18 Master Vernier Height Gage
7. \* 3000-40 Directional Coupler
8. \* 34401A Digital Multimeter
9. \* 432A HP Power Meter
10. \* 439 Personnel Scale
11. \* 4410 Bird Wattmeter
12. \* 4800 Tachometer
13. \* 53132A HP Frequency Counter
14. \* 5700A Fluke Meter Calibrator
15. 8340B HP Synthesized Sweeper
16. \* 8510B Vector Network Analyzer
17. \* 8562A HP Spectrum Analyzer
18. \* 8644A HP Signal Generator
19. \* 8902AE04 HF Signal Generator
20. \* 8903B HP Audio Analyzer
21. \* DT-205 Digital Tachometer
22. \* DT-301 Digital Stroboscope
23. \* M1A1 Powder Thermometer
24. \* M20-P100 Thermometer
25. MD400 2K lb Wheel Scale
26. \* MW9070NV Optical Time Domain Reflectometer
27. \* S133 Scale, Weighing
28. \* S253Z Dial Indicator Set

29. \* TETS Third Echelon Test Set

ADMINISTRATIVE INSTRUCTIONS: This task applies to the equipment noted in the most current edition of TM 10510-14/1.

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TASK: 2874.03.05 (CORE) VERIFY ACCURACY OF CALIBRATION FACILITY STANDARD

CONDITION(S): Provided tools, materials, equipment, and references.

STANDARD(S): To authenticate standard, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Receive transfer standards.
3. Adhere to connector care requirements.
4. Perform operational check and repair, as required.
5. Read ICP introduction, description, and equipment requirements.
6. Perform preliminary operations.
7. Perform calibration.
8. Complete standard calibration documentation.
9. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. MCO 4733.1\_, Marine Corps TMDE CAMP
3. MCO P4790.2\_, MIMMS Field Procedures Manual
4. MCWP 6-22, Communications and Information Systems
5. TM 10510-14/1, Electronic Test Equipment Listing
6. UM 4790-5, Users Manual MIMMS

ADMINISTRATIVE INSTRUCTIONS: This task applies to the equipment noted in the most current edition of TI-4733-35/8.

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TASK: 2874.03.06 (CORE) ADJUST CALIBRATION FACILITY STANDARD

CONDITION(S): Provided tools, materials, equipment, and references.

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STANDARD(S): To restore standard to an accurate operational condition, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Adhere to connector care requirements.
3. Ensure proper handling of static sensitive components/printed circuit cards.
4. Read schematic diagrams.
5. Calculate circuit parameters.
6. Perform calibration measurement.
7. Identify out-of-tolerance indication.
8. Perform alignments.
9. Repeat calibration measurement.
10. Evacuate for repair, as required.
11. Complete standard calibration documentation.
12. Complete reverse traceability error audit.
13. Initiate recall of TMDE if error audit indicates suspect calibrations.
14. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. MCO 4733.1\_, Marine Corps TMDE CAMP
4. MCO P4790.2\_, MIMMS Field Procedures Manual
5. TM 10510-14/1, Electronic Test Equipment Listing
6. UM 4790-5, Users Manual MIMMS

ADMINISTRATIVE INSTRUCTIONS: This task applies to the equipment noted in the most current edition of TI-4733-35/8.

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DUTY AREA 04 - MAINTENANCE OPERATIONS

For a complete task list in this duty area for MOS 2874 include all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 4.

TASK: 2874.04.01 (CORE) DEPLOY CALIBRATION MAINTENANCE FACILITY

CONDITION(S): Provided Commander's guidance, tools, materials, equipment, and references.

STANDARD(S): To ensure accurate operational condition, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Site area for shelters, air conditioners, and equipment.
3. Create a layout diagram of calibration facility.
4. Provide for local security.
5. Verify grounding of equipment.
6. Connect power cables.
7. Anchor shelters and air conditioners.
8. Camouflage shelters, air conditioners, and equipment.
9. Apply power.
10. Conduct operational check.
11. Verify enviromental conditions inside shelter.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. MCO 4733.1\_, Marine Corps TMDE CAMP
4. MCO P4790.2\_, MIMMS Field Procedures Manual
5. MCWP 6-22, Communications and Information Systems
6. TM 10510-14/1, Electronic Test Equipment Listing
7. TM 9406-15, Grounding Procedures
8. UM 4790-5, Users Manual MIMMS

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ADMINISTRATIVE INSTRUCTIONS: This task applies to the equipment noted in the most current edition of TM 10510-14/1.

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DUTY AREA 05 - MAINTENANCE TRAINING

For a complete task list in this duty area for MOS 2874 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 5.

MOS 2881, MICROMINIATURE AND AUTOMATIC TEST EQUIPMENT TECHNICIAN

DUTY AREA 01 - MAINTENANCE PLANNING

For a complete task list in this duty area for MOS 2881 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 1.

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DUTY AREA 02 - MAINTENANCE ADMINISTRATION

For a complete task list in this duty area for MOS 2881 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 2.

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ENCLOSURE (6)

DUTY AREA 03 - MAINTENANCE ACTIONS

For a complete task list in this duty area for MOS 2881 include all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 3.

TASK: 2881.03.01 (CORE) PERFORM PREVENTIVE MAINTENANCE ON THE MICROMINIATURE SOLDERING STATION (2M WORKSTATION)

CONDITION(S): Provided a 2M Workstation, tools, and references.

STANDARD(S): To ensure equipment is free of dirt, debris, rust, and corrosion, and is fully operational or discrepancies are noted for repair, per the references.

PERFORMANCE STEPS:

1. Adhere to all safety requirements.
2. Select minimum level of light intensity required at the Microminiature Soldering Station MSS.
3. Select recommended dimensions of a MMSS.
4. Perform tool and equipment inspections and inventories.
5. Identify a subassembly malfunction.
6. Identify damaged or missing tools and equipment.
7. Replace damaged or missing tools and equipment.
8. Submit corrective maintenance, as required.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. MCO P4790.2\_, MIMMS Field Procedures Manual
3. TM 5895-45/1, Standard Miniature/2M Maintenance Practices for Electronic Assembly Repair
4. TM 9999-15/1, ESD Awareness Electro-Static Discharge
5. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* AN/USM-465 Automatic Test Set
2. \* AN/USM-631 Automatic Hybrid Test
3. \* AN/USM-646 Automatic Test Set
4. \* MK-2663/U Electronic Equipment Maintenance Kit

TASK: 2881.03.02 (CORE) PERFORM CORRECTIVE MAINTENANCE ON ELECTRONIC COMPONENTS/CIRCUITS UTILIZING THE 2M WORKSTATION

CONDITION(S): Given an electronic device, tools, TMDE, and references.

STANDARD(S): To ensure that components are soldered within specifications, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Select appropriate soldering tip for required application.
3. Set soldering iron to correct temperature.
4. Clean intended application area.
5. Tin wire, as required.
6. Solder connectors, as required.
7. Repair/Fabricate a cable's, e.g. ribbon/flex cable, as required.
8. Splice a wire cable, as required.
9. Solder components, as required.
10. Clean flux from connection.
11. Visually inspect to verify there are no defects.
12. Update Module, Test, and Repair Tracking Software (MTRS), as required.
13. Perform operational check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. MCO P5090.2\_, Environmental Compliance and Protection Manual
4. MSDS, Material Safety Data Sheets
5. SMT, Soldering Handbook for SMT, Manko, 1986
6. TI 4400-15/5, Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items

7. TM 5895-45/1, Standard Miniature/2M Maintenance Practices for Electronic Assembly Repair

8. TM 9999-15/1, ESD Awareness Electro-Static Discharge

TRAINING MATERIEL:

1. \* AN/USM-465 Automatic Test Set
2. \* AN/USM-631 Automatic Hybrid Test
3. \* AN/USM-646 Automatic Test Set
4. \* MK-2663/U Electronic Equipment Maintenance Kit

DISTANCE LEARNING PRODUCT(S):

1. MCI 2820, Electronics Mathematics for Marines
2. MCI 286, Fundamentals of Digital Logic
3. MCI 287, Introduction to Test Equipment

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TASK: 2881.03.03 (CORE) PERFORM CORRECTIVE MAINTENANCE ON CIRCUIT CARD ASSEMBLIES

CONDITION(S): Provided faulty circuit card assemblies, an assigned maintenance area, tools, TMDE, and references.

STANDARD(S): To return faulty circuit card assemblies to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Connect faulty equipment to automated/standard test equipment.
3. Ensure proper handling of static sensitive components/printed circuit cards.
4. Trace functional block diagrams/schematic diagrams.
5. Isolate faulty component(s).
6. Requisition repair parts, as required.
7. Remove/Replace faulty components, as required.
8. Research authorized Modification and Technical Instructions (MI & TI).
9. Update Module, Test, and Repair Tracking Software (MTRS).
10. Perform Maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

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REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. MCO P4790.2\_, MIMMS Field Procedures Manual
4. MSDS, Material Safety Data Sheets
5. SMT, Soldering Handbook for SMT, Manko, 1986
6. TM 5895-45/1, Standard Miniature/2M Maintenance Practices for Electronic Assembly Repair
7. TM 9999-15/1, ESD Awareness Electro-Static Discharge
8. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* AN/USM-465 Automatic Test Set
2. \* AN/USM-631 Automatic Hybrid Test
3. \* AN/USM-646 Automatic Test Set
4. \* MK-2663/U Electronic Equipment Maintenance Kit

DISTANCE LEARNING PRODUCT(S):

1. MCI 2820, Electronics Mathematics for Marines
2. MCI 286, Fundamentals of Digital Logic
3. MCI 287, Introduction to Test Equipment

ADMINISTRATIVE INSTRUCTIONS: This task will be applied to all future assemblies that are repairable but not previously specified, i.e., modules, printed wiring assemblies (PWA), printed wire board (PWB), etc.

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TASK: 2881.03.04 (CORE) PERFORM CORRECTIVE MAINTENANCE ON COMMUNICATION SECURITY EQUIPMENT

CONDITION(S): Provided designated faulty equipment, assigned maintenance area, tools, TMDE, and references.

STANDARD(S): To return faulty Communication Security equipment to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Adhere to cryptographic security regulations.

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3. Connect faulty equipment to special test equipment.
4. Ensure proper handling of static sensitive components/printed circuit cards.
5. Trace functional block diagrams.
6. Isolate faulty LRU/chassis mounted components, as required.
7. Requisition repair parts, as required.
8. Remove/Replace faulty components, as required.
9. Restore equipment to a fully operational status by substitution of LRU, as required.
10. Evacuate to higher echelon, as required.
11. Research authorized modification both mandatory and optional and Repair Actions.
12. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. CMS-21, COMSEC Material System Policy & Procedures
4. CMS-5\_, COMSEC Material System Policy & Procedures Manual
5. FEDLOG, Federal Logistic Data on Compact Disk
6. MCO P4790.2\_, MIMMS Field Procedures Manual
7. SL 1-2/3, Index of Authorized Publications in Stock
8. TM 9999-15/1, ESD Awareness Electro-Static Discharge
9. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* HGX-82/TSEC Loop Key Generator Common Unit
2. \* HYP-57/TSEC Vehicular Power Adapter
3. \* HYX-57/TSEC Wireline Adapter
4. \* KY-57 Vinson/VHF/FM/UHF
5. \* ST-43 KY-57 Back-to-Back Test Set
6. \* ST-58 Fill/Vinson/KG-84

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7. \* TSEC/KG-13 Electronic Key Generator
8. \* TSEC/KG-27 Electronic Key Generator
9. \* TSEC/KG-30-3 Multi-Purpose Record and Data Key Generator
10. \* TSEC/KG-33-3 Muti-Purpose Record and Data Key Generator
11. \* TSEC/KG-36 Key Generator
12. \* TSEC/KG-40 Half-Duplex Digital Key Generator
13. \* TSEC/KG-84A General Purpose Encryption Equipment
14. \* TSEC/KG-84C General Purpose Encryption Equipment
15. \* TSEC/KG-94/94A/194/194A Trunk Encryption Device
16. \* TSEC/KIR-1C IFF Interrogator
17. \* TSEC/KIT-1A IFF Transponder
18. \* TSEC/KOI-18 General Purpose Tape Reader
19. TSEC/KY-2-2A Secure Voice Module
20. \* TSEC/KY-57 Speech Security Equipment (VINSON)
21. \* TSEC/KY-58 Speech Security Equipment (VINSON)
22. \* TSEC/KY-65 Tactical Spech Security Equipment (PARKHILL)
23. \* TSEC/KY-90 Secure Digital Net Radio Interface Unit (SDNRIU)
24. \* TSEC/KY-99 Advanced Narrowband Digital Voice Terminal (ANDVT/MINTERM)
25. Z-ACD/TSEC Vehicular Power Supply
26. Z-AHP/TSEC Remote Control Unit

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TASK: 2881.03.05 (CORE) PREPARE AUTOMATED TEST EQUIPMENT (ATE) FOR OPERATION

CONDITION(S): Provided ATE, an Application Program Set (APS)/Silver/Gold Disk, and references.

STANDARD(S): To ensure equipment is set-up and operating, per the references.

PERFORMANCE STEPS:

1. Adhere to all safety requirement.
2. Load appropriate programs.
3. Perform all tests according to the program.

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4. Verify equipment operation.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. MCO P4790.2\_, MIMMS Field Procedures Manual
3. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* AN/USM-465 Automatic Test Set
2. \* AN/USM-631 Automatic Hybrid Test
3. \* AN/USM-646 Automatic Test Set

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TASK: 2881.03.06 (CORE) PERFORM CORRECTIVE MAINTENANCE ON THE 2M WORKSTATION

CONDITION(S): Provided a faulty 2M workstation, tools, TMDE, and references.

STANDARD(S): To return a faulty 2M workstation to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Connect faulty equipment to special test equipment.
3. Ensure proper handling of static sensitive components/printed circuit cards.
4. Trace functional block diagrams.
5. Isolate faulty components.
6. Requisition repair parts, as required.
7. Remove/Replace faulty components, as required.
8. Research authorized Modification and Technical Instructions (MI & TI).
9. Perform Maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. MCO P4790.2\_, MIMMS Field Procedures Manual

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3. TI 4400-15/5, Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
4. TM 9999-15/1, ESD Awareness Electro-Static Discharge
5. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* MK-2663/U Electronic Equipment Maintenance Kit

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TASK: 2881.03.07 (CORE) CREATE A SILVER DISK

CONDITION(S): Provided a known good circuit card, parts list, ATE, assigned maintenance area, and references.

STANDARD(S): To develop an electronic signature reference for base line circuit card comparative analysis, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Develop assembly drawing:
  - a. Paint 16 color bitmap.
  - b. Draw the CCA.
  - c. Apply component pictorial symbols to CCA drawing.
  - d. Label components.
3. Develop assembly test instructions:
  - a. Write header information.
  - b. List component reference symbol (RSN).
  - c. Write assembly test instructions.
  - d. Determine test range selection.
4. Enter component signatures:
  - a. Measure component voltage/current (V/I) characteristics.
  - b. Select best signature range.
  - c. Save component V/I characteristics.
5. Develop logistics information:
  - a. Enter assembly part number.

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- b. Enter component data.
  - c. Enter assembly data.
6. Verify developed Silver Disk:
- a. Check drawing.
  - b. Check assembly test instructions.
  - c. Verify completed assembly Silver Disk against a different known good assembly.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. TM 5895-45/1, Standard Miniature/2M Maintenance Practices for Electronic Assembly Repair

TRAINING MATERIEL:

1. \* AN/USM-465 Automatic Test Set
2. \* AN/USM-631 Automatic Hybrid Test
3. \* AN/USM-646 Automatic Test Set

DUTY AREA 04 - MAINTENANCE OPERATIONS

For a complete task list in this duty area for MOS 2881 include all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 4.

TASK: 2881.04.01 (CORE) PROVIDE TECHNICAL ASSISTANCE DURING THE INSTALLATION OF COMMUNICATION SECURITY EQUIPMENT

CONDITION(S): Provided an operational plan, equipment, and references.

STANDARD(S): To verify that Communication Security equipment is installed and functioning correctly, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Adhere to cryptographic security regulations.
3. Verify power source.
4. Verify remote capabilities, as required.
5. Verify equipment operation.
6. Verify equipment operating procedures, when required.
7. Perform Electro-Magnetic Interference (EMI) troubleshooting to include checking for proper grounds, cable connections, etc.
8. Provide guidance to correct any discrepancies noted.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. CMS-21, COMSEC Material System Policy & Procedures
3. CMS-5\_, COMSEC Material System Policy & Procedures Manual
4. TM 9999-15/1, ESD Awareness Electro-Static Discharge

TRAINING MATERIEL:

1. \* AN/CYZ-10 Digital Transfer Device
2. \* HYP-57/TSEC Vehicular Power Adapter
3. \* HYX-57/TSEC Wireline Adapter
4. \* KY-57 Vinson/VHF/FM/UHF
5. ST-43 KY-57 Back-to-Back Test Set
6. ST-58 Fill/Vinson/KG-84

7. \* TSEC/KG-13 Electronic Key Generator
8. TSEC/KG-27 Electronic Key Generator
9. TSEC/KG-30-3 Multi-Purpose Record and Data Key Generator
10. TSEC/KG-33-3 Muti-Purpose Record and Data Key Generator
11. \* TSEC/KG-84A General Purpose Encryption Equipment
12. \* TSEC/KG-84C General Purpose Encryption Equipment
13. \* TSEC/KG-94/94A/194/194A Trunk Encryption Device
14. TSEC/KIR-1A IFF Interrogator
15. TSEC/KIT-1A IFF Transponder
16. \* TSEC/KOI-18 General Purpose Tape Reader
17. TSEC/KY-2-2A Secure Voice Module
18. \* TSEC/KY-57 Speech Security Equipment (VINSON)
19. TSEC/KY-58 Speech Security Equipment (VINSON)
20. \* TSEC/KY-65 Tactical Spech Security Equipment (PARKHILL)
21. \* TSEC/KY-99 Advanced Narrowband Digital Voice Terminal (ANDVT/MINTERM)
22. \* TSEC/KYK-13 Electronic Transfer Device
23. TSEC/KYV-5 ANDVT COMSEC Module (VACTOR)

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DUTY AREA 05 - MAINTENANCE TRAINING

For a complete task list in this duty area for MOS 2881 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 5.

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MOS 2884, GROUND RADAR REPAIRER

DUTY AREA 01 - MAINTENANCE PLANNING

MOS 2884 is an additional MOS only, assigned to qualified Marines with a primary MOS of 2846 or 2862. For a complete task list of MOS 2884 use all tasks for the Marine's primary MOS.

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DUTY AREA 02 - MAINTENANCE ADMINISTRATION

MOS 2884 is an additional MOS only, assigned to qualified Marines with a primary MOS of 2846 or 2862. For a complete task list of MOS 2884 use all tasks for the Marine's primary MOS.

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ENCLOSURE (6)

DUTY AREA 03 - MAINTENANCE ACTIONS

MOS 2884 is an additional MOS only, assigned to qualified Marines with a primary MOS of 2846 or 2862. For a complete task list of MOS 2884 include all tasks for the Marine's primary MOS.

TASK: 2884.03.01 (CORE) PERFORM CORRECTIVE MAINTENANCE ON GROUND RADAR EQUIPMENT

CONDITION(S): Provided designated faulty equipment, assigned maintenance area, tools, Test Measurement and Diagnostic Equipment (TMDE), and references.

STANDARD(S): To return faulty equipment to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Read schematic diagrams.
3. Calculate circuit parameters.
4. Measure basic circuit performance.
5. Ensure proper handling of static sensitive components/printed circuit cards.
6. Perform alignments, as required.
7. Trace signal paths.
8. Trace current/voltage paths.
9. Isolate faulty component.
10. Requisition repair parts, as required.
11. Remove/Replace faulty component(s).
12. Research authorized Modification and Technical Instructions (MI & TI).
13. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. FEDLOG, Federal Logistic Data on Compact Disk
3. MCO P4790.2\_, MIMMS Field Procedures Manual
4. TM 9999-15/1, ESD Awareness Electro-Static Discharge

TRAINING MATERIEL:

1. \* 2000 Semiconductor Device Test Set

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2. \* 2246A Oscilloscope
3. \* 34401A Digital Multimeter
4. \* 77/BN Multimeter
5. \* 8643A Signal Generator
6. \* AN/PPN-19 Radar Transponder Beacon
7. \* AN/PPS-15A(V)2 Radar Set
8. \* TS-4317/GRM Radio Test Set

DISTANCE LEARNING PRODUCT(S):

1. MCI 2820, Electronics Mathematics for Marines
2. MCI 286, Fundamentals of Digital Logic
3. MCI 287, Introduction to Test Equipment

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DUTY AREA 04 - MAINTENANCE OPERATIONS

MOS 2884 is an additional MOS only, assigned to qualified Marines with a primary MOS of 2846 or 2862. For a complete task list of MOS 2884 use all tasks for the Marine's primary MOS.

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DUTY AREA 05 - MAINTENANCE TRAINING

MOS 2884 is an additional MOS only, assigned to qualified Marines with a primary MOS of 2846 or 2862. For a complete task list of MOS 2884 use all tasks for the Marine's primary MOS.

MOS 2887, GROUND ARTILLERY ELECTRONICS TECHNICIAN

DUTY AREA 01 - MAINTENANCE PLANNING

For a complete task list in this duty area for MOS 2887 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 1.

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DUTY AREA 02 - MAINTENANCE ADMINISTRATION

For a complete task list in this duty area for MOS 2887 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 2.

Appendix X to  
ENCLOSURE (6)

DUTY AREA 03 - MAINTENANCE ACTIONS

For a complete task list in this duty area for MOS 2887 include all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 3.

TASK: 2887.03.01 (CORE) PERFORM CORRECTIVE MAINTENANCE ON THE FIREFINDER RADAR (FFR) TO THE LINE REPLACEABLE UNIT (LRU) LEVEL

CONDITION(S): Given appropriate tools, materials, equipment, and references.

STANDARD(S): To restore faulty electronic equipment to an operational condition, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Read schematic diagrams.
3. Calculate circuit parameters.
4. Ensure proper handling of static sensitive components/printed circuit cards.
5. Measure basic circuit performance.
6. Perform alignments, as required.
7. Trace signal paths.
8. Trace current/voltage paths.
9. Isolate faulty component.
10. Requisition repair parts, as required.
11. Remove/Repair faulty components, as required.
12. Research authorized Modification and Technical Instructions (MI & TI).
13. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Maintenance Float Catalog
3. FEDLOG, Federal Logistic Data on Compact Disk
4. MCO P4790.2\_, MIMMS Field Procedures Manual
5. SL 1-2/3, Index of Authorized Publications in Stock
6. SL-4, Repair Parts for End Items

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7. TM 9999-15/1, ESD Awareness Electro-Static Discharge
8. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 2000 Semiconductor Device Test Set
2. \* 2246A Oscilloscope
3. \* 2430A Oscilloscope
4. \* 28 Volt Power Supply
5. \* 6556 Power Supply
6. \* 8643A Signal Generator
7. \* AN/TPQA Firefinder Radar Set

DISTANCE LEARNING PRODUCT(S):

1. MCI 2820, Electronics Mathematics for Marines
2. MCI 286, Fundamentals of Digital Logic
3. MCI 287, Introduction to Test Equipment

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TASK: 2887.03.02 (CORE) PERFORM CORRECTIVE MAINTENANCE ON METEOROLOGICAL MEASURING SYSTEM (MMS) TO THE LRU LEVEL

CONDITION(S): Given appropriate tools, materials, equipment, and references.

STANDARD(S): To restore faulty electronic equipment to an operational condition, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Read schematic diagrams.
3. Calculate circuit parameters.
4. Ensure proper handling of static sensitive components/printed circuit cards.
5. Measure basic circuit performance.
6. Perform alignments, as required.
7. Trace signal paths.
8. Trace current/voltage paths.
9. Isolate faulty component.

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10. Requisition repair parts, as required.
11. Research authorized Modification and Technical Instructions (MI & TI).
12. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. MCO P4790.2\_, MIMMS Field Procedures Manual
4. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 2000 Semiconductor Device Test Set
2. \* 2246A Oscilloscope
3. \* 2430A Oscilloscope
4. \* 28 Volt Power Supply
5. \* 33120A Function Generator
6. \* 34401A Digital Multimeter
7. \* 6556 Power Supply
8. \* 8643A Signal Generator
9. \* AN/TMQ-41MMS

DISTANCE LEARNING PRODUCT(S):

1. MCI 2820, Electronics Mathematics for Marines
2. MCI 286, Fundamentals of Digital Logic
3. MCI 287, Introduction to Test Equipment

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TASK: 2887.03.03 (CORE) PERFORM CORRECTIVE MAINTENANCE ON THE MUZZLE VELOCITY SYSTEM (MVS) TO THE LRU LEVEL

CONDITION(S): Given appropriate tools, materials, equipment, and references.

STANDARD(S): To restore equipment to an operational condition, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Read schematic diagrams.
3. Calculate circuit parameters.
4. Ensure proper handling of static sensitive components/printed circuit cards.
5. Measure basic circuit performance.
6. Perform alignments, as required.
7. Trace signal paths.
8. Trace current/voltage paths.
9. Isolate faulty component.
10. Requisition repair parts, as required.
11. Research authorized Modification and Technical instructions (MI & TI).
12. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. MCO P4790.2\_, MIMMS Field Procedures Manual
4. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 2000 Semiconductor Device Test Set
2. \* 2246A Oscilloscope
3. \* 33120A Function Generator
4. \* 34401A Digital Multimeter
5. \* 54825N Digital O'Scope
6. \* 6556 Power Supply
7. \* 8643A Signal Generator
8. \* M-94 MVS

DISTANCE LEARNING PRODUCT(S):

1. MCI 2820, Electronics Mathematics for Marines
  2. MCI 286, Fundamentals of Digital Logic
  3. MCI 287, Introduction to Test Equipment
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TASK: 2887.03.04 (CORE) PERFORM CORRECTIVE MAINTENANCE ON ARTILLERY ELECTRONIC EQUIPMENT TO THE SECONDARY REPLACEABLE UNIT (SRU) OR CHASSIS MOUNTED COMPONENT LEVEL

CONDITION(S): Given appropriate tools, materials, equipment, and references.

STANDARD(S): To restore faulty electronic equipment to an operational condition, per references.

PERFORMANCE STEPS:

1. Adhere to all safety requirements.
2. Read schematic diagrams.
3. Calculate circuit parameters.
4. Ensure proper handling of static sensitive components/printed circuit cards.
5. Measure circuit performance.
6. Perform alignments, as required.
7. Trace signal paths.
8. Trace current/voltage paths.
9. Isolate faulty component.
10. Requisition repair parts, as required.
11. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. FEDLOG, Federal Logistic Data on Compact Disk
4. MCWP 6-22, Communications and Information Systems
5. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 2000 Semiconductor Device Test Set
2. \* 2246A Oscilloscope
3. \* 2430A Oscilloscope
4. \* 28 Volt Power Supply
5. \* 33120A Function Generator
6. \* 34401A Digital Multimeter
7. \* 8431 Electrical Dummy Load
8. \* 8643A Signal Generator
9. AN/TMQ-41MMS
10. AN/TPQA Firefinder Radar Set
11. \* AN/USM-646 Automatic Test Set
12. AN/USQ-70 Position Azimuth Determining System
13. M-94 MVS
14. OD-144 Gun Directional Unit

DISTANCE LEARNING PRODUCT(S):

1. MCI 2820, Electronics Mathematics for Marines
2. MCI 286, Fundamentals of Digital Logic
3. MCI 287, Introduction to Test Equipment

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TASK: 2887.03.05 (CORE) PERFORM CORRECTIVE MAINTENANCE ON ARTILLERY ELECTRONIC EQUIPMENT SRU TO THE PIECE PART COMPONENT LEVEL

CONDITION(S): Given appropriate tools, materials, equipment, and references.

STANDARD(S): To restore equipment to an operational condition, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Research applicable technical data pertaining to faulty equipment.
3. Read schematic diagrams.
4. Calculate circuit parameters.

5. Ensure proper handling of static sensitive components/printed circuit cards.
6. Measure circuit performance.
7. Perform alignments.
8. Identify faulty component(s).
9. Remove/Replace faulty component(s), as required.
10. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. MCO P4790.2\_, MIMMS Field Procedures Manual
4. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* 2000 Semiconductor Device Test Set
2. \* 2246A Oscilloscope
3. 2430A Oscilloscope
4. \* 28 Volt Power Supply
5. \* 33120A Function Generator
6. \* 34401A Digital Multimeter
7. 54825N Digital O'Scope
8. 6556 Power Supply
9. 77/BN Multimeter
10. \* 8431 Electrical Dummy Load
11. \* 8643A Signal Generator
12. AN/TMQ-41MMS
13. AN/TPQA Firefinder Radar Set
14. \* AN/USM-646 Automatic Test Set
15. AN/USQ-70 Position Azimuth Determining System
16. \* J-4843A/GRM Test Adapter

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17. M-94 MVS
18. OD-144 Gun Directional Unit
19. \* TS-4317/GRM Radio Test Set

DISTANCE LEARNING PRODUCT(S):

1. MCI 2820, Electronics Mathematics for Marines
2. MCI 286, Fundamentals of Digital Logic
3. MCI 287, Introduction to Test Equipment

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TASK: 2887.03.06 (CORE PLUS) PERFORM CORRECTIVE MAINTENANCE ON THE GUN DIRECTION UNIT (GDU) TO THE LRU LEVEL

CONDITION(S): Given appropriate tools, materials, equipment, and references.

STANDARD(S): To restore faulty electronic equipment to an operational condition, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Read schematic diagrams.
3. Calculate circuit parameters.
4. Ensure proper handling of static sensitive components/printed circuit cards.
5. Measure basic circuit performance.
6. Perform alignments, as required.
7. Trace signal paths.
8. Trace current/voltage paths.
9. Isolate faulty component.
10. Requisition repair parts, as required.
11. Remove/Replace faulty component(s).
12. Research authorized Modification and Technical Instructions (MI & TI).
13. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals

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2. Tritac equipment records
3. MCO P4790.2\_, MIMMS Field Procedures Manual
4. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. OD-144 Gun Directional Unit
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TASK: 2887.03.07 (CORE PLUS) PERFORM CORRECTIVE MAINTENANCE ON THE POSITION AZIMUTH DETERMINING SYSTEM (PADS) TO THE LRU LEVEL

CONDITION(S): Given appropriate tools, materials, equipment, and references.

STANDARD(S): To restore faulty electronic equipment to an operational condition, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Read schematic diagrams.
3. Calculate circuit parameters.
4. Ensure proper handling of static sensitive components/printed circuit cards.
5. Measure basic circuit performance.
6. Perform alignments.
7. Trace signal paths.
8. Trace current/voltage paths.
9. Isolate faulty components.
10. Requisition repair parts, as required.
11. Remove/Replace components, as required.
12. Research authorized Modification and Technical Instructions (MI & TI).
13. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. MCO P4790.2\_, MIMMS Field Procedures Manual

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4. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. AN/USQ-70 Position Azimuth Determining System

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TASK: 2887.03.08 (CORE PLUS) PERFORM ADVANCED CORRECTIVE MAINTENANCE ON ARTILLERY ELECTRONIC EQUIPMENT TO THE PIECE PART COMPONENT LEVEL

CONDITION(S): Provided faulty equipment, assigned maintenance area, tools, TMDE, and references.

STANDARD(S): To return faulty equipment to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Ensure proper handling of static sensitive components/printed circuit cards.
3. Research applicable technical data pertaining to faulty equipment.
4. Read schematic diagrams.
5. Calculate circuit parameters.
6. Measure circuit performance.
7. Trace signal paths, e.g., Current/Voltage.
8. Perform alignments, as required.
9. Isolate faulty components.
10. Requisition repair parts, as required.
11. Remove/Replace faulty components, as required.
12. Research authorized Modification and Technical Instructions (MI & TI).
13. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. FEDLOG, Federal Logistic Data on Compact Disk
4. MCO P4790.2\_, MIMMS Field Procedures Manual

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5. SL 1-2/3, Index of Authorized Publications in Stock
6. SL-4, Repair Parts for End Items
7. TM 9999-15/1, ESD Awareness Electro-Static Discharge
8. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. 11582A Attenuator Set
2. 2000 Semiconductor Device Test Set
3. 2246A Oscilloscope
4. 2430A Oscilloscope
5. 28 Volt Power Supply
6. 33120A Function Generator
7. 34401A Digital Multimeter
8. 8643A Signal Generator
9. AN/TMQ-41MMS
10. AN/TPQA Firefinder Radar Set
11. AN/USQ-70 Position Azimuth Determining System
12. M-94 MVS
13. OD-144 Gun Directional Unit

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DUTY AREA 04 - MAINTENANCE OPERATIONS

For a complete task list in this duty area for MOS 2887 include all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 4.

TASK: 2887.04.01 (CORE) PROVIDE TECHNICAL ASSISTANCE DURING THE INSTALLATION OF ARTILLERY ELECTRONIC EQUIPMENT

CONDITION(S): Provided a mission, equipment, and references.

STANDARD(S): To ensure equipment is installed and operating, per the references.

PERFORMANCE STEPS:

1. Verify equipment connection to a grounding system.
2. Verify power source.
3. Verify antenna installation, as required.
4. Verify remote capabilities, as required.
5. Verify COMSEC connection, as required.
6. Verify equipment operation.
7. Verify equipment operating procedures to include COMSEC.
8. Perform Electromagnetic Interference (EMI) troubleshooting.
9. Provide guidance to correct discrepancies noted.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. TM 9406-15, Grounding Procedures
3. TM 9999-15/1, ESD Awareness Electro-Static Discharge

TRAINING MATERIEL:

1. AN/TMQ-41MMS
2. AN/TPQA Firefinder Radar Set
3. AN/USQ-70 Position Azimuth Determining System
4. M-94 MVS
5. OD-144 Gun Directional Unit

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TASK: 2887.04.02 (CORE PLUS) PROVIDE GUIDANCE FOR THE OPERATION OF ARTILLERY ELECTRONIC TEST EQUIPMENT

CONDITION(S): Provided designated TMDE, tools, connectors, and a Unit Under Test (UUT), and references.

STANDARD(S): Verify test equipment is operational, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Connect TMDE to appropriate power source.
3. Perform equipment operational check.
4. Connect TMDE to equipment.
5. Operate controls of TMDE to obtain the correct measurement/display.
6. Interpret/Calculate measurement obtained.
7. Disconnect TMDE from the circuit undergoing test.
8. Secure UUT and TMDE, as required.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals

TRAINING MATERIEL:

1. 2246A Oscilloscope
2. AN/TMQ-41MMS
3. AN/TPQA Firefinder Radar Set
4. \* AN/USM-646 Automatic Test Set
5. J-4843A/GRM Test Adapter
6. M-94 MVS
7. \* MK-2902/TPQ Maintenance Kit
8. TETS Third Echelon Test Set
9. TS-4291/P Radio Test Set
10. TS-4317/GRM Radio Test Set

DISTANCE LEARNING PRODUCT(S):

1. MCI 287, Introduction to Test Equipment

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DUTY AREA 05 - MAINTENANCE TRAINING

For a complete task list in this duty area for MOS 2887 use all of the tasks for the appropriate grade from MOS 2800, Ground Electronics Maintenance OccFld, Duty Area 5.

MOS 2891, ELECTRONICS MAINTENANCE CHIEF

DUTY AREA 01 - MAINTENANCE PLANNING

This MOS supervises all enlisted Marines in the Ground Electronics Maintenance OccFld.

TASK: 2891.01.01 (CORE) ASSIST IN THE PLANNING FOR DEPLOYMENT OF A FIELD MAINTENANCE ACTIVITY

CONDITION(S): Provided a mission, Commander's guidance, warning order, and references.

STANDARD(S): To ensure maintenance personnel and equipment support the mission, per the references.

PERFORMANCE STEPS:

1. Review warning order.
2. Review Commander's guidance.
3. Review supported equipment density list.
4. Identify support requirements.
5. Make recommended changes to class 9 supply block, as required.
6. Make recommended changes to float block, as required.
7. Submit embarkation requirements.
8. Project site requirements.
9. Determine Security/Defense requirements.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: MSgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Operational Order
3. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
4. MCO P4400.150\_, Consumer Level Supply Policy Manual
5. MCO P4790.2\_, MIMMS Field Procedures Manual
6. MCWP 4-24, Commander's Guide to Maintenance
7. MCWP 5-1, Marine Corps Planning Process
8. MCWP 6-22, Communications and Information Systems
9. MPS, Load Plan

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10. UM 4790-5, Users Manual MIMMS
11. UNIT SOP, Unit's Standing Operating Procedures
12. UNIT TO/E, Table of Organization/Equipment

DISTANCE LEARNING PRODUCT(S):

1. MCI 0414, Ground Maintenance Procedures for Supervisors
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TASK: 2891.01.02 (CORE) DRAFT DATA/COMMUNICATIONS-ELECTRONIC MAINTENANCE SOP

CONDITION(S): Provided a mission, TO/E, Commander's guidance, and references.

STANDARD(S): To ensure standardization of the maintenance procedures for the unit, per the references.

PERFORMANCE STEPS:

1. Analyze mission, directives, policy guidance, and references.
2. Staff SOP within unit for review.
3. Submit to Maintenance/Commanding Officer for approval.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: MSgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. Higher Headquarters Directives
3. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
4. MCO P4790.2\_, MIMMS Field Procedures Manual
5. MCWP 4-24, Commander's Guide to Maintenance
6. MCWP 5-1, Marine Corps Planning Process
7. MCWP 6-22, Communications and Information Systems
8. SECNAVINST 5510.36, Department of the Navy Information and Personnel Security Program Regulations
9. UNIT SOP, Unit's Standing Operating Procedures

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DUTY AREA 02 - MAINTENANCE ADMINISTRATION

This MOS supervises all enlisted Marines in the Ground Electronics Maintenance OccFld.

TASK: 2891.02.01 (CORE) MANAGE MAINTENANCE PRODUCTION

CONDITION(S): Provided assigned maintenance area, electronic maintenance unit, a mission, Commander's guidance, and references.

STANDARD(S): To enhance maintenance efficiency and effectiveness, per the references.

PERFORMANCE STEPS:

1. Conduct internal review.
2. Evaluate external analysis.
3. Determine action required.
4. Develop POA&M.
5. Execute plan.
6. Evaluate results.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: MSgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. FSMAO Checklist
3. MCO 3000.11\_, Marine Corps Ground Equipment Resources Reporting
4. MCO 4400.82\_, MIMMS Controlled Item Management Manual
5. MCO 4733.1\_, Marine Corps TMDE CAMP
6. MCO P4105.3\_, ILS Manual
7. MCO P4400.150\_, Consumer Level Supply Policy Manual
8. MCO P4790.2\_, MIMMS Field Procedures Manual
9. MCO P5215.17\_, The USMC Tech Pub System
10. MCO P5215.1\_, Marine Corps Directives System
11. MCWP 4-24, Commander's Guide to Maintenance
12. SECNAVINST 5510.30, Information and Personnel Security Program
13. SECNAVINST 5510.36, Department of the Navy Information and Personnel Security Program Regulations
14. SI 4400-15/5, SI

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15. TI 4400-15/5, Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
16. TM 9999-15/1, ESD Awareness Electro-Static Discharge
17. UM 4790-5, Users Manual MIMMS
18. UNIT TO/E, Table of Organization/Equipment

DISTANCE LEARNING PRODUCT(S):

1. MCI 0414, Ground Maintenance Procedures for Supervisors

DUTY AREA 03 - MAINTENANCE ACTIONS

This MOS supervises all enlisted Marines in the Ground Electronics Maintenance OccFld.

TASK: 2891.03.01 (CORE) SUPERVISE MAINTENANCE ACTIONS

CONDITION(S): Provided maintenance personnel, equipment, and references.

STANDARD(S): To maintain unit communication/electronics equipment readiness, per the references.

PERFORMANCE STEPS:

1. Determine maintenance capabilities.
2. Evaluate available personnel.
3. Evaluate available equipment.
4. Ensure maintenance is performed in compliance with unit E3 program.
5. Analyze workload.
6. Establish maintenance priorities.
7. Assign special projects, as required.
8. Inspect completed maintenance actions.
9. Conduct maintenance readiness inspections.
10. Assign corrective actions, as required.
11. Establish shop organization.
12. Prepare a budget, as required.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: MSgt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. MCO P4790.2\_, MIMMS Field Procedures Manual
4. MCO P5090.2\_, Environmental Compliance and Protection Manual
5. MCWP 4-11, Maintenance Operations
6. MCWP 4-24, Commander's Guide to Maintenance
7. MCWP 5-1, Marine Corps Planning Process
8. MCWP 6-22, Communications and Information Systems

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9. UNIT SOP, Unit's Standing Operating Procedures

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DUTY AREA 04 - MAINTENANCE OPERATIONS

This MOS supervises all enlisted Marines in the Ground Electronics Maintenance OccFld.

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DUTY AREA 05 - MAINTENANCE TRAINING

This MOS supervises all enlisted Marines in the Ground Electronics Maintenance OccFld.

Appendix Y to  
ENCLOSURE (6)

MOS 8641, MICROMINIATURE REPAIRER

DUTY AREA 01 - HANDLING ELECTROSTATIC DEVICES

This is an additional MOS only, assigned to Marines who have completed the Circuit Card Repair Course at MCCES, 29 Palms, CA.

TASK: 8641.01.01 (CORE) PREPARE AUTOMATED TEST EQUIPMENT (ATE) FOR OPERATION

CONDITION(S): Provided ATE, an Application Program Set (APS)/Silver/Gold Disk, and references.

STANDARD(S): To ensure equipment is operating, per the references.

PERFORMANCE STEPS:

1. Adhere to all safety requirement.
2. Load appropriate programs.
3. Perform all tests according to the program.
4. Verify equipment operation.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. MCO P4790.2\_, MIMMS Field Procedures Manual
3. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. AN/USM-465 Automatic Test Set
2. AN/USM-631 Automatic Hybrid Test
3. AN/USM-646 Automatic Test Set
4. AN/USM-657(V2) Third Echelon Test System (TETS)

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TASK: 8641.01.02 (CORE) REMOVE ELECTROSTATIC SENSITIVE COMPONENTS FROM A CIRCUIT CARD ASSEMBLY

CONDITION(S): Provided faulty circuit card assemblies, Microminiature Soldering Station (2M workstation), tools, Test Measurement and Diagnostic Equipment (TMDE), and references.

STANDARD(S): To ensure components are removed without damage, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Ensure proper handling of static sensitive components/printed circuit cards.
3. Verify setup of anti-static workstation.
4. Identify faulty circuit card assembly components.
5. Utilize solder removal methods.
6. Desolder components.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. IPC-610B, Industry Production Control
4. IPC-7711, Industry Production Control 7711
5. IPC-7712, Industry Production Control 7712
6. PC HANDBOOK, Printed Circuit Handbook, COMBS 1988
7. TM 09999-15/1, ESD Awareness
8. TM 09999-15/2, ESD Management
9. TM 5895-45/1, Standard Miniature/2M Maintenance Practices for Electronic Assembly Repair

TRAINING MATERIEL:

1. \* MK-2663/U Electronic Equipment Maintenance Kit

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TASK: 8641.01.03 (CORE) INSTALL ELECTROSTATIC SENSITIVE COMPONENTS ON A CIRCUIT CARD ASSEMBLY

CONDITION(S): Provided faulty circuit card assemblies, tools, TMDE, and references.

STANDARD(S): To return faulty circuit card assemblies to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Ensure proper handling of static sensitive components/printed circuit cards.

3. Verify setup of anti-static workstation.
4. Install components.
5. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. IPC-610B, Industry Production Control
4. IPC-7711, Industry Production Control 7711
5. IPC-7712, Industry Production Control 7712
6. PC HANDBOOK, Printed Circuit Handbook, COMBS 1988
7. TM 09999-15/1, ESD Awareness
8. TM 09999-15/2, ESD Management

TRAINING MATERIEL:

1. \* MK-2663/U Electronic Equipment Maintenance Kit

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DUTY AREA 02 - MAINTAINING MINIATURE CIRCUITRY

This is an additional MOS only, assigned to Marines who have completed the Circuit Card Repair Course at MCCES, 29 Palms, CA.

TASK: 8641.02.01 (CORE) PERFORM PREVENTIVE MAINTENANCE ON THE MICROMINIATURE SOLDERING STATION (2M WORKSTATION)

CONDITION(S): Provided a 2M Workstation, tools, and references.

STANDARD(S): To ensure equipment is free of dirt, debris, rust and corrosion, and is fully operational or discrepancies are noted for repair, per the references.

PERFORMANCE STEPS:

1. Adhere to all safety requirements.
2. Select minimum level of light intensity required at the 2M workstation.
3. Select recommended dimensions of a 2M workstation.
4. Perform equipment inspections/inventories.
5. Identify a subassembly malfunction.
6. Identify damaged or missing tools/equipment.
7. Replace damaged or missing tools/equipment.
8. Submit corrective maintenance, as required.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. MCO P4790.2\_, MIMMS Field Procedures Manual
3. TM 5895-45/1, Standard Miniature/2M Maintenance Practices for Electronic Assembly Repair
4. TM 9999-15/1, ESD Awareness Electro-Static Discharge
5. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* MK-2663/U Electronic Equipment Maintenance Kit

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TASK: 8641.02.02 (CORE) MAINTAIN A 2M WORKSTATION

CONDITION(S): Provided a faulty 2M workstation, tools, TMDE, and references.

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ENCLOSURE (6)

STANDARD(S): To return a faulty 2M workstation to a fully operational status, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Perform equipment inspections/inventories.
3. Identify subassembly malfunction.
4. Identify damaged or missing tools/equipment.
5. Replace damaged or missing tools/equipment.
6. Requisition repair parts as required.
7. Remove/Replace faulty components as required.
8. Research authorized Modification and Technical Instructions.
9. Perform maintenance closeout procedures to include quality assurance check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. MCO P4790.2\_, MIMMS Field Procedures Manual
3. TI 4400-15/5, Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
4. TM 9999-15/1, ESD Awareness Electro-Static Discharge
5. UM 4790-5, Users Manual MIMMS

TRAINING MATERIEL:

1. \* MK-2663/U Electronic Equipment Maintenance Kit

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TASK: 8641.02.03 (CORE) PERFORM CORRECTIVE MAINTENANCE ON ELECTRONIC COMPONENTS/CIRCUITS UTILIZING THE 2M WORKSTATION

CONDITION(S): Given an electronic device, tools, TMDE, and references.

STANDARD(S): To ensure that components are soldered within specifications, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Select appropriate soldering tip for required application.

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3. Ensure quality and reliability in a solder connection.
4. Identify circuit card assembly types.
5. Set soldering iron to correct temperature.
6. Clean intended application area.
7. Remove conformal coating from circuit card assemblies.
8. Tin wire, as required.
9. Solder connectors, as required.
10. Repair/Fabricate a cable, e.g. ribbon/flex cable, as required.
11. Splice a wire cable, as required.
12. Solder components, as required.
13. Apply conformal coating to circuit card assemblies.
14. Clean flux from connection.
15. Visually inspect to verify there are no defects.
16. Update Module, Test, and Repair Tracking Software (MTRS), as required.
17. Perform operational check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. IPC-610B, Industry Production Control
4. IPC-7711, Industry Production Control 7711
5. IPC-7712, Industry Production Control 7712
6. MCO P5090.2\_, Environmental Compliance and Protection Manual
7. MSDS, Material Safety Data Sheets
8. PC HANDBOOK, Printed Circuit Handbook, COMBS 1988
9. SMT, Soldering Handbook for SMT, Manko, 1986
10. TI 4400-15/5, Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items

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11. TM 5895-45/1, Standard Miniature/2M Maintenance Practices for Electronic Assembly Repair

12. TM 9999-15/1, ESD Awareness Electro-Static Discharge

TRAINING MATERIEL:

1. AN/USM-465 Automatic Test Set
2. AN/USM-631 Automatic Hybrid Test
3. AN/USM-646 Automatic Test Set
4. AN/USM-657(V2) Third Echelon Test System (TETS)
5. \* MK-2663/U Electronic Equipment Maintenance Kit

DISTANCE LEARNING PRODUCT(S):

1. MCI 2820, Electronics Mathematics for Marines
2. MCI 286, Fundamentals of Digital Logic
3. MCI 287, Introduction to Test Equipment

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TASK: 8641.02.04 (CORE) CREATE A SILVER DISK

CONDITION(S): Provided a known good circuit card, parts list, ATE, assigned maintenance area, and references.

STANDARD(S): To develop an electronic signature reference for base line circuit card comparative analysis, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Develop assembly drawing:
  - a. Paint 16 color bitmap.
  - b. Draw the CCA.
  - c. Apply component pictorial symbols to CCA drawing.
  - d. Label components.
3. Develop assembly test instructions:
  - a. Write header information.
  - b. List component reference symbol (RSN).
  - c. Write assembly test instructions.

- d. Determine test range selection.
4. Enter component signatures:
  - a. Measure component voltage/current (V/I) characteristics.
  - b. Select best signature range.
  - c. Save component V/I characteristics.
5. Develop logistics information:
  - a. Enter assembly part number.
  - b. Enter component data.
  - c. Enter assembly data.
6. Verify developed Silver Disk:
  - a. Check drawing.
  - b. Check assembly test instructions.
  - c. Verify completed assembly Silver Disk against a different known good assembly.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. TM 5895-45/1, Standard Miniature/2M Maintenance Practices for Electronic Assembly Repair

TRAINING MATERIEL:

1. AN/USM-465 Automatic Test Set
2. AN/USM-631 Automatic Hybrid Test
3. AN/USM-646 Automatic Test Set
4. AN/USM-657(V2) Third Echelon Test System (TETS)
5. MK-2663/U Electronic Equipment Maintenance Kit

DUTY AREA 03 - MAINTAINING MICRO CIRCUITRY

This is an additional MOS only, assigned to Marines who have completed the Circuit Card Repair Course at MCCES, 29 Palms, CA.

TASK: 8641.03.01 (CORE) REPAIR DAMAGED CIRCUIT CARD ASSEMBLY LAMINATES

CONDITION(S): Given an electronic device, tools, Test Measurement and Diagnostic Equipment (TMDE), and references.

STANDARD(S): To ensure that components are soldered within specifications, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Select appropriate soldering tip for required application.
3. Ensure quality and reliability in a solder connection.
4. Identify circuit card assembly types.
5. Set soldering iron to correct temperature.
6. Clean intended application area.
7. Remove conformal coating from circuit card assemblies.
8. Tin wire, as required.
9. Solder connectors, as required.
10. Repair/Fabricate a cable's, e.g. ribbon/flex cable, as required.
11. Splice a wire cable, as required.
12. Solder components, as required.
13. Apply conformal coating to circuit card assemblies.
14. Clean flux from connection.
15. Visually inspect to verify there are no defects.
16. Update Module, Test, and Repair Tracking Software (MTRS), as required.
17. Perform operational check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication

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3. IPC-610B, Industry Production Control
4. IPC-7711, Industry Production Control 7711
5. IPC-7712, Industry Production Control 7712
6. MCO P5090.2\_, Environmental Compliance and Protection Manual
7. MSDS, Material Safety Data Sheets
8. PC HANDBOOK, Printed Circuit Handbook, COMBS 1988
9. SMT, Soldering Handbook for SMT, Manko, 1986
10. TI 4400-15/5, Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
11. TM 5895-45/1, Standard Miniature/2M Maintenance Practices for Electronic Assembly Repair
12. TM 9999-15/1, ESD Awareness Electro-Static Discharge

TRAINING MATERIEL:

1. \* MK-2663/U Electronic Equipment Maintenance Kit

DISTANCE LEARNING PRODUCT(S):

1. MCI 2820, Electronics Mathematics for Marines
2. MCI 286, Fundamentals of Digital Logic
3. MCI 287, Introduction to Test Equipment

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TASK: 8641.03.02 (CORE) REPAIR DAMAGED CIRCUIT CARD ASSEMBLY CONDUCTORS

CONDITION(S): Given an electronic device, tools, TMDE, and references.

STANDARD(S): To ensure that components are soldered within specifications, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Select appropriate soldering tip for required application.
3. Ensure quality and reliability in a solder connection.
4. Identify circuit card assembly types.
5. Set soldering iron to correct temperature.
6. Clean intended application area.

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7. Remove conformal coating from circuit card assemblies.
8. Tin wire, as required.
9. Solder connectors, as required.
10. Repair/Fabricate a cable, e.g. ribbon/flex cable, as required.
11. Splice a wire cable, as required.
12. Solder components, as required.
13. Apply conformal coating to circuit card assemblies.
14. Clean flux from connection.
15. Visually inspect to verify there are no defects.
16. Update Module, Test, and Repair Tracking Software (MTRS), as required.
17. Perform operational check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. IPC-610B, Industry Production Control
4. IPC-7711, Industry Production Control 7711
5. IPC-7712, Industry Production Control 7712
6. MCO P5090.2\_, Environmental Compliance and Protection Manual
7. MSDS, Material Safety Data Sheets
8. PC HANDBOOK, Printed Circuit Handbook, COMBS 1988
9. SMT, Soldering Handbook for SMT, Manko, 1986
10. TI 4400-15/5, Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
11. TM 5895-45/1, Standard Miniature/2M Maintenance Practices for Electronic Assembly Repair
12. TM 9999-15/1, ESD Awareness Electro-Static Discharge

TRAINING MATERIEL:

1. \* MK-2663/U Electronic Equipment Maintenance Kit

DISTANCE LEARNING PRODUCT(S):

1. MCI 2820, Electronics Mathematics for Marines
  2. MCI 286, Fundamentals of Digital Logic
  3. MCI 287, Introduction to Test Equipment
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TASK: 8641.03.03 (CORE) REPLACE MISSING CIRCUIT CARD ASSEMBLY CONDUCTORS

CONDITION(S): Given an electronic device, tools, TMDE, and references.

STANDARD(S): To ensure that components are soldered within specifications, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Select appropriate soldering tip for required application.
3. Ensure quality and reliability in a solder connection.
4. Identify circuit card assembly types.
5. Set soldering iron to correct temperature.
6. Clean intended application area.
7. Remove conformal coating from circuit card assemblies.
8. Tin wire, as required.
9. Solder connectors, as required.
10. Repair/Fabricate a cable, e.g. ribbon/flex cable, as required.
11. Splice a wire cable, as required.
12. Solder components, as required.
13. Apply conformal coating to circuit card assemblies.
14. Clean flux from connection.
15. Visually inspect to verify there are no defects.
16. Update Module, Test, and Repair Tracking Software (MTRS), as required.
17. Perform operational check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

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1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. IPC-610B, Industry Production Control
4. IPC-7711, Industry Production Control 7711
5. IPC-7712, Industry Production Control 7712
6. MCO P5090.2\_, Environmental Compliance and Protection Manual
7. MSDS, Material Safety Data Sheets
8. PC HANDBOOK, Printed Circuit Handbook, COMBS 1988
9. SMT, Soldering Handbook for SMT, Manko, 1986
10. TI 4400-15/5, Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
11. TM 5895-45/1, Standard Miniature/2M Maintenance Practices for Electronic Assembly Repair
12. TM 9999-15/1, ESD Awareness Electro-Static Discharge

TRAINING MATERIEL:

1. \* MK-2663/U Electronic Equipment Maintenance Kit

DISTANCE LEARNING PRODUCT(S):

1. MCI 2820, Electronics Mathematics for Marines
2. MCI 286, Fundamentals of Digital Logic
3. MCI 287, Introduction to Test Equipment

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TASK: 8641.03.04 (CORE) REPAIR DAMAGED RIBBON CABLES

CONDITION(S): Given an electronic device, tools, TMDE, and references.

STANDARD(S): To ensure that components are soldered within specifications, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Select appropriate soldering tip for required application.
3. Ensure quality and reliability in a solder connection.
4. Identify circuit card assembly types.

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5. Set soldering iron to correct temperature.
6. Clean intended application area.
7. Remove conformal coating from circuit card assemblies.
8. Tin wire, as required.
9. Solder connectors, as required.
10. Repair/Fabricate a cable, e.g. ribbon/flex cable, as required.
11. Splice a wire cable, as required.
12. Solder components, as required.
13. Apply conformal coating to circuit card assemblies.
14. Clean flux from connection.
15. Visually inspect to verify there are no defects.
16. Update Module, Test, and Repair Tracking Software (MTRS), as required.
17. Perform operational check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. IPC-610B, Industry Production Control
4. IPC-7711, Industry Production Control 7711
5. IPC-7712, Industry Production Control 7712
6. MCO P5090.2\_, Environmental Compliance and Protection Manual
7. MSDS, Material Safety Data Sheets
8. PC HANDBOOK, Printed Circuit Handbook, COMBS 1988
9. SMT, Soldering Handbook for SMT, Manko, 1986
10. TI 4400-15/5, Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
11. TM 5895-45/1, Standard Miniature/2M Maintenance Practices for Electronic Assembly Repair
12. TM 9999-15/1, ESD Awareness Electro-Static Discharge

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TRAINING MATERIEL:

1. \* MK-2663/U Electronic Equipment Maintenance Kit

DISTANCE LEARNING PRODUCT(S):

1. MCI 2820, Electronics Mathematics for Marines
2. MCI 286, Fundamentals of Digital Logic
3. MCI 287, Introduction to Test Equipment

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TASK: 8641.03.05 (CORE) REPAIR DAMAGED FLEXIBLE FLAT CONDUCTORS

CONDITION(S): Given an electronic device, tools, TMDE, and references.

STANDARD(S): To ensure that components are soldered within specifications, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Select appropriate soldering tip for required application.
3. Ensure quality and reliability in a solder connection.
4. Identify circuit card assembly types.
5. Set soldering iron to correct temperature.
6. Clean intended application area.
7. Remove conformal coating from circuit card assemblies.
8. Tin wire, as required.
9. Solder connectors, as required.
10. Repair/Fabricate a cable, e.g. ribbon/flex cable, as required.
11. Splice a wire cable, as required.
12. Solder components, as required.
13. Apply conformal coating to circuit card assemblies.
14. Clean flux from connection.
15. Visually inspect to verify there are no defects.
16. Update Module, Test, and Repair Tracking Software (MTRS), as required.
17. Perform operational check.

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REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. IPC-610B, Industry Production Control
4. IPC-7711, Industry Production Control 7711
5. IPC-7712, Industry Production Control 7712
6. MCO P5090.2\_, Environmental Compliance and Protection Manual
7. MSDS, Material Safety Data Sheets
8. PC HANDBOOK, Printed Circuit Handbook, COMBS 1988
9. SMT, Soldering Handbook for SMT, Manko, 1986
10. TI 4400-15/5, Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
11. TM 5895-45/1, Standard Miniature/2M Maintenance Practices for Electronic Assembly Repair
12. TM 9999-15/1, ESD Awareness Electro-Static Discharge

TRAINING MATERIEL:

1. \* MK-2663/U Electronic Equipment Maintenance Kit

DISTANCE LEARNING PRODUCT(S):

1. MCI 2820, Electronics Mathematics for Marines
2. MCI 286, Fundamentals of Digital Logic
3. MCI 287, Introduction to Test Equipment

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TASK: 8641.03.06 (CORE) REPLACE DAMAGED CONDUCTORS IN A FLEXIBLE FLAT CONDUCTOR

CONDITION(S): Given an electronic device, tools, TMDE, and references.

STANDARD(S): To ensure that components are soldered within specifications, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Select appropriate soldering tip for required application.

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3. Ensure quality and reliability in a solder connection.
4. Identify circuit card assembly types.
5. Set soldering iron to correct temperature.
6. Clean intended application area.
7. Remove conformal coating from circuit card assemblies.
8. Tin wire, as required.
9. Solder connectors, as required.
10. Repair/Fabricate a cable, e.g. ribbon/flex cable, as required.
11. Splice a wire cable, as required.
12. Solder components, as required.
13. Apply conformal coating to circuit card assemblies.
14. Clean flux from connection.
15. Visually inspect to verify there are no defects.
16. Update Module, Test, and Repair Tracking Software (MTRS), as required.
17. Perform operational check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. IPC-610B, Industry Production Control
4. IPC-7711, Industry Production Control 7711
5. IPC-7712, Industry Production Control 7712
6. MCO P5090.2\_, Environmental Compliance and Protection Manual
7. MSDS, Material Safety Data Sheets
8. PC HANDBOOK, Printed Circuit Handbook, COMBS 1988
9. SMT, Soldering Handbook for SMT, Manko, 1986
10. TI 4400-15/5, Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items

11. TM 5895-45/1, Standard Miniature/2M Maintenance Practices for Electronic Assembly Repair
12. TM 9999-15/1, ESD Awareness Electro-Static Discharge

TRAINING MATERIEL:

1. \* MK-2663/U Electronic Equipment Maintenance Kit

DISTANCE LEARNING PRODUCT(S):

1. MCI 2820, Electronics Mathematics for Marines
2. MCI 286, Fundamentals of Digital Logic
3. MCI 287, Introduction to Test Equipment

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TASK: 8641.03.07 (CORE) REMOVE MULTI-LEAD DEVICES FROM CIRCUIT CARD ASSEMBLIES

CONDITION(S): Given an electronic device, tools, TMDE, and references.

STANDARD(S): To ensure that components are soldered within specifications, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Select appropriate soldering tip for required application.
3. Ensure quality and reliability in a solder connection.
4. Identify circuit card assembly types.
5. Set soldering iron to correct temperature.
6. Clean intended application area.
7. Remove conformal coating from circuit card assemblies.
8. Tin wire, as required.
9. Solder connectors, as required.
10. Repair/Fabricate a cable, e.g. ribbon/flex cable, as required.
11. Splice a wire cable, as required.
12. Solder components, as required.
13. Apply conformal coating to circuit card assemblies.
14. Clean flux from connection.
15. Visually inspect to verify there are no defects.

16. Update Module, Test, and Repair Tracking Software (MTRS), as required.
17. Perform operational check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. IPC-610B, Industry Production Control
4. IPC-7711, Industry Production Control 7711
5. IPC-7712, Industry Production Control 7712
6. MCO P5090.2\_, Environmental Compliance and Protection Manual
7. MSDS, Material Safety Data Sheets
8. PC HANDBOOK, Printed Circuit Handbook, COMBS 1988
9. SMT, Soldering Handbook for SMT, Manko, 1986
10. TI 4400-15/5, Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
11. TM 5895-45/1, Standard Miniature/2M Maintenance Practices for Electronic Assembly Repair
12. TM 9999-15/1, ESD Awareness Electro-Static Discharge

TRAINING MATERIEL:

1. \* MK-2663/U Electronic Equipment Maintenance Kit

DISTANCE LEARNING PRODUCT(S):

1. MCI 2820, Electronics Mathematics for Marines
2. MCI 286, Fundamentals of Digital Logic
3. MCI 287, Introduction to Test Equipment

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TASK: 8641.03.08 (CORE) INSTALL MULTI-LEAD DEVICES ON CIRCUIT CARD ASSEMBLIES

CONDITION(S): Given an electronic device, tools, TMDE, and references.

STANDARD(S): To ensure that components are soldered within specifications, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Select appropriate soldering tip for required application.
3. Ensure quality and reliability in a solder connection.
4. Identify circuit card assembly types.
5. Set soldering iron to correct temperature.
6. Clean intended application area.
7. Remove conformal coating from circuit card assemblies.
8. Tin wire, as required.
9. Solder connectors, as required.
10. Repair/Fabricate a cable, e.g. ribbon/flex cable, as required.
11. Splice a wire cable, as required.
12. Solder components, as required.
13. Apply conformal coating to circuit card assemblies.
14. Clean flux from connection.
15. Visually inspect to verify there are no defects.
16. Update Module, Test, and Repair Tracking Software (MTRS), as required.
17. Perform operational check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. IPC-610B, Industry Production Control
4. IPC-7711, Industry Production Control 7711
5. IPC-7712, Industry Production Control 7712
6. MCO P5090.2\_, Environmental Compliance and Protection Manual
7. MSDS, Material Safety Data Sheets
8. PC HANDBOOK, Printed Circuit Handbook, COMBS 1988
9. SMT, Soldering Handbook for SMT, Manko, 1986

10. TI 4400-15/5, Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
11. TM 5895-45/1, Standard Miniature/2M Maintenance Practices for Electronic Assembly Repair
12. TM 9999-15/1, ESD Awareness Electro-Static Discharge

TRAINING MATERIEL:

1. \* MK-2663/U Electronic Equipment Maintenance Kit

DISTANCE LEARNING PRODUCT(S):

1. MCI 2820, Electronics Mathematics for Marines
2. MCI 286, Fundamentals of Digital Logic
3. MCI 287, Introduction to Test Equipment

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TASK: 8641.03.09 (CORE) REMOVE SURFACE MOUNT TECHNOLOGY DEVICES

CONDITION(S): Given an electronic device, tools, TMDE, and references.

STANDARD(S): To ensure that components are soldered within specifications, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Select appropriate soldering tip for required application.
3. Ensure quality and reliability in a solder connection.
4. Identify circuit card assembly types.
5. Set soldering iron to correct temperature.
6. Clean intended application area.
7. Remove conformal coating from circuit card assemblies.
8. Tin wire, as required.
9. Solder connectors, as required.
10. Repair/Fabricate a cable, e.g. ribbon/flex cable, as required.
11. Splice a wire cable, as required.
12. Solder components, as required.
13. Apply conformal coating to circuit card assemblies.

MCO 1510.44C  
10 JAN 01

14. Clean flux from connection.
15. Visually inspect to verify there are no defects.
16. Update Module, Test, and Repair Tracking Software (MTRS), as required.
17. Perform operational check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. IPC-610B, Industry Production Control
4. IPC-7711, Industry Production Control 7711
5. IPC-7712, Industry Production Control 7712
6. MCO P5090.2\_, Environmental Compliance and Protection Manual
7. MSDS, Material Safety Data Sheets
8. PC HANDBOOK, Printed Circuit Handbook, COMBS 1988
9. SMT, Soldering Handbook for SMT, Manko, 1986
10. TI 4400-15/5, Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
11. TM 5895-45/1, Standard Miniature/2M Maintenance Practices for Electronic Assembly Repair
12. TM 9999-15/1, ESD Awareness Electro-Static Discharge

TRAINING MATERIEL:

1. \* MK-2663/U Electronic Equipment Maintenance Kit

DISTANCE LEARNING PRODUCT(S):

1. MCI 2820, Electronics Mathematics for Marines
2. MCI 286, Fundamentals of Digital Logic
3. MCI 287, Introduction to Test Equipment

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TASK: 8641.03.10 (CORE) INSTALL SURFACE MOUNT TECHNOLOGY DEVICES

CONDITION(S): Given an electronic device, tools, TMDE, and references.

Appendix Z to  
ENCLOSURE (6)

STANDARD(S): To ensure that components are soldered within specifications, per the references.

PERFORMANCE STEPS:

1. Adhere to safety requirements.
2. Select appropriate soldering tip for required application.
3. Ensure quality and reliability in a solder connection.
4. Identify circuit card assembly types.
5. Set soldering iron to correct temperature.
6. Clean intended application area.
7. Remove conformal coating from circuit card assemblies.
8. Tin wire, as required.
9. Solder connectors, as required.
10. Repair/Fabricate a cable, e.g. ribbon/flex cable, as required.
11. Splice a wire cable, as required.
12. Solder components, as required.
13. Apply conformal coating to circuit card assemblies.
14. Clean flux from connection.
15. Visually inspect to verify there are no defects.
16. Update Module, Test, and Repair Tracking Software (MTRS), as required.
17. Perform operational check.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals
2. 29 CFR1910.1200, Title 29 Code of Federal Regulations, Hazard Communication
3. IPC-610B, Industry Production Control
4. IPC-7711, Industry Production Control 7711
5. IPC-7712, Industry Production Control 7712
6. MCO P5090.2\_, Environmental Compliance and Protection Manual
7. MSDS, Material Safety Data Sheets

MCO 1510.44C  
10 JAN 01

8. PC HANDBOOK, Printed Circuit Handbook, COMBS 1988
9. SMT, Soldering Handbook for SMT, Manko, 1986
10. TI 4400-15/5, Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
11. TM 5895-45/1, Standard Miniature/2M Maintenance Practices for Electronic Assembly Repair
12. TM 9999-15/1, ESD Awareness Electro-Static Discharge

TRAINING MATERIEL:

1. \* MK-2663/U Electronic Equipment Maintenance Kit

DISTANCE LEARNING PRODUCT(S):

1. MCI 2820, Electronics Mathematics for Marines
2. MCI 286, Fundamentals of Digital Logic
3. MCI 287, Introduction to Test Equipment

Appendix Z to  
ENCLOSURE (6)

SUMMARY/INDEX OF INDIVIDUAL TRAINING STANDARDS BY SPECIFIC CATEGORY (MOJT, DL, PST)

1. This enclosure summarizes the Individual Training Standards (ITS) according to three categories:

Appendix A: ITSs Trained via Managed On-The-Job Training (MOJT)

Appendix B: ITSs Supported by Distance Learning (DL) Products

Appendix C: ITSs Supported by Performance Support Tools (PST)

2. If no information is applicable to a category, the appendix will include a statement to that effect.

3. Format. The columns in each appendix are as follows:

a. SEQ. Sequence Number. This number dictates the order in which tasks for a given duty area are displayed.

b. TASK. ITS Designator. This is the permanent designator assigned to the task when it is created.

c. TITLE. ITS Task Title.

d. CORE. An "X" appears in this column when the task is designated as a "core" task required to "make" a Marine or qualify that Marine for the appropriate MOS. The absence of an "X" indicates that this is an advanced ("core plus") task that is mission, grade, or billet specific.

e. FLC. Functional Learning Center. An "X" appears in this column when the FLC is designated as the initial training setting. The absence of an "X" indicates that the initial training is accomplished through Managed On-The-Job Training (MOJT).

f. DL. Distance Learning (DL) Product. An "X" in this column indicates that at least one DL product is associated with this task. Consult enclosure (6) for details.

g. PST. Performance Support Tool (PST). An "X" in this column indicates that at least one PST is associated with this task. Consult enclosure (6) for details.

h. SUS. Sustainment Training Period. An entry in this column represents the number of months between evaluation or retraining by the unit to maintain the proficiency required by the standard, provided the task supports the unit's METL.

i. REQ BY. Required By. An entry in this column depicts the lowest grade required to demonstrate proficiency in this task.

j. PAGE. Page Number. This column lists the number of the page in enclosure (6) that contains detailed information concerning this task.

INDIVIDUAL TRAINING STANDARDS TRAINED VIA MANAGED ON-THE-JOB TRAINING

This appendix includes a summary listing of all ITS tasks planned for initial Managed On-The-Job Training (MOJT). They are grouped by MOS and Duty Area.

<u>SEQ TASK</u>	<u>TITLE</u>	<u>CORE</u>	<u>FLC</u>	<u>DL</u>	<u>PST</u>	<u>SUS</u>	<u>REQ</u>	<u>BY</u>	<u>PAGE</u>
<u>MOS 2800, BASIC DATA/COMMUNICATIONS MAINTENANCE MARINE</u>									
<u>DUTY AREA 01 - MAINTENANCE PLANNING</u>									
1)	2800.01.01	RECOMMEND TO/E CHANGES				12	SSgt		6-A-1
2)	2800.01.02	DRAFT UNIT'S MAINTENANCE POLICY LETTERS				12	SSgt		6-A-1
3)	2800.01.03	PLAN DEPLOYMENT/INSTALLATION OF A FIELD MAINTENANCE FACILITY			X	12	SSgt		6-A-2
<u>DUTY AREA 02 - MAINTENANCE ADMINISTRATION</u>									
4)	2800.02.04	ANALYZE MAINTENANCE INFORMATION SYSTEM (MIS) DATA			X	12	Cpl		6-A-6
5)	2800.02.05	ADMINISTER PRE-EXPENDED BIN CONTROL PROGRAM				12	LCpl		6-A-7
6)	2800.02.06	ADMINISTER CALIBRATION CONTROL PROGRAM				12	LCpl		6-A-8
7)	2800.02.07	ADMINISTER MODIFICATION CONTROL PROGRAM				12	LCpl		6-A-9
8)	2800.02.08	ADMINISTER TOOL CONTROL PROGRAM				12	LCpl		6-A-9
9)	2800.02.09	ADMINISTER PUBLICATION CONTROL PROGRAM			X	12	LCpl		6-A-10
10)	2800.02.10	MAINTAIN EQUIPMENT RECORD JACKET ON ORGANIC MAINTENANCE EQUIPMENT				12	LCpl		6-A-11
11)	2800.02.11	REPORT QUALITY DEFICIENCY				12	LCpl		6-A-12
12)	2800.02.12	ADMINISTER COMMUNICATION-ELECTRONIC MAINTENANCE SHOP PROCEDURES			X	12	Sgt		6-A-13
13)	2800.02.13	MAINTAIN PREVENTIVE MAINTENANCE SCHEDULE				12	LCpl		6-A-14
14)	2800.02.14	ADMINISTER QUALITY CONTROL PROGRAM				12	Sgt		6-A-14
15)	2800.02.15	SUBMIT CHANGE TO TECHNICAL PUBLICATIONS				12	Pvt		6-A-15
16)	2800.02.16	ADMINISTER ELECTROMAGNETIC ENVIRONMENTAL EFFECTS (E3) PROGRAM				12	Cpl		6-A-15
<u>DUTY AREA 03 - MAINTENANCE ACTIONS</u>									
4)	2800.03.04	PERFORM LIMITED TECHNICAL INSPECTION (LTI) ON GROUND COMMUNICATIONS/ELECTRONIC EQUIPMENT				12	Pvt		6-A-19
5)	2800.03.05	DEPLOY A FIELD MAINTENANCE ACTIVITY				12	SSgt		6-A-20
6)	2800.03.06	DETERMINE MAINTENANCE SUPPORT REQUIREMENTS				12	Sgt		6-A-21
7)	2800.03.07	DIRECT MAINTENANCE ACTIONS				12	Sgt		6-A-21
8)	2800.03.08	PREPARE FOR EQUIPMENT EMBARKATION				12	Cpl		6-A-22
<u>DUTY AREA 04 - MAINTENANCE OPERATIONS</u>									
1)	2800.04.01	INSTALL ELECTROMAGNETIC INTERFERENCE (EMI) MAINTENANCE SHELTER FOR FIELD USE				12	LCpl		6-A-24

Appendix A to  
ENCLOSURE (7)









<u>SEQ</u>	<u>TASK</u>	<u>TITLE</u>	<u>CORE</u>	<u>FLC</u>	<u>DL</u>	<u>PST</u>	<u>SUS</u>	<u>REQ</u>	<u>BY</u>	<u>PAGE</u>
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DUTY AREA 04 - MAINTENANCE OPERATIONS

2)	2887.04.02	PROVIDE GUIDANCE FOR THE OPERATION OF ARTILLERY ELECTRONIC TEST EQUIPMENT				X		12	Sgt	6-X-15
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MOS 2891, ELECTRONICS MAINTENANCE CHIEF

There are no MOJT tasks assigned to any duty areas within this MOS.

MOS 8641, MICROMINIATURE REPAIRER

There are no MOJT tasks assigned to any duty areas within this MOS.

INDIVIDUAL TRAINING STANDARDS SUPPORTED BY DISTANCE LEARNING PRODUCTS

This appendix includes a summary listing of all ITS tasks that have at least one currently available or planned distance learning (DL) product associated with them. They are grouped by MOS and Duty Area.

SEQ TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ BY	PAGE
<u>MOS 2800, BASIC DATA/COMMUNICATIONS MAINTENANCE MARINE</u>								
<u>DUTY AREA 01 - MAINTENANCE PLANNING</u>								
3)	2800.01.03 PLAN DEPLOYMENT/INSTALLATION OF A FIELD MAINTENANCE FACILITY				X		12 SSgt	6-A-2
<u>DUTY AREA 02 - MAINTENANCE ADMINISTRATION</u>								
1)	2800.02.01 COMPLETE AN EQUIPMENT REPAIR ORDER (ERO)/ASSET TRACKING LOGISTIC AUTOMATED SUPPLY SYSTEM (ATLASS) WORK ORDER (WO)	X	X	X			12 Pvt	6-A-4
2)	2800.02.02 REQUISITION REQUIRED PARTS	X	X	X			12 Pvt	6-A-4
3)	2800.02.03 MANAGE MAINTENANCE SHOP PROGRAMS	X	X	X			12 Sgt	6-A-5
4)	2800.02.04 ANALYZE MAINTENANCE INFORMATION SYSTEM (MIS) DATA				X		12 Cpl	6-A-6
9)	2800.02.09 ADMINISTER PUBLICATION CONTROL PROGRAM				X		12 LCpl	6-A-10
12)	2800.02.12 ADMINISTER COMMUNICATION-ELECTRONIC MAINTENANCE SHOP PROCEDURES				X		12 Sgt	6-A-13
<u>DUTY AREA 03 - MAINTENANCE ACTIONS</u>								
3)	2800.03.03 TEST GROUND COMMUNICATIONS/ELECTRONIC EQUIPMENT	X	X	X			12 Pvt	6-A-18
<u>MOS 2802, ELECTRONICS MAINTENANCE OFFICER (GROUND)</u>								
<u>DUTY AREA 02 - MAINTENANCE ADMINISTRATION</u>								
1)	2802.02.01 SUPERVISE ELECTRONIC MAINTENANCE SUPPORT PROGRAMS				X		12 Capt	6-B-8
<u>MOS 2805, GROUND ELECTRONICS/COMMUNICATIONS MAINTENANCE OFFICER</u>								
There are no Distance Learning Products attached to any duty areas within this MOS.								
<u>MOS 2810, TELEPHONE SYSTEMS MAINTENANCE OFFICER</u>								
There are no Distance Learning Products attached to any duty areas within this MOS.								
<u>MOS 2822, ELECTRONIC SWITCHING EQUIPMENT TECHNICIAN</u>								





<u>SEQ TASK</u>	<u>TITLE</u>	<u>CORE</u>	<u>FLC</u>	<u>DL</u>	<u>PST</u>	<u>SUS</u>	<u>REQ</u>	<u>BY</u>	<u>PAGE</u>
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DUTY AREA 03 - MAINTENANCE ACTIONS

- |    |            |   |   |   |   |  |    |     |       |
|----|------------|---|---|---|---|--|----|-----|-------|
| 1) | 2871.03.01 | TROUBLESHOOT TEST MEASUREMENT AND DIAGNOSTIC EQUIPMENT/GENERAL PURPOSE TEST EQUIPMENT (TMDE/GPTE) | X | X | X |  | 12 | Pvt | 6-T-3 |
| 2) | 2871.03.02 | REPAIR TMDE/GPTE  | X | X | X |  | 12 | Pvt | 6-T-4 |

MOS 2874, METROLOGY TECHNICIAN

DUTY AREA 03 - MAINTENANCE ACTIONS

- |    |            |   |   |   |   |  |    |     |       |
|----|------------|---|---|---|---|--|----|-----|-------|
| 1) | 2874.03.01 | TROUBLESHOOT TEST MEASUREMENT AND DIAGNOSTIC EQUIPMENT (TMDE) | X | X | X |  | 12 | Sgt | 6-U-5 |
| 2) | 2874.03.02 | REPAIR TMDE   | X | X | X |  | 12 | Sgt | 6-U-7 |

MOS 2881, MICROMINIATURE AND AUTOMATIC TEST EQUIPMENT TECHNICIAN

DUTY AREA 03 - MAINTENANCE ACTIONS

- |    |            |   |   |   |   |  |    |     |       |
|----|------------|---|---|---|---|--|----|-----|-------|
| 2) | 2881.03.02 | PERFORM CORRECTIVE MAINTENANCE ON ELECTRONIC COMPONENTS/CIRCUITS UTILIZING THE 2M WORKSTATION | X | X | X |  | 12 | Pvt | 6-V-4 |
| 3) | 2881.03.03 | PERFORM CORRECTIVE MAINTENANCE ON CIRCUIT CARD ASSEMBLIES                                     | X | X | X |  | 12 | Pvt | 6-V-5 |

MOS 2884, GROUND RADAR REPAIRER

DUTY AREA 03 - MAINTENANCE ACTIONS

- |    |            |  |   |   |   |  |    |     |       |
|----|------------|--|---|---|---|--|----|-----|-------|
| 1) | 2884.03.01 | PERFORM CORRECTIVE MAINTENANCE ON GROUND RADAR EQUIPMENT | X | X | X |  | 12 | Pvt | 6-W-3 |
|----|------------|--|---|---|---|--|----|-----|-------|

MOS 2887, GROUND ARTILLERY ELECTRONICS TECHNICIAN

DUTY AREA 03 - MAINTENANCE ACTIONS

- |    |            |   |   |   |   |  |    |     |       |
|----|------------|---|---|---|---|--|----|-----|-------|
| 1) | 2887.03.01 | PERFORM CORRECTIVE MAINTENANCE ON THE FIREFINDER RADAR (FFR) TO THE LINE REPLACEABLE UNIT (LRU) LEVEL                                       | X | X | X |  | 12 | Pvt | 6-X-3 |
| 2) | 2887.03.02 | PERFORM CORRECTIVE MAINTENANCE ON METEOROLOGICAL MEASURING SYSTEM (MMS) TO THE LRU LEVEL  | X | X | X |  | 12 | Pvt | 6-X-4 |
| 3) | 2887.03.03 | PERFORM CORRECTIVE MAINTENANCE ON THE MUZZLE VELOCITY SYSTEM (MVS) TO THE LRU LEVEL   | X | X | X |  | 12 | Pvt | 6-X-5 |
| 4) | 2887.03.04 | PERFORM CORRECTIVE MAINTENANCE ON ARTILLERY ELECTRONIC EQUIPMENT TO THE SECONDARY REPLACEABLE UNIT (SRU) OR CHASSIS MOUNTED COMPONENT LEVEL | X | X | X |  | 12 | Pvt | 6-X-7 |
| 5) | 2887.03.05 | PERFORM CORRECTIVE MAINTENANCE ON ARTILLERY ELECTRONIC EQUIPMENT SRU TO THE PIECE PART COMPONENT LEVEL                                      | X | X | X |  | 12 | Pvt | 6-X-8 |

Appendix B to  
ENCLOSURE (7)



INDIVIDUAL TRAINING STANDARDS SUPPORTED BY PERFORMANCE SUPPORT TOOLS

There are no performance support tools assigned to any tasks in this order.