

STP 9-94M13-SM-TG

SOLDIER'S MANUAL AND TRAINER'S GUIDE

**MOS 94M
RADAR REPAIRER
SKILL LEVELS 1, 2, AND 3**

FEBRUARY 2009

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SOLDIER'S MANUAL and TRAINER'S GUIDE

MOS 94M Radar Repairer Skill Levels 1, 2, and 3

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PREFACE

This Soldier Training Publication (STP) is intended for Soldiers holding MOS 94M, Skill Levels (SLs) 1, 2, and 3, their supervisors, trainers, and commanders. It contains a MOS Training Plan that provides information needed to plan, conduct, and evaluate unit training, which is one of the most important jobs of military leaders. It includes standardized training objectives in the form of task summaries that can be used to train and evaluate Soldiers on critical tasks that supporting unit missions during wartime.

Soldiers holding MOS 94M should have access to this publication. Trainers and first-line supervisors should actively plan for the Soldier's access, making it available in work areas, unit learning centers, and unit libraries. However, it is not intended for an individual copy to be provided to each MOS holder. The STP is obtainable on line from the Reimer Digital Library (RDL) on the Internet at <http://www.adtdl.army.mil/atdls.htm>.

This publication applies to the Active Army, the Army National Guard (ARNG)/Army National Guard of the United States (ARNGUS), and the United States Army Reserve (USAR) unless otherwise stated.

The proponent of this publication is Headquarters (HQ) Training and Doctrine Command (TRADOC). Submit comments and recommendations on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to: Department of the Army, Training Directorate, Ordnance Training Division, ATTN: ATCL-TDF, 2221 Adams Avenue, Fort Lee, VA 23801-2102.

CHAPTER 1

Introduction

1-1. General. This Soldier Training Publication (STP) identifies individual military occupational specialty (MOS) training requirements for Soldiers holding MOS 94M. Commanders, trainers, and Soldiers should use it to plan, conduct, and evaluate individual training in units. The STP is the primary MOS reference for supporting self-development, evaluating MOS proficiency, and training of 94M Soldiers. Commanders employ two primary methods to evaluate a Soldier's proficiency:

- Commander's evaluation: Commander's evaluations are local tests or assessments of a Soldier's performance of MOS-specific and common tasks critical to the unit mission. They may be conducted year-round.
- Common task test (CTT): CTTs are hands-on tests used to evaluate proficiency on common tasks. Alternate written tests are provided if equipment is not available for hands-on testing.

This publication is the Soldier's primary reference to prepare for a commander's evaluation of MOS-specific tasks. It contains task summaries for all critical tasks specific to the MOS and skill level (SL). Commanders and trainers will use this Soldier's manual/trainer's guide (SM/TG) to plan and conduct training and commander's evaluations. Chapter 2, Trainer's Guide, contains information needed to plan training requirements for this MOS. The trainer's guide—

- Identifies subject areas in which Soldiers must be trained.
- Identifies critical tasks for each subject area.
- Specifies where Soldiers are initially trained on each task.
- Recommends how often each task should be trained to sustain proficiency.
- Recommends a strategy for cross-training Soldiers.
- Recommends a strategy for training Soldiers to perform higher-level tasks.

Use this STP along with STP 21-1-SMCT (Soldier's Manual of Common Tasks, Skill Level 1), STP 21-24-SMCT (Soldier's Manual of Common Tasks, Skill Levels 2-4), Army training and evaluation programs (ARTEPs), FM 25-4 (How to Conduct Training Exercises), FM 25-5 (Training for Mobilization and War), FM 7-0 (Training for Full Spectrum Operations), and FM 7-1 (Battle Focused Training) to establish effective training plans and programs that integrate Soldier, leader, and collective tasks.

1-2. Task Summaries. Task summaries outline wartime performance requirements for each critical task in the STP. They provide the Soldier and the trainer with the information necessary to prepare, conduct, and evaluate critical task training. As a minimum, task summaries include information Soldiers must know and skills they must perform to standard for each task. The following is the task summary format:

- Task number. The task number is a 10-digit number that identifies the task and skill level. Include the task number and title in any correspondence relating to the task.
- Task title. The task title identifies the action to be performed.
- Conditions. The task condition statement describes the field or garrison conditions under which the task will be performed and identifies the equipment, tools, references, job aids, and supporting personnel that the Soldier needs to perform the task in wartime.
- Standards. The task standards describe how well and to what level of proficiency the Soldier must perform the task under wartime conditions. Standards are typically expressed in terms of accuracy, completeness, duration, sequence, speed, and tolerance.
- Performance steps. A performance step provides, in detail, what is required on how to perform the task.

- Performance measures. The performance measure identifies specific actions that the Soldier must accomplish to complete the task successfully. Performance measures appear in a GO/NO-GO rating format for easy evaluation. Some tasks may also include detailed training information in a Training Information Outline and an Evaluation Preparation Section. The Evaluation Preparation Section indicates necessary modifications to task performance in order to train and evaluate a task that cannot be trained to the wartime standard under wartime conditions. It may also include special training and evaluation preparation instructions to accommodate these modifications and any instructions that should be given to the Soldier before evaluation.
- References. This section identifies all references that are cited in the publication. References also provide more detailed explanations of task performance requirements than are given in the task summary. References are listed by type, identification number, title, and date.
- Glossary. The glossary is a comprehensive list of acronyms, abbreviations, and definitions used in the STP.
- Warnings. Warnings alert users to the possibility of immediate personal injury or equipment damage.
- Notes. Notes provide additional supportive explanations or tips relating to task performance.

1-3. Soldier's Responsibilities. Each Soldier is responsible for performing individual tasks identified by the first-line supervisor based on the unit's mission-essential task list (METL). Soldiers must perform tasks to the standards included in the task summary. If Soldiers have questions about tasks or which tasks in this manual they must perform, they are responsible for asking their first-line supervisor for clarification. First-line supervisors know how to perform each task or can direct Soldiers to appropriate training materials (including current field manuals, technical manuals, and Army regulations). Soldiers are responsible for using these materials to maintain performance. They are also responsible for maintaining performance of all common tasks listed in the SMCTs at their current SL and below. Periodically, Soldiers should ask their supervisor or another Soldier to check their performance to ensure that they can perform the tasks.

1-4. NCO Self-Development and the STP. Self-development is a key component of leader development. Leaders follow planned, progressive, sequential self development programs developed by the individual NCO and his or her first-line supervisor to enhance and sustain military competencies. Self-development consists of individual study, research, professional reading, practice, and self assessment. The self-development concept requires NCOs, as Army professionals, to take responsibility for remaining current in all phases of their MOS. The STP is the NCO's primary source for maintaining MOS proficiency. Another important resource for self-development is the Army Correspondence Course Program (ACCP). For enrollment information in this program, visit on line through the Army Institute for Professional Development (AIPD) website at <http://www.atsc.army.mil/accp/aipdnew.asp>.

1-5. Commander's Responsibilities. Commanders must ensure that their unit training plans prepare the unit for war by enabling Soldiers to develop and sustain proficiency in their MOS and SL tasks. Commanders should design unit-training programs to provide individual training for all Soldiers assigned to the unit and to evaluate Soldier proficiency routinely as part of the commander's evaluation program. The unit-training program should also integrate individual training with crew drills and other collective training. The MOS training plan provides information on which to base integration, cross-train, train-up, and sustainment training programs. Commanders should use the MOS training plan when developing unit-training plans.

1-6. Trainer's Responsibilities. Training is the business of all unit leaders. First-line leaders are the principal trainers in the unit because they directly supervise Soldiers and lead crews, squads, sections, and teams.

a. Trainers can use the MOS training plan to determine the critical tasks each Soldier is responsible. They should tell each Soldier which tasks he or she must be able to perform. Trainers should evaluate task performance to determine which tasks each Soldier can or cannot perform to standard. Soldiers who cannot perform a task to standard need further training. This STP helps the trainer do what trainers are paid to do train. Developing effective training is explained in detail in FM 7-0 and FM 7-1.

b. Every task summary in this STP includes performance measures, which trainers may use year-round to determine if Soldiers can perform critical tasks to the specified standards. The performance measures identify what the trainer needs to observe to score a Soldier's performance. A blank space is provided for the trainer to check either the GO or NO-GO column for each performance measure. Some tasks require the trainer to watch the Soldier perform them (evaluate the process). Other tasks call for the trainer to focus on the results of the Soldier's performance (evaluate the product). Comments should not be written on the task summary.

c. Trainers can monitor the progress of their Soldiers by recording task GO/NO-GO results. Trainers may use DA Form 5164-R (Hands-On Evaluation) to record the performance measures a Soldier passed or failed. The form, which may be locally reproduced, applies to all tasks in this STP. Trainers may have DA Form 5164-R overprinted with information unique to their training requirements before reproducing it. See Appendix A of this STP for a sample DA Form 5164-R with instructions.

d. Trainers may use DA Form 5165-R (Field Expedient Squad Book) to record hands-on GO/NO-GO results for a group of Soldiers (for example, a crew, section, or squad) having the same MOS and skill level. This form supports conduct of commander's evaluations, and can be used to record training results gathered in the field during slack time for all MOS's and skill levels. Use of this form is optional. See Appendix B for a sample DA Form 5165-R with instructions. Trainers should work with each Soldier until tasks can be performed to specific task summary standards.

1-7. Training Support. References have been identified for each task to assist in planning and conducting training. A consolidated list of references identified by type, publication number, and title and a comprehensive glossary of acronyms, abbreviations, and definitions are included in this STP.

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CHAPTER 2

Training Guide

2-1. **General.** The MOS training plan identifies the essential components of a unit training plan for individual training. Units have different training needs and requirements based on differences in environment, location, equipment, dispersion, and similar factors. Therefore, the MOS training plan should be used as a guide for conducting unit training and not a rigid standard. The MOS training plan consists of two parts. Each part is designed to assist the commander in preparing a unit training plan which satisfies integration, cross training, training up, and sustainment training requirements for Soldiers in this MOS.

a. Part One of the MOS training plan shows the relationship of an MOS skill level between duty position and critical tasks. These critical tasks are grouped by task commonality into subject areas.

b. Section I list the subject area numbers and titles used throughout the MOS training plan. These subject areas are used to define the training requirements for each duty position within an MOS.

c. Section II identifies the total training requirement for each duty position within an MOS and provides a recommendation for cross training and train-up/merger training.

- **Duty Position Column.** This column lists the duty positions of the MOS, by skill level, which have different training requirements.
- **Subject Area Column.** This column lists, by numerical key (see Section I), the subject areas a Soldier must be proficient in to perform in that duty position.
- **Cross-Train Column.** This column lists the recommended duty position for which Soldiers should be cross-trained.
- **Train-Up/Merger Column.** This column lists the corresponding duty position for the next higher skill level or MOSC the Soldier will merge into on promotion.

d. Part Two lists, by general subject areas, the critical tasks to be trained in an MOS and the type of training required (resident, integration, or sustainment).

- **Subject Area Column.** This column lists the subject area number and title in the same order as Section I, Part One of the MOS training plan.
- **Task Number Column.** This column lists the task numbers for all tasks included in the subject area.
- **Title Column.** This column lists the task title for each task in the subject area.
- **Training Location Column.** This column identifies the training location where the task is first trained to Soldier training publications standards. If the task is first trained to standard in the unit, the word "Unit" will be in this column. If the task is first trained to standard in the training base, it will identify, by brevity code (AIT, BNCOC, and UNIT), the resident course where the task was taught. Figure 2-1 contains a list of training locations and their corresponding brevity codes.

AIT	Advanced Individual Training
BNCOC	Basic Noncommissioned Officer Course
UNIT	Trained in the Unit

Figure 2-1. Training Locations

- **Sustainment Training Frequency Column.** This column indicates the recommended frequency at which the tasks should be trained to ensure Soldiers maintain task proficiency. Figure 2-2 identifies the frequency code used in this column.

QT - Quarterly

Figure 2-2. Sustainment Training Frequency Code

- **Sustainment Training Skill Level Column.** This column lists the skill levels of the MOS for which Soldiers must receive sustainment training to ensure they maintain proficiency to Soldier’s manual standards.

2-2. Subject Area Codes.

Skill Level 1

- Subject Area 1 Intermediate Maintenance AN/TPQ-36
- Subject Area 2 Intermediate Maintenance AN/TPQ-36 (V)8
- Subject Area 3 Intermediate Maintenance AN/TPQ-37
- Subject Area 4 Maintenance on Sentinel AN/MPQ-64
- Subject Area 5 Intermediate Maintenance AN/TMQ-41 (Unit Trained)
- Subject Area 6 Intermediate Maintenance M-93 and M-94 (Unit Trained)

Skill Level 3

- Subject Area 7 Maintenance Operations

2-3. Duty Position Training Requirements.

94M CAREER FIELD DUTY POSITIONS				
SKILL LEVEL	DUTY POSTION	SUBJECT AREAS	CROSS-TRAIN	TRAIN-UP/MERGER
1	Radar Repairer	1 through 6	N/A	94M10/Radar Repairer 94M20/Radar Repairer
2	Radar Repairer	1 through 6	N/A	94M30/Radar Repairer Inspector/Supervisor
3	Radar System Inspector	1 through 7	Avenger System Supervisor	94W40/Section Chief, Missile Maintenance Supervisor

2-4. Critical Tasks List.

**MOS TRAINING PLAN
94M13**

CRITICAL TASKS

Task Number	Title	Training Location	Sust Tng Freq	Sust Tng SL
Skill Level 1				
<i>Subject Area 1. Intermediate Maintenance AN/TPQ-36</i>				
093-94M-1101	Repair the System Power Function of the AN/TPQ-36 Radar Set	AIT	QT	1-3
093-94M-1103	Repair the Trailer Control Function of the AN/TPQ-36 Radar Set	AIT	QT	1-3
093-94M-1105	Repair the Exciter/Clock Function of the AN/TPQ-36 Radar Set	AIT	QT	1-3
093-94M-1107	Repair the Transmitter Function of the AN/TPQ-36 Radar Set	AIT	QT	1-3
093-94M-1109	Repair the Beam Steering Unit of the AN/TPQ-36 Radar Set	AIT	QT	1-3
093-94M-1111	Repair the Antenna Positioning Function of the AN/TPQ-36 Radar Set	AIT	QT	1-3
093-94M-1113	Repair the Receiver Function of the AN/TPQ-36 Radar Set	AIT	QT	1-3
093-94M-1114	Perform Preventive Maintenance Checks and Services (PMCS) on the AN/TPQ-36 Radar	AIT	QT	1-3
<i>Subject Area 2. Intermediate Maintenance AN/TPQ-36 (V)8</i>				
093-94M-1301	Repair the System Power Function of the AN/TPQ-36(V)8 Shelter	AIT	QT	1-3
093-94M-1303	Repair the Communications System Function of the AN/TPQ-36(V)8 Shelter	AIT	QT	1-3
093-94M-1305	Repair the LCU/HCU/Peripheral Function of the AN/TPQ-36(V)8 Shelter	AIT	QT	1-3
093-94M-1307	Repair the Radar Processor Function of the AN/TPQ-36(V)8 Shelter	AIT	QT	1-3
093-94M-1309	Repair the Light Control Panel Function of the AN/TPQ-36(V)8 Shelter	AIT	QT	1-3
093-94M-1311	Repair the Shelter Control Panel Function of the AN/TPQ-36(V)8 Shelter	AIT	QT	1-3
093-94M-1313	Repair the Control Display Terminal (CDT) Function of the AN/TPQ-36(V)8 Shelter	AIT	QT	1-3
093-94M-1314	Perform Preventive Maintenance Checks and Services (PMCS) on the AN/TPQ-36(V)8 Shelter	AIT	QT	1-3

CRITICAL TASKS

Task Number	Title	Training Location	Sust Tng Freq	Sust Tng SL
Skill Level 1				
<i>Subject Area 3. Intermediate Maintenance AN/TPQ-37</i>				
093-94M-1001	Repair the Computer/Peripheral and Digital Upgrade Function of the AN/TPQ-37 Radar Set	AIT	QT	1-3
093-94M-1003	Repair the Weapons Location Unit (WLU)/TACFIRE Interface of the AN/TPQ-37 Radar Set	AIT	QT	1-3
093-94M-1005	Repair the Synchronizer Function of the AN/TPQ-37 Radar Set	AIT	QT	1-3
093-94M-1007	Repair the Radar Buffers of the AN/TPQ-37 Radar Set	AIT	QT	1-3
093-94M-1009	Repair the Video Processor Function of the AN/TPQ-37 Radar Set	AIT	QT	1-3
093-94M-1011	Repair the B-Scope of the AN/TPQ-37 Radar Set	AIT	QT	1-3
093-94M-1201	Repair the System Power Function of the AN/TPQ-37 Radar Set	AIT	QT	1-3
093-94M-1203	Repair the Trailer Control Function of the AN/TPQ-37 Radar Set	AIT	QT	1-3
093-94M-1205	Repair the Exciter/Clock Function of the AN/TPQ-37 Radar Set	AIT	QT	1-3
093-94M-1207	Repair the Transmitter Function of the AN/TPQ-37 Radar Set	AIT	QT	1-3
093-94M-1209	Repair the Beam Steering Unit Function of the AN/TPQ-37 Radar Set	AIT	QT	1-3
093-94M-1211	Repair the Antenna Positioning Function of the AN/TPQ-37 Radar Set	AIT	QT	1-3
093-94M-1213	Repair the Receiver Function of the AN/TPQ-37 Radar Set	AIT	QT	1-3
093-94M-1214	Perform Preventive Maintenance Checks and Services (PMCS) on the AN/TPQ-37 Radar Set	AIT	QT	1-3
<i>Subject Area 4. Maintenance on Sentinel AN/MPQ-64</i>				
093-94M-1401	Repair the Radar Control Terminal (RCT)/Mass Storage Device Function of the AN/MPQ-64 Sentinel	AIT	QT	1-3
093-94M-1403	Repair the Signal/Data Processor Function of the AN/MPQ-64 Sentinel	AIT	QT	1-3
093-94M-1405	Repair the System Power Function of the AN/MPQ-64 Sentinel	AIT	QT	1-3
093-94M-1407	Repair the Exciter/Clock Function of the AN/MPQ-64 Sentinel	AIT	QT	1-3
093-94M-1409	Repair the Transmitter Function of the AN/MPQ-64 Sentinel	AIT	QT	1-3
093-94M-1411	Repair the Beam Steering Unit (BSU)/Antenna Function of the AN/MPQ-64 Sentinel	AIT	QT	1-3
093-94M-1413	Repair the Antenna Positioning Function of the AN/MPQ-64 Sentinel	AIT	QT	1-3

CRITICAL TASKS

Task Number	Title	Training Location	Sust Tng Freq	Sust Tng SL
Skill Level 1				
093-94M-1415	Repair the Receiver Function of the AN/MPQ-64 Sentinel	AIT	QT	1-3
093-94M-1417	Repair the Identification Friend or Foe (IFF) Function of the AN/MPQ-64 Sentinel	AIT	QT	1-3
093-94M-1418	Perform Preventive Maintenance Checks and Services (PMCS) on the AN/MPQ-64 Sentinel	AIT	QT	1-3
Subject Area 5. Intermediate Maintenance AN/TMQ-41 (Unit Trained)				
093-94M-1901	Repair the Power Control Unit of the AN/TMQ-41	AIT	QT	1-3
093-94M-1903	Repair the Power Entry Assembly of the AN/TMQ-41	AIT	QT	1-3
093-94M-1905	Repair the Signal Entry Box of the AN/TMQ-41	AIT	QT	1-3
093-94M-1907	Repair the Signal Data Converter of the AN/TMQ-41	AIT	QT	1-3
093-94M-1909	Repair the Marwin Processor of the AN/TMQ-41	AIT	QT	1-3
Subject Area 6. Intermediate Maintenance M-93 and M-94 (Unit Trained)				
093-94M-1707	Repair the CPDU Assembly of Muzzle Velocity Radar Sets M-93 and M-94	UNIT	QT	1-3
Skill Level 3				
Subject Area 7. Maintenance Operations				
093-SSG-3001	Inspect Section/Shop Safety	BNCOC	QT	3
093-SSG-3002	Manage Section/Shop Security	BNCOC	QT	3
093-SSG-3003	Maintain Section/Shop Calibration Program	BNCOC	QT	3
093-SSG-3004	Submit a Quality Deficiency Report (QDR)	BNCOC	QT	3
093-SSG-3005	Submit Equipment Improvement Recommendation (EIR)	BNCOC	QT	3
093-SSG-3006	Plan Work Flow	BNCOC	QT	3
093-SSG-3007	Direct Performance of Preventive Maintenance	BNCOC	QT	3
093-SSG-3008	Provide Technical Assistance to Repairers	BNCOC	QT	3
093-SSG-3009	Perform Initial Inspections	BNCOC	QT	3
093-SSG-3010	Perform Final Inspections	BNCOC	QT	3
093-SSG-3011	Write a Standing Operating Procedure (SOP)	BNCOC	QT	3
093-SSG-3012	Perform In-Process Inspections	BNCOC	QT	3
093-SSG-3013	Maintain Property Accountability	BNCOC	QT	3
093-SSG-3014	Assess Battlefield Damage	BNCOC	QT	3
093-SSG-3015	Manage Demand Supported Repair Parts Listed on the Prescribed Load List (PLL)	BNCOC	QT	3
093-SSG-3016	Monitor Bench Stock Operations	BNCOC	QT	3
093-SSG-3017	Monitor Shop Stock Operations	BNCOC	QT	3
093-SSG-3019	Inspect Maintenance Support Team Operations	BNCOC	QT	3
093-SSG-3020	Inspect Maintenance Reporting and Management Data	BNCOC	QT	3
093-SSG-3021	Review SAMS Reports	BNCOC	QT	3

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CHAPTER 3**MOS/Skill Level Tasks**

Skill Level 1

Subject Area 1: Intermediate Maintenance AN/TPQ-36

**Repair the System Power Function of the AN/TPQ-36 Radar Set
093-94M-1101**

Conditions: In a contemporary operational environment, given an AN/TPQ-36 Radar Set with a defective System Power function, a multimeter, an oscilloscope, an Organizational/Direct Support tool kit, TM 11-5840-380-10, TM 11-5840-380-10-HR, TM 11-5840-380-23-1, TM 11-5840-380-23-2, TM 11-5840-380-23P, TM 11-5840-354-10-HR, TM 11-5840-354-20, TM 11-5840-354-20P, TM 11-5840-354-30-1, TM 11-5840-354-30-3, TM 11-5840-354-34P, TM 11-5840-378-20&P, DA Pamphlet 750-8, and spare parts.

Standards: Repair the System Power function of the AN/TPQ-36 Radar Set to operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Turn on system power (if no System Power, check the following).
 - a. Are shelter lights on. If yes, check the following. If no, move on to step 2(a).
 - (1) Shelter circuit breakers (CBs) closed.
 - (2) Card direct current (DC) switches on the shelter control panel set to on.
 - b. Is system power off, lamp lit.
 - (1) If no, check Trailer CB's is closed, External Generator running at correct voltage, primary power cable connected to trailer and generator, shelter-to-trailer cables connected, phase sequence correct.
 - (2) If yes, check that the system power is on and switch lamp has been pressed, Trailer CB's is closed, shelter/trailer cables connected, emergency stop switch has been reset.
2. Follow the flow chart in accordance with TM 11-5840-378-20&P if none of the previous steps work.
3. Determine what equipment you need to troubleshoot the fault.
 - a. Toolbox.
 - b. Multimeter.
 - c. O-scope.
4. Determine a good starting point.
5. Identify the fault.
6. Repair the fault.
7. Verify the fault is fixed.
8. Return to operations.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Turned on system power.	—	—
2. Followed the flow chart in accordance with TM 11-5840-378-20&P.	—	—
3. Determined what equipment you need to troubleshoot the fault.	—	—
4. Determined a good starting point.	—	—
5. Identified the fault.	—	—
6. Repaired the fault.	—	—
7. Verified the fault was fixed.	—	—
8. Returned to operations.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

- DA PAM 750-8
- TM 11-5840-354-10-HR
- TM 11-5840-354-20
- TM 11-5840-354-20P
- TM 11-5840-354-30-1
- TM 11-5840-354-30-3
- TM 11-5840-354-34P
- TM 11-5840-378-20&P
- TM 11-5840-380-10
- TM 11-5840-380-10-HR
- TM 11-5840-380-23-1
- TM 11-5840-380-23-2
- TM 11-5840-380-23P

Related

- LO 11-5840-354-20
- TM 11-5840-354-30-2

Repair the Trailer Control Function of the AN/TPQ-36 Radar Set
093-94M-1103

Conditions: In a contemporary operational environment, given an AN/TPQ-36 Radar Set with a defective Trailer Control function, a multimeter, an oscilloscope, an Organizational/Direct Support tool kit, TM 11-5840-380-10, TM 11-5840-380-23-1, TM 11-5840-380-23-2, TM 11-5840-380-23P, TM 11-5840-354-10-HR, TM 11-5840-354-20, TM 11-5840-354-20-1, TM 11-5840-354-20P, TM 11-5840-354-30-1, TM 11-5840-354-30-3, TM 11-5840-354-34P, DA Pamphlet 750-8, and spare parts.

Standards: Repair the Trailer Control function of the AN/TPQ-36 Radar Set to operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Apply power to the AN/TPQ-36 System.
2. Run printouts.
 - a. Shelter fault isolation test (FIT).
 - b. 62 Print Command.
 - c. 63 Print Report.
3. Verify the fault that shows up on your printout.
 - a. System Idle.
 - b. Radar Status Monitor Routine (RSMR).
 - c. Fault Message.
4. Determine the equipment you need.
 - a. O-scope.
 - b. Toolbox.
5. Determine a good starting point in accordance with TM 11-5840-354-20-1 and TM 11-5840-354-30-3.
6. Identify the fault.
7. Repair the fault.
8. Verify the fault is fixed.
9. Return to operations.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Applied power to the AN/TPQ-36 System.	—	—
2. Ran printouts.	—	—
3. Verified the fault that shows up on the test printout.	—	—
4. Determined the equipment you will need.	—	—
5. Determined a good starting point in accordance with TM 11-5840-354-20-1 and TM 11-5840-354-30-3.	—	—
6. Identified the fault	—	—
7. Repaired the fault.	—	—
8. Verified the fault was fixed.	—	—
9. Returned to operations.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

- DA PAM 750-8
- TM 11-5840-354-10-HR
- TM 11-5840-354-20
- TM 11-5840-354-20-1
- TM 11-5840-354-20P
- TM 11-5840-354-30-1
- TM 11-5840-354-30-3
- TM 11-5840-354-34P
- TM 11-5840-380-10
- TM 11-5840-380-23-1
- TM 11-5840-380-23-2
- TM 11-5840-380-23P

Related

- LO 11-5840-354-20
- TM 11-5840-354-30-2

Repair the Exciter/Clock Function of the AN/TPQ-36 Radar Set
093-94M-1105

Conditions: In a contemporary operational environment, given an AN/TPQ-36 Radar Set with a defective Exciter/Clock function, a multimeter, an oscilloscope, a spectrum analyzer, a power meter, an Organizational/Direct Support tool kit, a maintenance aid tool kit, TM 11-5840-354-10-HR, TM 11-5840-354-20, TM 11-5840-354-20P, TM 11-5840-354-30-2, TM 11-5840-354-30-3, TM-5840-354-34P, TM 11-5840-380-10, TM 11-5840-380-23-1, TM 11-5840-380-23-2, TM 11-5840-380-23P, DA Pamphlet 750-8, and spare parts.

Standards: Repair the Exciter/Clock function of the AN/TPQ-36 Radar Set to operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Apply power to the AN/TPQ-36 System.
2. Run the fault isolation test (FIT).
 - a. Shelter.
 - b. Trailer.
3. Verify what subtest has a fault.
4. Determine what equipment you will need to troubleshoot the fault.
 - a. Toolbox.
 - b. Power meter.
 - c. Supplements.
 - d. TM's.
 - (1) TM 11-5840-354-20.
 - (2) TM 11-5840-354-30-3.
 - e. Multimeter.
 - f. O-scope.
5. Determine a good starting point to take measurements.
6. Identify the fault.
7. Repair the fault.
8. Verify the fault is fixed.
9. Return back to operations.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Applied power to the AN/TPQ-36 System.	—	—
2. Ran the FIT.	—	—
3. Verified what subtest had a fault.	—	—
4. Determined what equipment you needed to troubleshoot the fault.	—	—
5. Determined a good starting point to take measurement.	—	—
6. Identified the fault.	—	—
7. Repaired the fault.	—	—
8. Verified the fault was fixed.	—	—
9. Returned back to operations.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

- DA PAM 750-8
- TM 11-5840-354-10-HR
- TM 11-5840-354-20
- TM 11-5840-354-20P
- TM 11-5840-354-30-2
- TM 11-5840-354-30-3
- TM 11-5840-354-34P
- TM 11-5840-380-10
- TM 11-5840-380-23-1
- TM 11-5840-380-23-2
- TM 11-5840-380-23P

Related

- LO 11-5840-354-20
- TM 11-5840-354-30-1

Repair the Transmitter Function of the AN/TPQ-36 Radar Set
093-94M-1107

Conditions: In a contemporary operational environment, given an AN/TPQ-36 Radar Set with a defective Transmitter function, a multimeter, an oscilloscope, a spectrum analyzer, a power meter, an Organizational/Direct Support tool kit, a maintenance aid tool kit, TM 11-5840-354-10-HR, TM 11-5840-354-20, TM 11-5840-354-20P, TM 11-5840-354-30-1, TM 11-5840-354-30-2, TM 11-5840-354-30-3, TM 11-5840-354-34P, TM 11-5840-378-20&P, TM 11-5840-380-10, TM 11-5840-380-23-1, TM 11-5840-380-23-2, TM 11-5840-380-23P, DA Pamphlet 750-8, and spare parts.

Standards: Repair the Transmitter function of the AN/TPQ-36 Radar Set to operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Apply power to AN/TPQ-36 System.
2. Run fault isolation test (FIT) printout.
 - a. Shelter.
 - b. Trailer.
3. Verify what substest has a fault from the printout.
4. Determine if it is a Transmitter fault.
5. Observe the indicators on the Transmitter Power Distribution and Fault Processor Panels.
 - a. AC Power On.
 - b. SYS +28V On.
 - c. Door INTLK Open.
 - d. CKT BRKR Open.
 - e. XMTR Air Flow.
 - f. Power Dist.
 - g. Logic SPLY.
 - h. Fault PROC.
 - i. MOD PWR SPLY.
 - j. REF PWR SPLY.
 - k. INV XFMR PRESS.
 - l. FLTG DECK DC.
 - m. RFA1.
 - n. HIGH VSWR.
 - o. HV SPLY.
 - p. MOD/FLTG DECK.
 - q. RFA2.
 - r. CATH OVERCUR.
6. Follow flow chart in accordance with TM 11-5840-378-20&P if any of those indicators are lit.
7. Determine what equipment you will need to troubleshoot the fault.
 - a. Digital multimeter.
 - b. O-scope.
 - c. TM's.
 - (1) Supplements.
 - (2) TM 11-5840-354-30-1.
 - (3) TM 11-5840-378-20&P.
 - d. Power meter.
 - e. Toolbox.

Performance Steps

8. Determine a good starting point.
9. Identify the fault.
10. Repair the fault.
11. Verify the fault is fixed.
12. Return the radar back to operations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Applied power to AN/TPQ-36 System.	—	—
2. Ran FIT printout.	—	—
3. Verified what subtest had a fault from the printout.	—	—
4. Determined if it was a Transmitter fault.	—	—
5. Observed the indicators on the Transmitter Power Distribution and Fault Processor Panels.	—	—
6. Followed flow chart in accordance with TM 11-5840-378-20&P if any of those indicators are lit.	—	—
7. Determined what equipment you needed to troubleshoot the fault.	—	—
8. Determined a good starting point.	—	—
9. Identified the fault.	—	—
10. Repaired the fault.	—	—
11. Verified the fault was fixed.	—	—
12. Returned the radar back to operations.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

- DA PAM 750-8
- TM 11-5840-354-20
- TM 11-5840-354-20P
- TM 11-5840-354-30-1
- TM 11-5840-354-30-2
- TM 11-5840-354-30-3
- TM 11-5840-354-34P
- TM 11-5840-378-20&P
- TM 11-5840-380-10
- TM 11-5840-380-23-1
- TM 11-5840-380-23-2

Related

- LO 11-5840-354-20
- TM 11-5840-354-10-HR
- TM 11-5840-380-23P

Repair the Beam Steering Unit of the AN/TPQ-36 Radar Set
093-94M-1109

Conditions: In a contemporary operational environment, given an AN/TPQ-36 Radar Set with a defective Beam Steering Unit (BSU)/Antenna, a multimeter, an oscilloscope, an Organizational/Direct Support tool kit, TM 11-5840-354-10, TM 11-5840-354-20, TM 11-5840-354-20-1, TM 11-5840-354-20P, TM 11-5840-354-30-1, TM 11-5840-354-30-2, TM 11-5840-354-30-3, TM 11-5840-354-34P, TM 11-5840-378-10, TM 11-5840-378-20&P, DA Pamphlet 750-8, and spare parts.

Standards: Repair the Beam Steering Unit (BSU)/Antenna of the AN/TPQ-36 Radar Set to operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Apply power to AN/TPQ-36 System.
2. Run fault isolation test (FIT).
 - a. Shelter.
 - b. Trailer.
3. Run 501 test.
4. Observe BSU indicators to isolate the fault.
5. Follow the BSU troubleshooting guide in accordance with TM 11-5840-378-20&P.
6. Determine what test equipment you will need to test the fault.
 - a. Multimeter.
 - b. O-scope.
 - c. TM's.
 - d. Toolbox.
7. Determine a good starting point.
8. Identify the fault.
9. Repair the fault.
10. Verify the fault is fixed.
11. Return back to operations.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Applied power to AN/TPQ-36 System.	—	—
2. Ran FIT.	—	—
3. Ran 501 test.	—	—
4. Observed BSU indicators to isolate the fault.	—	—
5. Followed the BSU troubleshooting guide in accordance with TM 11-5840-378-20&P.	—	—
6. Determined what test equipment you needed to test the fault.	—	—
7. Determined a good starting point.	—	—
8. Identified the fault.	—	—
9. Repaired the fault.	—	—
10. Verified the fault was fixed.	—	—
11. Returned back to operations.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

DA PAM 750-8
 TM 11-5840-354-10
 TM 11-5840-354-20
 TM 11-5840-354-20-1
 TM 11-5840-354-20P
 TM 11-5840-354-30-1
 TM 11-5840-354-30-2
 TM 11-5840-354-30-3
 TM 11-5840-354-34P
 TM 11-5840-378-10
 TM 11-5840-378-20&P

Related

LO 11-5840-354-20
 TM 11-5840-354-10-HR
 TM 11-5840-364-20
 TM 11-5840-364-20P
 TM 11-5840-364-30-1
 TM 11-5840-364-30-3
 TM 11-5840-364-34P

Repair the Antenna Positioning Function of the AN/TPQ-36 Radar Set
093-94M-1111

Conditions: In a contemporary operational environment, given an AN/TPQ-36 Radar Set with a defective Antenna Positioning function, a multimeter, an oscilloscope, an Organizational/Direct Support tool kit, TM 11-5840-354-10, TM 11-5840-354-20, TM 11-5840-354-20-1, TM 11-5840-354-20P, TM 11-5840-354-30-1, TM 11-5840-354-30-2, TM 11-5840-354-30-3, TM 11-5840-354-34P, TM 11-5840-378-10, TM 11-5840-378-20&P, DA Pamphlet 750-8, and spare parts.

Standards: Repair the Antenna Positioning function of the AN/TPQ-36 Radar Set to operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Apply power to the AN/TPQ-36 System.
2. Run fault isolation test (FIT).
 - a. Shelter.
 - b. Trailer.
3. Run 801 test.
4. Confirm the following before troubleshooting.
 - a. The azimuth well cover is correctly installed.
 - b. The manual azimuth brake release handle is pushed in.
5. Rerun the 801 test.
 - a. Print the test out.
 - b. Check what fault branch shows up on the printout.
6. Determine what type of Antenna fault it is.
 - a. Elevation drive.
 - b. Azimuth drive.
 - c. Azimuth encoder.
 - d. Tilt Sensor.
7. Determine the equipment you will need to test the fault.
 - a. Multimeter.
 - b. O-scope.
 - c. TM's.
 - d. Toolbox.
8. Follow the flow chart in accordance with TM 11-5840-378-20&P to fix the fault.
9. Determine a good starting point.
10. Identify the fault.
11. Repair the fault.
12. Verify the fault is fixed.
13. Return back to operations.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Applied power to the AN/TPQ-36 System.	—	—
2. Ran FIT.	—	—
3. Ran 801 test.	—	—
4. Confirmed the following before troubleshooting.	—	—
a. The azimuth well cover is correctly installed.		
b. The manual azimuth brake release handle is pushed in.		
5. Reran the 801 test.	—	—
6. Determined what type of Antenna fault it is.	—	—
7. Determined the equipment you needed to test the fault.	—	—
8. Followed the flow chart in accordance with TM 11-5840-378-20&P to fix the fault.	—	—
9. Determined a good starting point.	—	—
10. Identified the fault.	—	—
11. Repaired the fault.	—	—
12. Verified the fault was fixed.	—	—
13. Returned back to operations.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

- DA PAM 750-8
- TM 11-5840-354-10
- TM 11-5840-354-20
- TM 11-5840-354-20-1
- TM 11-5840-354-20P
- TM 11-5840-354-30-1
- TM 11-5840-354-30-2
- TM 11-5840-354-30-3
- TM 11-5840-354-34P
- TM 11-5840-378-10
- TM 11-5840-378-20&P

Related

- LO 11-5840-354-20
- TM 11-5840-354-10-HR
- TM 11-5840-364-20
- TM 11-5840-364-20P
- TM 11-5840-364-30-1
- TM 11-5840-364-30-3
- TM 11-5840-364-34P

Repair the Receiver Function of the AN/TPQ-36 Radar Set
093-94M-1113

Conditions: In a contemporary operational environment, given an AN/TPQ-36 Radar Set with a defective Receiver function, a multimeter, an oscilloscope, a spectrum analyzer, a power meter, an Organizational/Direct Support tool kit, a maintenance aid tool kit, TM 11-5840-354-10, TM 11-5840-354-20, TM 11-5840-354-20-1, TM 11-5840-354-20P, TM 11-5840-354-30-1, TM 11-5840-354-30-2, TM 11-5840-354-30-3, TM 11-5840-354-34P, TM 11-5840-378-10, TM 11-5840-378-20&P, DA Pamphlet 750-8, and spare parts.

Standards: Repair the Receiver function of the AN/TPQ-36 Radar Set to operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Apply power to the AN/TPQ-36 System.
2. Run the fault isolation test (FIT).
 - a. Shelter.
 - b. Trailer.
3. Verify what subtest has a fault.
4. Determine what equipment you will need to troubleshoot the fault.
 - a. Toolbox.
 - b. Power meter.
 - c. Supplements.
 - d. TM's.
 - e. Multimeter.
 - f. O-scope.
5. Determine a good starting point to take measurements.
6. Identify the fault.
7. Repair the fault.
8. Verify the fault is fixed.
9. Return back to operations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Applied power to the AN/TPQ-36 System.	—	—
2. Ran the FIT.	—	—
3. Verified what subtest had a fault.	—	—
4. Determined what equipment you needed to troubleshoot the fault.	—	—
5. Determined a good starting point to take measurement.	—	—
6. Identified the fault.	—	—
7. Repaired the fault.	—	—
8. Verified the fault was fixed	—	—
9. Returned back to operations.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

DA PAM 750-8
TM 11-5840-354-10
TM 11-5840-354-20
TM 11-5840-354-20-1
TM 11-5840-354-20P
TM 11-5840-354-30-1
TM 11-5840-354-30-2
TM 11-5840-354-30-3
TM 11-5840-354-34P
TM 11-5840-378-10
TM 11-5840-378-20&P

Related

LO 11-5840-354-20
TM 11-5840-354-10-HR
TM 11-5840-364-20
TM 11-5840-364-20P
TM 11-5840-364-30-1
TM 11-5840-364-30-3
TM 11-5840-364-34P

**Perform Preventive Maintenance Checks and Services (PMCS) on the AN/TPQ-36 Radar
093-94M-1114**

Conditions: In a contemporary operational environment, given an AN/TPQ-36 Radar Set with a DA Form 2402 (Maintenance Tag), DA Form 2404 (Equipment Inspection and Maintenance Worksheet) or DA Form 5988-E (Equipment Inspection Maintenance Worksheet), a DA Form 2407 (Maintenance Request), cleaning materials, a multimeter, an oscilloscope, a spectrum analyzer, a power meter, an Organizational/Direct Support tool kit, a maintenance aid tool kit, LO 11-5840-354-20, TM 11-5840-354-10, TM 11-5840-354-10-HR, TM 11-5840-354-20, TM 11-5840-354-20-1, TM 11-5840-354-20P, TM 11-5840-354-30-1, TM 11-5840-354-30-2, TM 11-5840-354-30-3, TM 11-5840-354-34P, TM 11-5840-364-20, TM 11-5840-364-20P, TM 11-5840-364-30-1, TM 11-5840-364-30-3, TM 11-5840-364-34P, TM 11-5840-378-10, TM 11-5840-378-20&P, DA Pamphlet 750-8, and spare parts.

Standards: Perform PMCS on the AN/TPQ-36 Radar Set and observe all safety precautions. Tools and test equipment were used in accordance with PMCS procedures. Maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Perform routine services. (DA PAM 750-8, FM 3-09.12, TM 11-5820-890-10-1, TM 11-5840-378-10, TM 11-5840-380-10, TM 5-6115-585-12)
2. Perform PMCS on shelter.
3. Perform PMCS on generator.
4. Perform PMCS on Antenna Transmitter Group (ATG).
5. Complete DA Form 2404 or DA Form 5988-E and notify supervisor of any deficiencies not corrected.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed routine services.	—	—
2. Performed PMCS on shelter.	—	—
3. Performed PMCS on generator.	—	—
4. Performed PMCS on ATG.	—	—
5. Completed DA Form 2404 or DA Form 5988-E and notified supervisor of any deficiencies not corrected.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

DA FORM 2402
DA FORM 2404
DA FORM 2407
DA FORM 5988-E
DA PAM 750-8
FM 3-09.12
LO 11-5840-354-20
TM 11-5820-890-10-1
TM 11-5840-354-10
TM 11-5840-354-10-HR
TM 11-5840-354-20
TM 11-5840-354-20-1
TM 11-5840-354-20P
TM 11-5840-354-30-1
TM 11-5840-354-30-2
TM 11-5840-354-30-3
TM 11-5840-354-34P
TM 11-5840-364-20
TM 11-5840-364-20P
TM 11-5840-364-30-1
TM 11-5840-364-30-3
TM 11-5840-364-34P
TM 11-5840-378-10
TM 11-5840-378-20&P
TM 5-6115-585-12

Related

TM 11-5840-363-40

Subject Area 2: Intermediate Maintenance AN/TPQ-36 (V)8

**Repair the System Power Function of the AN/TPQ-36(V)8 Shelter
093-94M-1301**

Conditions: In a contemporary operational environment, given an AN/TPQ-36(V)8 Radar Set with a defective System power function, a multimeter, an oscilloscope, an Organizational/Direct Support tool kit, TM 11-5840-380-23-1, TM 11-5840-380-23-2, DA Pamphlet 750-8, and spare parts.

Standards: Repair the System Power function of the AN/TPQ-36(V)8 Radar Set to operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Apply power to the AN/TPQ-36(V)8 Shelter.
2. Refer to the System Power Troubleshooting flow chart in accordance with TM 11-5840-380-23-1.
3. Determine a good starting point.
4. Determine what equipment you might need.
 - a. Toolbox.
 - b. O-scope.
 - c. TM's.
5. Identify the fault.
6. Repair the fault.
7. Verify the fault is fixed.
8. Return to operations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Applied power to the AN/TPQ-36(V)8 Shelter.	___	___
2. Referred to the System Power Troubleshooting flow chart in accordance with TM 11-5840-380-23-1.	___	___
3. Determined a good starting point.	___	___
4. Determined what equipment was needed.	___	___
5. Identified the fault.	___	___
6. Repaired the fault.	___	___
7. Verified the fault was fixed.	___	___
8. Returned to operations.	___	___

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

DA PAM 750-8

TM 11-5840-380-23-1

TM 11-5840-380-23-2

Related

TM 11-5840-354-20P

TM 11-5840-354-30-1

TM 11-5840-354-30-2

TM 11-5840-354-30-3

TM 11-5840-380-10

TM 11-5840-380-23P

**Repair the Communications System Function of the AN/TPQ-36(V)8 Shelter
093-94M-1303**

Conditions: In a contemporary operational environment, given an AN/TPQ-36(V)8 Radar Set with a defective Communication System function, a multimeter, an oscilloscope, an Organizational/Direct Support tool kit, TM 11-5840-380-23-1, TM 11-5840-380-23-2, DA Pamphlet 750-8, and spare parts.

Standards: Repair the Communication function of the AN/TPQ-36(V)8 Radar Set to operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Apply power to the AN/TPQ-36(V)8 Shelter.
2. Check your communications switch.
 - a. Operator Control Station (OCS) No.1 (Single Channel Ground to Air Radio System [SINCGARS] and Enhanced Position Location and Reporting System [EPLRS] operations).
 - b. OCS No.2 (SINCGARS and EPLRS operations).
3. Follow the flow chart on TM 11-5840-380-23-1.
4. Determine a good starting point.
5. Determine what equipment you might need.
 - a. Toolbox.
 - b. O-scope.
 - c. Multimeter.
 - d. TM's.
6. Identify the fault.
7. Repair the fault.
8. Verify the fault is fixed.
9. Return back to operations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Applied power to the AN/TPQ-36(V)8 Shelter.	___	___
2. Checked the communications switch.	___	___
3. Followed the flow chart on TM 11-5840-380-23-1.	___	___
4. Determined a good starting point.	___	___
5. Determined what equipment you needed.	___	___
6. Identified the fault.	___	___
7. Repaired the fault.	___	___
8. Verified the fault was fixed.	___	___
9. Returned back to operations.	___	___

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

DA PAM 750-8
TM 11-5840-380-23-1
TM 11-5840-380-23-2

Related

TM 11-5840-354-20P
TM 11-5840-354-30-1
TM 11-5840-354-30-2
TM 11-5840-354-30-3
TM 11-5840-355-10-HR
TM 11-5840-355-20-2
TM 11-5840-355-20-3
TM 11-5840-355-20P
TM 11-5840-380-10
TM 11-5840-380-23P

**Repair the LCU/HCU/Peripheral Function of the AN/TPQ-36(V)8 Shelter
093-94M-1305**

Conditions: In a contemporary operational environment, given an AN/TPQ-36(V)8 Radar Set with a defective Lightweight Computer Unit (LCU)/Host Computer Unit (HCU)/Peripheral function, a multimeter, an oscilloscope, an Organizational/Direct Support tool kit, TM 11-5840-380-23-1, TM 11-5840-380-23-2, DA Pamphlet 750-8, and spare parts.

Standards: Repair the LCU/HCU/Peripheral function of the AN/TPQ-36(V)8 Radar Set to operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Check alternating current (AC) Power Distribution panel to see if the direct current (DC) power (PWR) Supply circuit breaker is on.
2. Observe DC Power Distribution panel to see if the battery Power 24 VDC circuit breaker is on.
3. Set power switch on the LCU or HCU to ON and observe the normal indicators.
 - a. Check Power indicator on the LCU or HCU to see if is lit.

NOTE: If not lit, replace the LCU or HCU.

- b. Check HDD indicator on the LCU or HCU to see if it is intermittently lights to indicate LCU or HCU is booting from the internal hard drive.

NOTE: If not intermittently lighting, replace the LCU or HCU.

4. Verify LCD brightness and LCD contrast and adjust on the LCU or HCU.
 - a. LCU or HCU display should respond to adjustment of controls.
 - b. If it does not respond, replace the LCU or HCU.
5. Check that the LCU or HCU responds to keyboard inputs after system boot is finished.
 - a. LCU or HCU should respond to keyboard inputs.
 - b. If it does not respond, replace the LCU or HCU.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Checked AC Power Distribution panel to see if the DC PWR Supply circuit breaker was on.	—	—
2. Observed DC Power Distribution panel to see if the battery Power 24 VDC circuit breaker was on.	—	—
3. Set power switch on the LCU or HCU to ON and observed the normal indicators.	—	—
4. Verified LCD brightness and LCD contrast and adjusted on the LCU or HCU.	—	—
5. Checked that the LCU or HCU responded to keyboard inputs after system boot was finished.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

DA PAM 750-8

TM 11-5840-380-23-1

TM 11-5840-380-23-2

Related

TM 11-5840-354-30-1

TM 11-5840-354-30-2

TM 11-5840-354-30-3

TM 11-5840-380-10

TM 11-5840-380-23P

**Repair the Radar Processor Function of the AN/TPQ-36(V)8 Shelter
093-94M-1307**

Conditions: In a contemporary operational environment, given an AN/TPQ-36(V)8 Radar Set with a defective Radar Processor function, a multimeter, an oscilloscope, an Organizational/Direct Support tool kit, TM 11-5840-380-23-1, TM 11-5840-380-23-2, DA Pamphlet 750-8, and spare parts.

Standards: Repair the Radar Processor function of the AN/TPQ-36(V)8 Radar Set to operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Apply power to the AN/TPQ-36(V)8 Shelter.
2. Verify Radar Processor is lit.
3. Follow the flow chart in accordance with TM 11-5840-380-23-1.
4. Determine what equipment you will need to troubleshoot the fault.
 - a. O-scope.
 - b. Multimeter.
 - c. Toolbox.
 - d. TM's.
5. Determine a good starting point.
6. Identify the fault.
7. Repair the fault.
8. Verify the fault is fixed.
9. Return back to operations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Applied power to the AN/TPQ-35(V)8 Shelter.	___	___
2. Verified Radar Processor was lit.	___	___
3. Followed the flow chart in accordance with TM 11-5840-380-23-1.	___	___
4. Determined what equipment was needed to troubleshoot the fault.	___	___
5. Determined a good starting point.	___	___
6. Identified the fault.	___	___
7. Repaired the fault.	___	___
8. Verified the fault was fixed.	___	___
9. Returned back to operations.	___	___

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

DA PAM 750-8

TM 11-5840-380-23-1

TM 11-5840-380-23-2

Related

TM 11-5840-354-20P

TM 11-5840-354-30-1

TM 11-5840-354-30-2

TM 11-5840-354-30-3

TM 11-5840-380-10

TM 11-5840-380-23P

**Repair the Light Control Panel Function of the AN/TPQ-36(V)8 Shelter
093-94M-1309**

Conditions: In a contemporary operational environment, given an AN/TPQ-36(V)8 Radar Set with a defective Light Control Panel function, a multimeter, an oscilloscope, an Organizational/Direct Support tool kit, TM 11-5840-380-23-1, TM 11-5840-380-23-2, DA Pamphlet 750-8, and spare parts.

Standards: Repair the Light Control Panel function of the AN/TPQ-36(V)8 Radar Set to operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Apply power to the AN/TPQ-36(V)8 Shelter.
2. Verify the following lights function normally.
 - a. Map Light.
 - b. Front Light.
 - c. Cold Start.
 - d. Blackout.
 - e. Spotlight and Spotlight Indicator.
3. Verify the Fan status indicator reads ON.
4. Follow the flow chart in accordance with TM 11-5840-380-23-1 to fix the fault.
5. Determine a good starting point.
6. Identify the fault.
7. Repair the fault.
8. Verify the fault is fixed.
9. Return to operations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Applied power to the AN/TPQ-36(V)8 Shelter.	___	___
2. Verified the lights functioned normally.	___	___
3. Verified the Fan status indicator reads ON.	___	___
4. Followed the flow chart in accordance with TM 11-5840-380-23-1 to fix the fault.	___	___
5. Determined a good starting point.	___	___
6. Identified the fault.	___	___
7. Repaired the fault.	___	___
8. Verified the fault was fixed.	___	___
9. Returned to operations.	___	___

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

DA PAM 750-8

TM 11-5840-380-23-1

TM 11-5840-380-23-2

Related

TM 11-5840-354-20P

TM 11-5840-354-30-1

TM 11-5840-354-30-2

TM 11-5840-354-30-3

TM 11-5840-380-10

TM 11-5840-380-23P

Repair the Shelter Control Panel Function of the AN/TPQ-36(V)8 Shelter
093-94M-1311

Conditions: In a contemporary operational environment, given an AN/TPQ-36(V)8 Radar Set with a defective Shelter Control Panel function, a multimeter, an oscilloscope, a Organizational/Direct Support tool kit, TM 11-5840-380-23-1, TM 11-5840-380-23-2, DA Pamphlet 750-8, and spare parts.

Standards: Repair the Shelter Control Panel function of the AN/TPQ-36(V)8 Radar Set to operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Apply Power to the AN/TPQ-36(V)8 Shelter.
2. Check to see if any ATG control switch lamp fails to execute function.
3. Press lamp test.
4. Follow the flow chart in accordance with TM 11-5840-380-23-1.
5. Determine what equipment you will need to fix the fault.
 - a. O-scope.
 - b. Multimeter.
 - c. TM's.
 - d. Toolbox.
6. Determine a good starting point.
7. Identify the fault.
8. Repair the fault.
9. Verify the fault is fixed.
10. Return to operations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Applied Power to the AN/TPQ-36(V)8 Shelter.	—	—
2. Checked to see if any ATG control switch lamp failed to execute function.	—	—
3. Pressed lamp test.	—	—
4. Followed the flow chart in accordance with TM 11-5840-380-23-1.	—	—
5. Determined what equipment you needed to fix the fault.	—	—
6. Determined a good starting point.	—	—
7. Identified the fault.	—	—
8. Repaired the fault.	—	—
9. Verified the fault was fixed.	—	—
10. Returned to operations.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

DA PAM 750-8
TM 11-5840-380-23-1
TM 11-5840-380-23-2

Related

TM 11-5840-354-30-1
TM 11-5840-354-30-2
TM 11-5840-354-30-3
TM 11-5840-380-10
TM 11-5840-380-23P

**Repair the Control Display Terminal (CDT) Function of the AN/TPQ-36(V)8 Shelter
093-94M-1313**

Conditions: In a contemporary operational environment given an AN/TPQ-36(V)8 Radar Set with a defective CDT function, a multimeter, an oscilloscope, a Organizational/Direct Support tool kit, TM 11-5840-380-23-1, TM 11-5840-380-23-2, DA Pamphlet 750-8, and spare parts.

Standards: Repair the CDT function of the AN/TPQ-36(V)8 Radar Set to operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Apply power to the AN/TPQ-36(V)8 Shelter.
2. Ensure that the CDT and LCU or HCU are set up in accordance with TM 11-5840-380-10.
3. Determine what equipments you will need to troubleshoot the problem.
 - a. O-scope.
 - b. Multimeter.
 - c. TM's.
 - d. Toolbox.
4. Follow the Control Display Terminal troubleshooting table in accordance with TM 11-5840-380-23-1 if any operational problems are encountered.
5. Determine a good starting point.
6. Identify the fault.
7. Repair the fault.
8. Verify the fault is fixed.
9. Return to operations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Applied power to the AN/TPQ-36(V)8 Shelter.	___	___
2. Ensured that the CDT and LCU or HCU are set up in accordance with TM 11-5840-380-10.	___	___
3. Determined what equipments you will need to troubleshoot the problem.	___	___
4. Followed the Control Display Terminal troubleshooting table in accordance with TM 11-5840-380-23-1 if any operational problems were encountered.	___	___
5. Determined a good starting point.	___	___
6. Identified the fault.	___	___
7. Repaired the fault.	___	___
8. Verified the fault was fixed.	___	___
9. Returned to operations.	___	___

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

DA PAM 750-8

TM 11-5840-380-23-1

TM 11-5840-380-23-2

Related

TM 11-5840-354-20P

TM 11-5840-354-30-1

TM 11-5840-354-30-2

TM 11-5840-354-30-3

TM 11-5840-380-10

TM 11-5840-380-23P

**Perform Preventive Maintenance Checks and Services (PMCS) on the AN/TPQ-36(V)8 Shelter
093-94M-1314**

Conditions: In a contemporary operational environment, given an AN/TPQ-36(V)8 Radar Set with a DA Form 2404 (Equipment Inspection and Maintenance Worksheet), cleaning materials, a multimeter, an oscilloscope, a spectrum analyzer, a power meter, a Organizational/Direct Support tool kit, a maintenance aid tool kit, TM 11-5840-380-23-1, TM 11-5840-380-23-2, DA Pamphlet 750-8, and spare parts.

Standards: Perform a PMCS of the AN/TPQ-36(V)8 Radar Set and observe all safety precautions. Tools and test equipment were used in accordance with PMCS procedures. Maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Perform routine checks like cleaning, dusting, washing, checking for frayed cables, stowing items not in use, covering unused receptacles, and checking for loose nuts and bolts.
2. Perform PMCS in accordance with PREVENTIVE MAINTENANCE CHECKS AND SERVICES INDEX (TM 11-5840-380-23-1, Section V, Chapter 3).
3. Utilize applicable manuals to assist in PMCS (TM 11-5840-380-10, TM 11-5840-355-23-1, TM 11-5840-30-380-23-2, TM 11-5840-354-30-1, TM 11-5840-354-30-2, and TM 11-5840-354-30-3).
4. Observe all safety warnings and cautions. Prevent damage to sensitive components, and observe the precautions given in the electrostatic discharge procedure.
 - a. Perform routine checks like cleaning, dusting, washing, checking for frayed cables, stowing items not in use, covering unused receptacles, and checking for loose nuts and bolts.
 - b. Perform PMCS in accordance with PREVENTIVE MAINTENANCE CHECKS AND SERVICES INDEX (TM 11-5840-380-23-1, Section V, Chapter 3).
 - c. Utilize applicable manuals to assist in PMCS (TM 11-5840-380-10, TM 11-5840-355-23-1, TM 11-5840-30-380-23-2, TM 11-5840-354-30-1, TM 11-5840-354-30-2, and TM 11-5840-354-30-3).
 - d. Observe all safety warnings and cautions. Prevent damage to sensitive components, and observe the precautions given in the electrostatic discharge procedure.
 - e. Complete the require maintenance forms. All deficiencies, together with corrective actions taken, were record on forms prescribe for maintenance in accordance with DA Pamphlet 738-750.
5. Complete the require maintenance forms. All deficiencies, together with corrective actions taken, were record on forms prescribe for maintenance in accordance with DA Pamphlet 738-750.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Performed routine checks like cleaning, dusting, washing, checking for frayed cables, stowing items not in use, covering unused receptacles, and checking for loose nuts and bolts.	—	—
2. Performed PMCS in accordance with PREVENTIVE MAINTENANCE CHECKS AND SERVICES INDEX (TM 11-5840-380-23-1, Section V, Chapter 3).	—	—
3. Utilized applicable manuals to assist in PMCS (TM 11-5840-380-23-1, TM 11-5840-380-23-2, TM 11-5840-30-355-30-4, TM 11-5840-354-30-1, TM 11-5840-354-30-2, and TM 11-5840-354-30-3).	—	—
4. Observed all safety warnings and cautions. Prevented damage to sensitive components, observed the precautions given in the electrostatic discharge procedure.	—	—
5. Completed the required maintenance forms. All deficiencies, together with corrective actions taken, were recorded on forms prescribed for maintenance in accordance with DA Pamphlet 738-750.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

D 20-1324

DA PAM 750-8

TM 11-5840-380-23-1

TM 11-5840-380-23-2

Related

TM 11-5840-354-20P

TM 11-5840-354-30-1

TM 11-5840-354-30-2

TM 11-5840-354-30-3

TM 11-5840-380-10

TM 11-5840-380-23P

Subject Area 3: Intermediate Maintenance AN/TPQ-37

**Repair the Computer/Peripheral and Digital Upgrade Function of the AN/TPQ-37 Radar Set
093-94M-1001**

Conditions: In a contemporary operational environment, given an AN/TPQ-37 Radar Set with a defective computer/peripheral and digital upgrade, a multimeter, an oscilloscope, an Organizational/Direct Support tool kit, TM 11-5840-355-10, TM 11-5840-355-20-1, DA Pamphlet 750-8, and spare parts.

Standards: Repaired the computer/peripheral and digital upgrade function of the AN/TPQ-37 Radar Set to operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Identify the fault in the system.
2. Verify if it is a computer/peripheral or digital upgrade fault.
3. Verify to see if it is a Computer fault.
 - a. Press and hold Master Clear switch.
 - b. Verify all indicators light on B-Scope and on DPI card.
 - c. Replace any unlit lights on B-Scope and replace DPI card if any of the indicators are unlit.
 - d. Release Master clear switch.
 - e. Set computer switch lamp in proper positions to run computer test.
 - f. Run CPU/IOC test.

NOTE: If test passes, move on to next step. If test fails, look at the DPI card replacement order in accordance with TM 11-5840-378-20-1.

- g. Run Memory test.

NOTE: If Memory test passes, move on to the CPC. If test fails, look at DPI card and look at card replacement order in Memory test in accordance with TM 11-5840-378-20-1.

4. Verify if it is a CPC and Line Printer.

NOTE: CPC and Line Printer are run in conjunction.

5. Verify if it is a Digital Upgrade Fault.

NOTE: Attempt to load program with VCU/Miltope.

6. Verify the fault.
7. Repair the fault.
8. Verify the fault is fixed.
9. Place system back into operations.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Identified the fault in the system.	—	—
2. Verified it is a Computer/Peripheral.	—	—
3. Verified the Computer fault.	—	—
4. Verified the CPC/Line Printer fault.	—	—
5. Verified it is a Digital Upgrade fault.	—	—
6. Verified the fault.	—	—
7. Repaired the fault.	—	—
8. Verified the fault was fixed.	—	—
9. Placed the system back in operations.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

- DA PAM 750-8
- TM 11-5840-355-10
- TM 11-5840-355-20-1

Related

- TM 11-5840-355-10-3
- TM 11-5840-355-10-HR
- TM 11-5840-355-20-2
- TM 11-5840-355-20-3
- TM 11-5840-355-20P
- TM 11-5840-355-30-1
- TM 11-5840-355-30-2
- TM 11-5840-355-30-3
- TM 11-5840-355-30-4
- TM 11-5840-355-34P
- TM 11-5840-363-40
- TM 11-5840-364-20
- TM 11-5840-364-20P
- TM 11-5840-364-30-1
- TM 11-5840-364-30-3
- TM 11-5840-364-34P

Repair the Weapons Location Unit (WLU)/TACFIRE Interface of the AN/TPQ-37 Radar Set
093-94M-1003

Conditions: In a contemporary operational environment, given an AN/TPQ-37 Radar Set with a defective Weapons Location Unit (WLU)/TACFIRE interface, a multimeter, an oscilloscope, an Organizational/Direct Support tool kit, TM 11-5840-355-10, TM 11-5840-355-20-1, DA Pamphlet 750-8, and spare parts.

Standards: Repaired the Weapons Location Unit (WLU)/TACFIRE Interface of the AN/TPQ-37 Radar Set to operational status. All maintenance forms completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Turn power on to the radar.
2. Load Shelter fault isolation test (FIT) and perform WLU test.
3. Observe any faults that occur.
4. Follow the flow chart in accordance with TM 11-5840-355-20-1.
5. Determine and isolate which fault out of nine subtests it is.
 - a. Alarm subtest.
 - b. Reset Test subtest.
 - c. Hexadecimal Display subtest.
 - d. Alphanumeric Display subtest.
 - e. Alphanumeric Entry subtest.
 - f. Indicator Switch subtest.
 - g. Easting Display subtest.
 - h. Drum Northing subtest.
 - i. Track Ball subtest.
6. Connect jumper between TP1 and TP33 on signal processor card 1A2A1A3A51 if none of the subtests are the fault
 - a. WLU Reset should appear in the Function and Data display.
 - b. Use the table in accordance with TM 11-5840-355-20-1.
7. Repair fault.
8. Verify the fault is fixed.
9. Return back to operations.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Turned power on to the radar.	—	—
2. Loaded Shelter FIT and performed WLU test.	—	—
3. Observed any faults that occurred.	—	—
4. Followed the flow chart in accordance with TM 11-5840-355-20-1.	—	—
5. Determined and isolated which fault out of nine subtests it is.	—	—
6. Connected jumper between TP1 and TP33 on signal processor card 1A2A1A3A51 if none of the subtests are the fault.	—	—
7. Repaired the fault.	—	—
8. Verified the fault was fixed.	—	—
9. Returned back to operations.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

- DA PAM 750-8
- TM 11-5840-355-10
- TM 11-5840-355-20-1

Related

- TM 11-5840-355-10-3
- TM 11-5840-355-10-HR
- TM 11-5840-355-20-2
- TM 11-5840-355-20-3
- TM 11-5840-355-20P
- TM 11-5840-355-30-1
- TM 11-5840-355-30-2
- TM 11-5840-355-30-3
- TM 11-5840-355-30-4
- TM 11-5840-355-34P
- TM 11-5840-363-40
- TM 11-5840-364-20
- TM 11-5840-364-20P
- TM 11-5840-364-30-1
- TM 11-5840-364-30-3

**Repair the Synchronizer Function of the AN/TPQ-37 Radar Set
093-94M-1005**

Conditions: In a contemporary operational environment, given an AN/TPQ-37 Radar Set with a defective Synchronizer function, a multimeter, an oscilloscope, an Organizational/Direct Support tool kit, TM 11-5840-355-10, TM 11-5840-355-20-1, and spare parts.

Standards: Repair the Synchronizer function of the AN/TPQ-37 Radar Set to operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Run test data print out.
NOTE: Check the print out to see what type of fault you have (Idle or Signature).
2. Determine what signal is bad.
3. Determine what test equipment you will need to test the fault.
 - a. O-scope.
 - b. Multimeter.
4. Identify the fault.
5. Repair the fault.
6. Verify the fault is fixed.
7. Return the radar back to operations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Ran test data print out to determine fault (Idle or Signature).	—	—
2. Determined what signal is bad.	—	—
3. Determined what test equipment you will need to test the fault.	—	—
4. Identified the fault.	—	—
5. Repaired the fault.	—	—
6. Verified the fault was fixed.	—	—
7. Returned the radar back to operations.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

DA PAM 750-8
TM 11-5840-355-10
TM 11-5840-355-20-1

Related

TM 11-5840-355-10-3
TM 11-5840-355-10-HR
TM 11-5840-355-20-2
TM 11-5840-355-20-3
TM 11-5840-355-20P
TM 11-5840-355-30-1
TM 11-5840-355-30-2
TM 11-5840-355-30-3
TM 11-5840-355-30-4
TM 11-5840-355-34P
TM 11-5840-363-40
TM 11-5840-364-20
TM 11-5840-364-20P
TM 11-5840-364-30-1
TM 11-5840-364-30-3

**Repair the Radar Buffers of the AN/TPQ-37 Radar Set
093-94M-1007**

Conditions: In a contemporary operational environment, given an AN/TPQ-37 Radar Set with a defective Radar Buffer function, a multimeter, an oscilloscope, an Organizational/Direct Support tool kit, TM 11-5840-355-10, TM 11-5840-355-20-1, DA Pamphlet 750-8, and spare parts.

Standards: Repair the Radar Buffer function of the AN/TPQ-37 Radar Set to operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Run test data printout (check the printout to see what type of fault you have).
 - a. Bad word count.
 - b. Bad word wrap.
 - c. Idle.
2. Determine what signal is bad under the Radar Buffer fault.
3. Determine what test equipment you will need to test the fault.
 - a. O-scope.
 - b. Multimeter.
4. Identify the fault.
5. Repair the fault.
6. Verify the fault is fixed.
7. Return the radar back to operations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Ran test data printout.	—	—
2. Determined what signal is bad under the Radar Buffer fault.	—	—
3. Determined what test equipment was needed to test the fault.	—	—
4. Identified the fault.	—	—
5. Repaired the fault.	—	—
6. Verified the fault was fixed.	—	—
7. Returned the radar back to operations.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

DA PAM 750-8
TM 11-5840-355-10
TM 11-5840-355-20-1

Related

TM 11-5840-355-10-3
TM 11-5840-355-10-HR
TM 11-5840-355-20-2
TM 11-5840-355-20-3
TM 11-5840-355-20P
TM 11-5840-355-30-1
TM 11-5840-355-30-2
TM 11-5840-355-30-3
TM 11-5840-355-30-4
TM 11-5840-355-34P
TM 11-5840-363-40
TM 11-5840-364-20
TM 11-5840-364-20P
TM 11-5840-364-30-1
TM 11-5840-364-30-3

**Repair the Video Processor Function of the AN/TPQ-37 Radar Set
093-94M-1009**

Conditions: In a contemporary operational environment, given an AN/TPQ-37 Radar Set with a defective Video Processor function, a multimeter, an oscilloscope, an Organizational/Direct Support tool kit, TM 11-5840-355-10-1, TM 11-5840-355-20-1, DA Pamphlet 750-8, and spare parts.

Standards: Repair the Video Processor function of the AN/TPQ-37 Radar Set to operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Run test data printout.
NOTE: Check the printout to see what type of fault you have.
2. Determine what signal is bad under the Video Processor fault. (Signature or Bite report)
NOTE: Determine a good starting point.
3. Determine what test equipment you will need to test the fault.
 - a. O-scope.
 - b. Multimeter.
4. Identify the fault.
5. Repair the fault.
6. Verify the fault is fixed.
7. Return the radar back to operations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Ran test data printout.	___	___
2. Determined what signal was bad under the Video Processor fault.	___	___
3. Determined what test equipment you will needed.	___	___
4. Identified the fault.	___	___
5. Repaired the fault.	___	___
6. Verified the fault was fixed.	___	___
7. Returned radar back to operations.	___	___

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

DA PAM 750-8
TM 11-5840-355-10
TM 11-5840-355-20-1

Related

TM 11-5840-355-10-3
TM 11-5840-355-10-HR
TM 11-5840-355-20-2
TM 11-5840-355-20-3
TM 11-5840-355-20P
TM 11-5840-355-30-1
TM 11-5840-355-30-2
TM 11-5840-355-30-3
TM 11-5840-355-30-4
TM 11-5840-355-34P
TM 11-5840-363-40
TM 11-5840-364-20
TM 11-5840-364-20P
TM 11-5840-364-30-1
TM 11-5840-364-30-3

**Repair the B-Scope of the AN/TPQ-37 Radar Set
093-94M-1011**

Conditions: In a contemporary operational environment, given an AN/TPQ-37 Radar Set with a defective B-Scope function, a multimeter, an oscilloscope, an Organizational/Direct Support tool kit, TM 11-5840-355-10-1, TM 11-5840-355-20-1, TM 11-5840-364-20, DA Pamphlet 750-8, and spare parts.

Standards: Repair the B-Scope function of the AN/TPQ-37 Radar Set to operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Run Shelter fault isolation test (FIT).
2. Run B-Scope Manual test using FC 72.

NOTE: If one of the following fault symptoms occurs as shown in the TM 11-5840-355-20-1, replace the B-Scope.

3. Follow the B-Scope flow chart in accordance with TM 11-5840-364-20.
4. Determine what subtest has the fault.

NOTE: There are 8 manual subtests, make sure you clear the B-Scope before running the next subtest using subtest 1.

5. Repair the fault.
6. Verify the fault is fixed.
7. Return back to operations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Ran Shelter FIT.	___	___
2. Ran B-Scope Manual test using FC 72.	___	___
3. Followed the B-Scope flow chart in accordance with TM 11-5840-355-20-1.	___	___
4. Determined what subtest has the fault.	___	___
5. Repaired the fault.	___	___
6. Verified the fault was fixed.	___	___
7. Returned back to operations.	___	___

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

DA PAM 750-8
TM 11-5840-355-10
TM 11-5840-355-20-1
TM 11-5840-364-20

Related

TM 11-5840-355-10-3
TM 11-5840-355-10-HR
TM 11-5840-355-20-2
TM 11-5840-355-20-3
TM 11-5840-355-20P
TM 11-5840-355-30-1
TM 11-5840-355-30-2
TM 11-5840-355-30-3
TM 11-5840-355-30-4
TM 11-5840-355-34P
TM 11-5840-363-40
TM 11-5840-364-20P
TM 11-5840-364-30-1
TM 11-5840-364-30-3

Repair the System Power Function of the AN/TPQ-37 Radar Set 093-94M-1201

Conditions: In a contemporary operational environment, given an AN/TPQ-37 Radar Set with a defective System Power function, a multimeter, an oscilloscope, an Organizational/Direct Support tool kit, TM 11-5840-355-10, TM 11-5840-355-20-1, TM 11-5840-355-20-2, TM 11-5840-355-20-3, TM 11-5840-355-20P, TM 11-5840-355-30-1, TM 11-5840-355-30-2, TM 11-5840-355-30-4, TM 11-5840-355-34P, TM 11-5840-364-20, TM 11-5840-364-20P, TM 11-5840-364-30-1, TM 11-5840-364-30-3, TM 11-5840-364-34P, DA Pamphlet 750-8, and spare parts.

Standards: Repair the System Power function of the AN/TPQ-37 Radar Set to operational status. Maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Apply system power to the AN/TPQ-37 System.
2. Observe the System power group of switch lamps on the left side of the WLU.
 - a. Power Supply Bite Card Fault.
 - b. System Power On.
 - c. System Power Off.
 - d. Trailer CB Open.
 - e. Shelter CB Open.
 - f. Trailer PS Off.
 - g. Shelter PS Off.
 - h. Trailer Fault BLO/TEMP.
 - i. Shelter Fault BLO/TEMP.
 - j. Trailer WRN BLO/TEMP.
 - k. Shelter WRN BLO/TEMP.
3. Verify which light is not working correctly then follow the flow chart in accordance with TM 11-5840-355-20-1
4. Determine what equipment you need to troubleshoot the fault.
 - a. Toolbox.
 - b. Multimeter.
 - c. O-scope.
 - d. TM's.
5. Determine a good starting point.
6. Identify the fault.
7. Repair the fault.
8. Verify the fault is fixed.
9. Return to operations.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Applied system power to the AN/TPQ-37 System.	—	—
2. Observed the System power group of switch lamps on the left side of the WLU.	—	—
3. Verified which light was not working correctly then follow the flow chart within TM 11-5840-355-20-1.	—	—
4. Determined what equipment was needed to troubleshoot the fault.	—	—
5. Determined a good starting point.	—	—
6. Identified the fault.	—	—
7. Repaired the fault.	—	—
8. Verified the fault was fixed.	—	—
9. Returned to operations.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

- DA PAM 750-8
- TM 11-5840-355-10
- TM 11-5840-355-20-1
- TM 11-5840-355-20-2
- TM 11-5840-355-20-3
- TM 11-5840-355-20P
- TM 11-5840-355-30-1
- TM 11-5840-355-30-2
- TM 11-5840-355-30-4
- TM 11-5840-355-34P
- TM 11-5840-364-20
- TM 11-5840-364-20P
- TM 11-5840-364-30-1
- TM 11-5840-364-30-3
- TM 11-5840-364-34P

Related

- LO 11-5840-355-20
- TM 11-5840-355-10-3
- TM 11-5840-355-10-HR
- TM 11-5840-355-30-3

Repair the Trailer Control Function of the AN/TPQ-37 Radar Set
093-94M-1203

Conditions: In a contemporary operational environment, given an AN/TPQ-37 Radar Set with a defective Trailer Control function, a multimeter, an oscilloscope, an Organizational/Direct Support tool kit, TM 11-5840-355-10-1, TM 11-5840-355-20-1, TM 11-5840-355-20P, TM 11-5840-355-30-1, TM 11-5840-355-30-2, TM 11-5840-355-30-4, TM 11-5840-355-34P, DA Pamphlet 750-8, and spare parts.

Standards: Repair the Trailer Control function of the AN/TPQ-37 Radar Set to operational status. Maintenance forms were complete according to DA Pamphlet 738-750. All safety precautions were observed.

Performance Steps

1. Apply power to the AN/TPQ-37 System.
2. Run printouts.
 - a. Shelter fault isolation test (FIT).
 - b. 62 Print Command.
 - c. 63 Print Report.
3. Verify the fault that shows up on your printout.
 - a. System Idle.
 - b. Radar Status Monitor Routine (RSMR).
 - c. Fault Message.
4. Determine the equipment you need.
 - a. O-scope.
 - b. Multimeter.
 - c. Toolbox.
 - d. TM's.
5. Determine a good starting point in accordance with TM 11-5840-355-20-1.
6. Identify the fault.
7. Repair the fault.
8. Verify the fault is fixed.
9. Return to operations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Applied power to the AN/TPQ-37 System.	—	—
2. Ran printouts.	—	—
3. Verified the fault that showed up on your printout.	—	—
4. Determined the equipment you needed.	—	—
5. Determined a good starting point in accordance with TM 11-5840-355-20-1.	—	—
6. Identified the fault.	—	—
7. Repaired the fault.	—	—
8. Verified the fault was fixed.	—	—
9. Returned to operations.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

DA PAM 750-8
 TM 11-5840-355-10
 TM 11-5840-355-20-1
 TM 11-5840-355-20P
 TM 11-5840-355-30-1
 TM 11-5840-355-30-2
 TM 11-5840-355-30-4
 TM 11-5840-355-34P

Related

LO 11-5840-355-20
 TM 11-5840-355-10-3
 TM 11-5840-355-10-HR
 TM 11-5840-355-20-2
 TM 11-5840-355-20-3
 TM 11-5840-355-30-3
 TM 11-5840-364-20
 TM 11-5840-364-20P
 TM 11-5840-364-30-1
 TM 11-5840-364-30-3
 TM 11-5840-364-34P

Repair the Exciter/Clock Function of the AN/TPQ-37 Radar Set
093-94M-1205

Conditions: In a contemporary operational environment, given an AN/TPQ-37 Radar Set with a defective Exciter/Clock function, a multimeter, an oscilloscope, a spectrum analyzer, a power meter, an Organizational/Direct Support tool kit, a maintenance aid tool kit, TM 11-5840-355-10, TM 11-5840-355-20-1, TM 11-5840-355-20-3, TM 11-5840-355-20P, TM 11-5840-355-30-1, TM 11-5840-355-30-2, TM 11-5840-355-30-3, TM 11-5840-355-30-4, TM 11-5840-355-34P, TM 11-5840-364-20, TM 11-5840-364-20P, TM 11-5840-364-30-1, TM 11-5840-364-30-3, TM 11-5840-364-34P, DA Pamphlet 750-8, and spare parts.

Standards: Repair the Exciter/Clock function of the AN/TPQ-37 Radar Set to operational status. Maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Apply power to AN/TPQ-37 System.
2. Turn on test printout.
3. Run fault isolation test (FIT).
 - a. Shelter.
 - b. Trailer.
4. Observe what fault shows up on the printout.
5. Determine what equipment you will need.
 - a. Multimeter.
 - b. O-scope.
 - c. TM's.
 - d. Toolbox.
 - e. Supplement.
6. Determine a good starting point.
7. Identify the fault.
8. Repair the fault.
9. Verify the fault is fixed.
10. Return back to operations.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Applied power to the AN/TPQ-37 System.	—	—
2. Turned on test printout.	—	—
3. Ran FITs.	—	—
4. Observed what fault showed up on the printout.	—	—
5. Determined what equipment you needed.	—	—
6. Determined a good starting point.	—	—
7. Identified the fault.	—	—
8. Repaired the fault.	—	—
9. Verified the fault was fixed.	—	—
10. Returned back to operations.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

- DA PAM 750-8
- TM 11-5840-355-10
- TM 11-5840-355-20-1
- TM 11-5840-355-20-3
- TM 11-5840-355-20P
- TM 11-5840-355-30-1
- TM 11-5840-355-30-2
- TM 11-5840-355-30-3
- TM 11-5840-355-30-4
- TM 11-5840-355-34P
- TM 11-5840-364-20
- TM 11-5840-364-20P
- TM 11-5840-364-30-1
- TM 11-5840-364-30-3
- TM 11-5840-364-34P

Related

- LO 11-5840-355-20
- TM 11-5840-355-10-3
- TM 11-5840-355-10-HR
- TM 11-5840-355-20-2

Repair the Transmitter Function of the AN/TPQ-37 Radar Set 093-94M-1207

Conditions: In a contemporary operational environment, given an AN/TPQ-37 Radar Set with a defective Transmitter function, a multimeter, an oscilloscope, a power meter, a Organizational/Direct Support tool kit, a maintenance aid tool kit, TM 11-5840-355-10, TM 11-5840-355-20-1, TM 11-5840-355-30-1, TM 11-5840-355-30-2, TM 11-5840-355-30-3, TM 11-5840-355-30-4, DA Pamphlet 750-8, and spare parts.

Standards: Repair the Transmitter function of the AN/TPQ-37 Radar Set to operational status. Maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Apply power to the AN/TPQ-37 System.
2. Run fault isolation test (FIT).
 - a. Shelter.
 - b. Trailer.
3. Observe XTMR fault and XMTR CAUTION indicator on the WLU.
 - a. If XMTR CAUTION is lit, make sure the test/normal switch is set to normal on the transmitter power distribution panel.
 - b. If XMTR CAUTION is still lit after you switch the switch to normal or if XTMR indicator is lit.
4. Start troubleshooting.

NOTE: Press Radiate on/Radiate off switch lamp at WQLU so that radiate off switch is off.

5. Run transmitter stability test in accordance with TM 11-5840-355-20-1.
6. Switch test/normal switch on transmitter power distribution panel to test.
7. Switch antenna/dummy load switch on transmitter power distribution pane to dummy load.
8. Press HV OFF pushbutton transmitter power distribution panel.
9. Observe Transmitter CAUTION and NO-GO indicators on transmitter power distribution panel.
10. Observe Transmitter CAUTION and NO-GO indicators.
 - a. If indicators are off, press HV pushbutton at transmitter power distribution panel.
 - b. if indicators are lit during any of the above steps, it is an indication that another indicator is lit which corresponds to the actual problem.
11. Observe indicators on transmitter control panel and transmitter power distribution panel to see if any of these lights are lit. If any of those lights are lit, perform correction action in accordance with TM 11-5840-355-20-1.
 - a. Door Interlock.
 - b. AIR.
 - c. Power ON.
 - d. 300 VDC Power supply.
 - e. Air Cooling System.
 - f. Antenna Interlock.
 - g. Body Regulator.
 - h. Circuit Breaker Open.
 - i. Dummy Load.
 - j. Exciter RF Low.
 - k. Generator Voltage 3 phase AC.
 - l. High VSWR.

Performance Steps

- m. Humidity Control System.
 - n. ION Current.
 - o. Interlocks Incomplete.
 - p. Inverter.
 - q. Liquid Coolant System.
 - r. Logic Power Supply.
 - s. Low RF Out.
 - t. Modulator.
 - u. No Triggers.
 - v. RFA1.
 - w. Transformer/Rectifier.
 - x. TWT.
 - y. TWT Bias.
 - z. TWT Filament.
 - aa. Waveguide Switch.
12. Determine what equipment you are going to need to troubleshoot the fault.
 - a. Multimeter.
 - b. O-scope.
 - c. TM's.
 - d. Supplement.
 - e. Toolbox.
 13. Determine a good starting point.
 14. Identify the fault.
 15. Repair the fault
 16. Verify the fault is fixed.
 17. Return back to operations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Applied power to the AN/TPQ-37 System.	_____	_____
2. Ran FIT.	_____	_____
3. Observed XTMR fault and XMTR CAUTION indicator on the WLU.	_____	_____
4. Started troubleshooting.	_____	_____
5. Ran transmitter stability test in accordance with TM 11-5840-355-20-1.	_____	_____
6. Switched test/normal switch on transmitter power distribution panel to test.	_____	_____
7. Switched antenna/dummy load switch on transmitter power distribution pane to dummy load.	_____	_____
8. Pressed HV OFF pushbutton transmitter power distribution panel.	_____	_____
9. Observed Transmitter CAUTION and NO-GO indicators on transmitter power distribution panel.	_____	_____

Performance Measures	<u>GO</u>	<u>NO-GO</u>
10. Observed Transmitter CAUTION and NO-GO indicators.	—	—
11. Observed indicators on transmitter control panel and transmitter power distribution panel to see if any of these lights were lit. If any of those lights were lit, performed correction action in accordance with TM 11-5840-355-20-1.	—	—
12. Determined what equipment you needed to troubleshoot the fault.	—	—
13. Determined a good starting point.	—	—
14. Identified the fault.	—	—
15. Repaired the fault.	—	—
16. Verified the fault was fixed.	—	—
17. Returned back to operations.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

DA PAM 750-8
 TM 11-5840-355-10
 TM 11-5840-355-20-1
 TM 11-5840-355-30-1
 TM 11-5840-355-30-2
 TM 11-5840-355-30-3
 TM 11-5840-355-30-4

Related

LO 11-5840-355-20
 TM 11-5840-355-10-3
 TM 11-5840-355-10-HR
 TM 11-5840-355-20-2
 TM 11-5840-355-34P
 TM 11-5840-364-20
 TM 11-5840-364-20P
 TM 11-5840-364-30-1
 TM 11-5840-364-30-3
 TM 11-5840-364-34P

**Repair the Beam Steering Unit Function of the AN/TPQ-37 Radar Set
093-94M-1209**

Conditions: In a contemporary operational environment, given an AN/TPQ-37 Radar Set with a defective Beam Steering Unit /Antenna function, a multimeter, an oscilloscope, a Organizational/Direct Support tool kit, TM 11-5840-355-10, TM 11-5840-355-20-1, TM 11-5840-355-30-1, TM 11-5840-355-30-2, TM 11-5840-355-30-4, TM 11-5840-378-20&P, DA Pamphlet 750-8, and spare parts.

Standards: Repair the Beam Steering Unit/Antenna function of the AN/TPQ-37 Radar Set to operational status. Maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Apply power to the AN/TPQ-37 System.
2. Run fault isolation test (FIT).
 - a. Shelter.
 - b. Trailer.
3. Run 501 test.
4. Observe BSU indicators to isolate the fault.
5. Follow the BSU troubleshooting guide in accordance with TM 11-5840-378-20&P.
6. Determine what test equipment you will need to test the fault.
 - a. Multimeter.
 - b. O-scope.
 - c. Toolbox.
7. Determine a good starting point.
8. Identify the fault.
9. Repair the fault.
10. Verify the fault is fixed.
11. Return back to operations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Applied power to the AN/TPQ-37 System.	_____	_____
2. Ran FIT.	_____	_____
3. Ran 501 test.	_____	_____
4. Observed the BSU indicators to isolate the fault.	_____	_____
5. Followed the BSU troubleshooting guide in accordance with TM 11-5840-378-20&P.	_____	_____
6. Determined what test equipment you needed to test the fault.	_____	_____
7. Determined a good starting point.	_____	_____
8. Identified the fault.	_____	_____
9. Repaired the fault.	_____	_____

Performance Measures

- 10. Verified the fault was fixed.
- 11. Returned back to operations.

<u>GO</u>	<u>NO-GO</u>
—	—
—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

- DA PAM 750-8
- TM 11-5840-355-10
- TM 11-5840-355-20-1
- TM 11-5840-355-30-1
- TM 11-5840-355-30-2
- TM 11-5840-355-30-4
- TM 11-5840-378-20&P

Related

- LO 11-5840-355-20
- TM 11-5840-355-10-3
- TM 11-5840-355-10-HR
- TM 11-5840-355-20-2
- TM 11-5840-355-20-3
- TM 11-5840-355-20P
- TM 11-5840-355-30-3
- TM 11-5840-355-34P
- TM 11-5840-364-20
- TM 11-5840-364-20P
- TM 11-5840-364-30-1
- TM 11-5840-364-30-3
- TM 11-5840-364-34P

**Repair the Antenna Positioning Function of the AN/TPQ-37 Radar Set
093-94M-1211**

Conditions: In a contemporary operational environment, given an AN/TPQ-37 Radar Set with a defective Antenna Positioning function, a multimeter, an oscilloscope, a Organizational/Direct Support tool kit, TM 11-5840-355-10, TM 11-5840-355-20-1, TM 11-5840-355-30-1, TM 11-5840-355-30-2, TM 11-5840-355-30-4, TM 11-5840-378-20&P, DA Pamphlet 750-8, and spare parts.

Standards: Repair the Antenna Positioning function of the AN/TPQ-37 Radar Set to operational status. Maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Apply power to the AN/TPQ-37 System.
2. Run fault isolation test (FIT).
 - a. Shelter.
 - b. Trailer.
3. Run 801 test.
4. Confirm the following before troubleshooting.
 - a. The azimuth well cover is correctly installed.
 - b. The manual azimuth brake release handle is pushed in.
5. Rerun the 801 test.
 - a. Print the test out.
 - b. Check what fault branch shows up on the printout.
6. Determine what type of Antenna fault it is.
 - a. Elevation drive.
 - b. Azimuth drive.
 - c. Azimuth encoder.
 - d. Tilt Sensor.
7. Determine the equipment you will need to test the fault.
 - a. Multimeter.
 - b. O-scope.
 - c. TM's.
 - d. Toolbox.
8. Follow the flow chart in accordance with TM 11-5840-378-20&P to fix the fault.
9. Determine a good starting point.
10. Identify the fault.
11. Repair the fault.
12. Verify the fault is fixed.
13. Return back to operations.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Applied power to the AN/TPQ-37.	—	—
2. Ran FIT.	—	—
3. Ran 801 test.	—	—
4. Confirmed the following before troubleshooting.	—	—
5. Reran the 801 test.	—	—
6. Determined what type of Antenna fault it is.	—	—
7. Determined the equipment you will need to test the fault.	—	—
8. Followed the flow chart in accordance with TM 11-5840-378-20&P to fix the fault.	—	—
9. Determined a good starting point.	—	—
10. Identified the fault.	—	—
11. Repaired the fault.	—	—
12. Verified the fault was fixed.	—	—
13. Returned back to operations.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

- DA PAM 750-8
- TM 11-5840-355-10
- TM 11-5840-355-20-1
- TM 11-5840-355-30-1
- TM 11-5840-355-30-2
- TM 11-5840-355-30-4
- TM 11-5840-378-20&P

Related

- LO 11-5840-355-20
- TM 11-5840-355-10-3
- TM 11-5840-355-10-HR
- TM 11-5840-355-20-3
- TM 11-5840-355-30-3
- TM 11-5840-364-20
- TM 11-5840-364-20P
- TM 11-5840-364-30-1
- TM 11-5840-364-30-3
- TM 11-5840-364-34P

Repair the Receiver Function of the AN/TPQ-37 Radar Set
093-94M-1213

Conditions: In a contemporary operational environment, given an AN/TPQ-37 Radar Set with a defective Receiver function, a multimeter, an oscilloscope, a power meter, a Organizational/Direct Support tool kit, a maintenance aid tool kit, TM 11-5840-355-10, TM 11-5840-355-20-1, TM 11-5840-355-30-1, TM 11-5840-355-30-2, TM 11-5840-355-30-4, DA Pamphlet 750-8, and spare parts.

Standards: Repair the Receiver function of the AN/TPQ-37 Radar Set to operational status. Ensure maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Apply power to AN/TPQ-37 System.
2. Turn on test data printout.
3. Run fault isolation tests (FITs).
 - a. Shelter.
 - b. Trailer.
4. Observe what fault shows up on the printout.
5. Determine what equipment you will need.
 - a. Multimeter.
 - b. O-scope.
 - c. TM's.
 - d. Toolbox.
 - e. Supplement.
6. Determine a good starting point.
7. Identify the fault.
8. Repair the fault.
9. Verify the fault is fixed.
10. Return to operations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Applied power to the AN/TPQ-37 System.	—	—
2. Turned on test printout.	—	—
3. Ran FITs.	—	—
4. Observed what fault showed up on the printout.	—	—
5. Determined what equipment you needed.	—	—
6. Determined a good starting point.	—	—
7. Identified the fault.	—	—
8. Repaired the fault.	—	—
9. Verified the fault was fixed.	—	—

Performance Measures**GO** **NO-GO**

10. Returned to operations.

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References**Required**

DA PAM 750-8
 TM 11-5840-355-10
 TM 11-5840-355-20-1
 TM 11-5840-355-30-1
 TM 11-5840-355-30-2
 TM 11-5840-355-30-4

Related

LO 11-5840-355-20
 TM 11-5840-355-10-3
 TM 11-5840-355-10-HR
 TM 11-5840-355-20-2
 TM 11-5840-355-20-3
 TM 11-5840-355-20P
 TM 11-5840-355-30-3
 TM 11-5840-364-20
 TM 11-5840-364-20P
 TM 11-5840-364-30-1
 TM 11-5840-364-30-3
 TM 11-5840-364-34P

**Perform Preventive Maintenance Checks and Services (PMCS) on the AN/TPQ-37 Radar Set
093-94M-1214**

Conditions: In a contemporary operational environment, given an AN/TPQ-37 Radar Set with a DA Form 2404 (Equipment Inspection and Maintenance Worksheet), a DA Form 2407 (Maintenance Request), cleaning materials, a multimeter, an oscilloscope, a power meter, a Organizational/Direct Support tool kit, a maintenance aid tool kit, TM 11-5840-355-10, TM 11-5840-364-30-1, TM 11-5840-364-30-3, TM 11-5840-355-20-1, TM 11-5840-355-30-1, TM 11-5840-355-30-2, TM 11-5840-355-30-4, DA Pamphlet 750-8, and spare parts.

Standards: Perform a PMCS of the AN/TPQ-37 Radar Set and observe all safety precautions. Use tools and test equipment in accordance with PMCS procedures. Completed maintenance forms in accordance with DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Perform routine checks like cleaning, dusting, washing, checking for frayed cables, stowing items not in use, covering unused receptacles, and checking for loose nuts and bolts.
2. Perform PMCS in accordance with Preventive Maintenance Checks and Services Index (TM 11-5840-355-20-1, Section V, Chapter 3).
3. Utilize applicable manuals to assist in PMCS (TM 11-5840-355-30-1, TM 11-5840-355-30-2, TM 11-5840-355-30-4, TM 11-5840-364-30-1, and TM 11-5840-364-30-3).
4. Observe all safety warnings and cautions. Prevent damage to sensitive components by observing the precautions given in the electrostatic discharge procedure.
5. Complete the required maintenance forms. Ensure all deficiencies, together with corrective actions taken, are recorded on forms prescribe for maintenance in accordance with DA Pamphlet 750-8.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed routine checks like cleaning, dusting, washing, checking for frayed cables, stowing items not in use, covering unused receptacles, and checking for loose nuts and bolts.	—	—
2. Performed PMCS in accordance with Preventive Maintenance Checks and Services Index. (TM 11-5840-355-20-1, Section V, Chapter 3)	—	—
3. Utilized applicable manuals to assist in PMCS (TM 11-5840-355-30-1, TM 11-5840-355-30-2, TM 11-5840-355-30-4, TM 11-5840-364-30-1, and TM 11-5840-364-30-3).	—	—
4. Observed all safety warnings and cautions. Prevented damage to sensitive components by observing the precautions given in the electrostatic discharge procedure.	—	—
5. Completed the required maintenance forms. Ensured all deficiencies, together with corrective actions taken, were recorded on forms prescribed for maintenance in accordance with DA Pamphlet 750-8.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References**Required**

DA FORM 2404
DA FORM 2407
DA PAM 750-8
TM 11-5840-355-10
TM 11-5840-355-20-1
TM 11-5840-355-30-1
TM 11-5840-355-30-2
TM 11-5840-355-30-4
TM 11-5840-364-30-1
TM 11-5840-364-30-3

Related

LO 11-5840-355-20
TM 11-5840-355-10-3
TM 11-5840-355-10-HR
TM 11-5840-355-20-2
TM 11-5840-355-20-3
TM 11-5840-355-20P
TM 11-5840-355-30-3
TM 11-5840-355-34P
TM 11-5840-364-20
TM 11-5840-364-20P
TM 11-5840-364-34P

Subject Area 4: Maintenance on Sentinel AN/MPQ-64

**Repair the Radar Control Terminal (RCT)/Mass Storage Device Function of the AN/MPQ-64 Sentinel
093-94M-1401**

Conditions: In a contemporary operational environment, given an AN/MPQ-64 Radar Set with a defective Radar Control Terminal (RCT)/Mass Storage Device function, a multimeter, an oscilloscope, a Organizational/Direct Support tool kit, TM 9-1430-741-10, TM 9-1430-741-24&P, DA Pamphlet 750-8, and spare parts.

Standards: Repair the Radar Control Terminal (RCT)/Mass Storage Device function of the AN/MPQ-64 Radar Set to operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Apply power to the AN/MPQ-64.
2. Apply power to the RCT.
3. Verify the faulty RCT.
4. Power up the laptop.
5. Click on ITEM TM 9-1430-741-24&P from desktop.
6. Follow the RCT troubleshooting procedures.
7. Identify the fault.
8. Repair the fault.
9. Verify the fault is fixed.
10. Return to operations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Applied power to the AN/MPQ-64.	—	—
2. Applied power to the RCT.	—	—
3. Verified the faulty RCT.	—	—
4. Powered up the laptop.	—	—
5. Clicked on ITEM TM 9-1430-741-24&P from desktop	—	—
6. Followed the RCT troubleshooting procedure.	—	—
7. Identified the fault.	—	—
8. Repaired the fault.	—	—
9. Verified the fault was fixed.	—	—
10. Returned to operations.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

DA PAM 750-8
TM 9-1430-741-10
TM 9-1430-741-24&P

Related

EM 0096
TM 9-1430-741-10-HR
TM 9-1430-741-BD

Repair the Signal/Data Processor Function of the AN/MPQ-64 Sentinel
093-94M-1403

Conditions: In a contemporary operational environment, given an AN/MPQ-64 Radar Set with a defective Signal/Data Processor function, a multimeter, an oscilloscope, a Organizational/Direct Support tool kit, TM 9-1430-741-10, TM 9-1430-741-24&P, DA Pamphlet 750-8, and spare parts.

Standards: Repair the Signal/Data Processor function of the AN/MPQ-64 Radar Set to operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Apply power to the AN/MPQ-64.
2. Apply power to the RCT.
3. Run the AGT fault isolation test (FIT).
4. Verify you have a faulty Signal/Data Processor by running the AGT FIT three times.
5. Power up the laptop.
6. Click on ITEM TM 9-1430-741-24&P from desktop.
7. Follow the Signal/Data troubleshooting procedures.
8. Identify the fault.
9. Repair the fault.
10. Verify the fault is fixed.
11. Return to operations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Applied power to the AN/MPQ-64.	—	—
2. Applied power to the RCT.	—	—
3. Ran the AGT FIT.	—	—
4. Verified you have a faulty Signal/Data Processor by running the AGT FIT three times.	—	—
5. Powered up the laptop.	—	—
6. Clicked on ITEM TM 9-1430-741-24&P from desktop.	—	—
7. Followed the Signal/Data troubleshooting procedure.	—	—
8. Identified the fault.	—	—
9. Repaired the fault.	—	—
10. Verified the fault was fixed.	—	—
11. Returned to operations.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

DA PAM 750-8

TM 9-1430-741-10

TM 9-1430-741-24&P

Related

EM 0096

TM 9-1430-741-10-HR

TM 9-1430-741-BD

**Repair the System Power Function of the AN/MPQ-64 Sentinel
093-94M-1405**

Conditions: In a contemporary operational environment, given an AN/MPQ-64 Radar Set with a defective System Power function, a multimeter, an oscilloscope, a Organizational/Direct Support tool kit, TM 9-1430-741-10, TM 9-1430-741-24&P, DA Pamphlet 750-8, and spare parts.

Standards: Repair the System Power function of the AN/MPQ-64 Radar Set to operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Apply power to the AN/MPQ-64.
2. Verify you have power to the system.
 - a. If no power check the Generator to see if the alternating current (AC) switch has been closed.
 - b. Next, check the cables.
3. Verify you are having System power problem.
4. Power up the laptop.
5. Click on ITEM TM 9-1430-741-24&P from desktop.
6. Follow the System Power troubleshooting procedures.
7. Identify the fault.
8. Repair the fault.
9. Verify the fault is fixed.
10. Return to operations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Applied power to the AN/MPQ-64.	___	___
2. Verified you have power to the system.	___	___
3. Verified you are having System power problem.	___	___
4. Powered up the laptop.	___	___
5. Clicked on ITEM TM 9-1430-741-24&P from desktop.	___	___
6. Followed the System Power troubleshooting procedures.	___	___
7. Identified the fault.	___	___
8. Repaired the fault.	___	___
9. Verified the fault was fixed.	___	___
10. Returned to operations.	___	___

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

DA PAM 750-8

TM 9-1430-741-10

TM 9-1430-741-24&P

Related

EM 0096

TM 9-1430-741-10-HR

TM 9-1430-741-BD

**Repair the Exciter/Clock Function of the AN/MPQ-64 Sentinel
093-94M-1407**

Conditions: In a contemporary operational environment, given an AN/MPQ-64 Radar Set with a defective Exciter/Clock function, a multimeter, an oscilloscope, a Organizational/Direct Support tool kit, TM 9-1430-741-10, TM 9-1430-741-24&P, DA Pamphlet 750-8, and spare parts.

Standards: Repair the Exciter/Clock function of the AN/MPQ-64 Radar Set to operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Apply power to the AN/MPQ-64.
2. Apply power to the Radar Control Terminal (RCT).
3. Run the AGT fault isolation test (FIT).
4. Verify you have a faulty Exciter/Clock by running the AGT FIT three times.
5. Power up the laptop.
6. Click on ITEM TM 9-1430-741-24&P from desktop.
7. Follow the Exciter/Clock troubleshooting procedures.
8. Identify the fault.
9. Repair the fault.
10. Verify the fault is fixed.
11. Return to operations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Applied power to the AN/MPQ-64.	_____	_____
2. Applied power to the RCT.	_____	_____
3. Ran the AGT FIT.	_____	_____
4. Verified you have a faulty Exciter/Clock by running the AGT FIT three times.	_____	_____
5. Powered up the laptop.	_____	_____
6. Clicked on ITEM TM 9-1430-741-24&P from desk top.	_____	_____
7. Followed the Exciter/Clock troubleshooting procedures.	_____	_____
8. Identified the fault.	_____	_____
9. Repaired the fault.	_____	_____
10. Verified the fault was fixed.	_____	_____
11. Returned to operations.	_____	_____

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

DA PAM 750-8

TM 9-1430-741-10

TM 9-1430-741-24&P

Related

EM 0096

TM 9-1430-741-10-HR

TM 9-1430-741-BD

**Repair the Transmitter Function of the AN/MPQ-64 Sentinel
093-94M-1409**

Conditions: In a contemporary operational environment, given an AN/MPQ-64 Radar Set with a defective Transmitter function, a multimeter, an oscilloscope, an Organizational/Direct Support tool kit, TM 9-1430-741-10, TM 9-1430-741-24&P, DA Pamphlet 750-8, and spare parts.

Standards: Repair the Transmitter function of the AN/MPQ-64 Radar Set to operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Apply power to the AN/MPQ-64.
2. Apply power to the Radar Control Terminal (RCT).
3. Run the AGT fault isolation test (FIT).
4. Verify you have a faulty transmitter by running the AGT FIT three times.
 - a. Check the circuit breakers on the Transmitter Power Distribution Panel Controls and Indicator.
 - b. Check the Transmitter fault Processor Panel Controls and Indicators.
5. Power up the laptop.
6. Click on ITEM TM 9-1430-741-24&P from desktop.
7. Follow the transmitter troubleshooting procedures.
8. Identify the fault.
9. Repair the fault.
10. Verify the fault is fixed.
11. Return to operations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Applied power to the AN/MPQ-64.	___	___
2. Applied power to the RCT.	___	___
3. Ran the AGT FIT.	___	___
4. Verified you have a faulty transmitter by running the AGT FIT three times.	___	___
5. Powered up the laptop.	___	___
6. Clicked on ITEM TM 9-1430-741-24&P from desktop.	___	___
7. Followed the transmitter troubleshooting procedures.	___	___
8. Identified the fault.	___	___
9. Repaired the fault.	___	___
10. Verified the fault was fixed.	___	___
11. Returned to operations.	___	___

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

DA PAM 750-8
TM 9-1430-741-10
TM 9-1430-741-24&P

Related

EM 0096
TM 9-1430-741-10-HR
TM 9-1430-741-BD

Repair the Beam Steering Unit (BSU)/Antenna Function of the AN/MPQ-64 Sentinel
093-94M-1411

Conditions: In a contemporary operational environment, given an AN/MPQ-64 Radar Set with a defective Beam Steering Unit (BSU)/Antenna function, a multimeter, an oscilloscope, a Organizational/Direct Support tool kit, TM 9-1430-741-10, TM 9-1430-741-24&P, DA Pamphlet 750-8, and spare parts.

Standards: Repair the Beam Steering Unit (BSU)/Antenna function of the AN/MPQ-64 Radar Set to operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Apply power to the AN/MPQ-64.
2. Apply power to the RCT.
3. Run the AGT fault isolation test (FIT).
4. Verify you have a faulty Beam Steering Unit (BSU)/Antenna by running the AGT FIT three times.
5. Power up the laptop.
6. Click on ITEM TM 9-1430-741-24&P from desktop.
7. Follow the BSU/Antenna troubleshooting procedures.
8. Identify the fault.
9. Repair the fault.
10. Verify the fault is fixed.
11. Return to operations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Applied power to the AN/MPQ-64.	—	—
2. Applied power to the RCT.	—	—
3. Ran the ATG FIT.	—	—
4. Verified you have a faulty Beam Steering Unit (BSU)/Antenna by running the ATG FIT three times.	—	—
5. Powered up the laptop.	—	—
6. Clicked on ITEM TM 9-1430-741-24&P from desktop.	—	—
7. Followed the BSU/Antenna troubleshooting procedures.	—	—
8. Identified the fault.	—	—
9. Repaired the fault.	—	—
10. Verified the fault was fixed.	—	—
11. Returned to operations.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

DA PAM 750-8
TM 9-1430-741-10
TM 9-1430-741-24&P

Related

EM 0096
TM 9-1430-741-10-HR
TM 9-1430-741-BD

**Repair the Antenna Positioning Function of the AN/MPQ-64 Sentinel
093-94M-1413**

Conditions: In a contemporary operational environment, given an AN/MPQ-64 Radar Set with a defective Antenna Positioning function, a multimeter, an oscilloscope, a Organizational/Direct Support tool kit, TM 9-1430-741-10, TM 9-1430-741-24&P, DA Pamphlet 750-8, and spare parts.

Standards: Repair the Antenna Positioning function of the AN/MPQ-64 Radar Set to operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Apply power to the AN/MPQ-64.
2. Apply power to the Radar Control Terminal (RCT).
3. Run the AGT fault isolation test (FIT).
4. Verify you have a faulty Antenna Positioning by running the AGT FIT three times.
5. Power up the laptop.
6. Click on ITEM TM 9-1430-741-24&P from desktop.
7. Follow the Antenna Positioning troubleshooting procedures.
8. Identify the fault.
9. Repair the fault.
10. Verify the fault is fixed.
11. Return to operations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Applied power to the AN/MPQ-64.	___	___
2. Applied power to the RCT.	___	___
3. Ran the AGT FIT.	___	___
4. Verified you have a faulty Antenna Positioning by running the AGT FIT three times.	___	___
5. Powered up the laptop.	___	___
6. Clicked on ITEM TM 9-1430-741-24&P from desktop.	___	___
7. Followed the Antenna Positioning troubleshooting procedures.	___	___
8. Identified the fault.	___	___
9. Repaired the fault.	___	___
10. Verified the fault was fixed.	___	___
11. Returned to operations.	___	___

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

DA PAM 750-8
TM 9-1430-741-10
TM 9-1430-741-24&P

Related

EM 0096
TM 9-1430-741-10-HR
TM 9-1430-741-BD

Repair the Receiver Function of the AN/MPQ-64 Sentinel
093-94M-1415

Conditions: In a contemporary operational environment, given an AN/MPQ-64 Radar Set with a defective Receiver function, a multimeter, an oscilloscope, a Organizational/Direct Support tool kit, TM 9-1430-741-10, TM 9-1430-741-24&P, DA Pamphlet 750-8, and spare parts.

Standards: Repair the Receiver function of the AN/MPQ-64 Radar Set to operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Apply power to the AN/MPQ-64.
2. Apply power to the Radar Control Terminal (RCT).
3. Run the AGT fault isolation test (FIT).
4. Verify you have a faulty Receiver by running the AGT FIT three times.
5. Power up the laptop.
6. Click on ITEM TM 9-1430-741-24&P from desktop.
7. Follow the Receiver troubleshooting procedures.
8. Identify the fault.
9. Repair the fault.
10. Verify the fault is fixed.
11. Return to operations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Applied power to the AN/MPQ-64.	—	—
2. Applied power to the RCT.	—	—
3. Ran the AGT FIT.	—	—
4. Verified you have a faulty Receiver by running the AGT FIT three times.	—	—
5. Powered up the laptop.	—	—
6. Clicked on ITEM TM 9-1430-741-24&P from desktop.	—	—
7. Followed the Receiver troubleshooting procedures.	—	—
8. Identified the fault.	—	—
9. Repaired the fault.	—	—
10. Verified the fault was fixed.	—	—
11. Returned to operations.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

DA PAM 750-8

TM 9-1430-741-10

TM 9-1430-741-24&P

Related

EM 0096

TM 9-1430-741-10-HR

TM 9-1430-741-BD

**Repair the Identification Friend or Foe (IFF) Function of the AN/MPQ-64 Sentinel
093-94M-1417**

Conditions: In a contemporary operational environment, given an AN/MPQ-64 Radar Set with a defective Identification Friend or Foe (IFF) function, a multimeter, an oscilloscope, a Organizational/Direct Support tool kit, TM 9-1430-741-10, TM 9-1430-741-24&P, DA Pamphlet 750-8, and spare parts.

Standards: Repair the Identification Friend or Foe (IFF) function of the AN/MPQ-64 Radar Set to operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Apply power to the AN/MPQ-64.
2. Apply power to the Radar Control Terminal (RCT).
3. Run the AGT fault isolation test (FIT).
4. Verify you have a faulty IFF by running the AGT FIT three times.
5. Power up the laptop.
6. Click on ITEM TM 9-1430-741-24&P from desktop.
7. Follow the IFF troubleshooting procedures.
8. Identify the fault.
9. Repair the fault.
10. Verify the fault is fixed.
11. Return to operations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Applied power to the AN/MPQ-64.	_____	_____
2. Applied power to the RCT.	_____	_____
3. Ran the AGT FIT.	_____	_____
4. Verified you have a faulty IFF by running the AGT FIT three times.	_____	_____
5. Powered up the laptop.	_____	_____
6. Clicked on ITEM TM 9-1430-741-24&P from desktop.	_____	_____
7. Followed the IFF troubleshooting procedures.	_____	_____
8. Identified the fault.	_____	_____
9. Repaired the fault.	_____	_____
10. Verified the fault was fixed.	_____	_____
11. Returned to operations.	_____	_____

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

DA PAM 750-8

TM 9-1430-741-10

TM 9-1430-741-24&P

Related

EM 0096

TM 9-1430-741-10-HR

TM 9-1430-741-BD

**Perform Preventive Maintenance Checks and Services (PMCS) on the AN/MPQ-64 Sentinel
093-94M-1418**

Conditions: In a contemporary operational environment you, given an AN/MPQ-64 Radar Set with a DA Form 2404 (Equipment Inspection and Maintenance Worksheet), cleaning materials, a multimeter, an oscilloscope, a spectrum analyzer, a power meter, a Organizational/Direct Support tool kit, a maintenance aid tool kit, TM 9-1430-741-10, TM 9-1430-741-24&P, DA Pamphlet 750-8, and spare parts.

Standards: Perform a PMCS of the AN/MPQ-64 Radar Set and observe all safety precautions. Tools and test equipment were used in accordance with PMCS procedures. Maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Perform routine checks like cleaning, dusting, washing, checking for frayed cables, stowing items not in use, covering unused receptacles, and checking for loose nuts and bolts.
2. Perform PMCS in accordance with PREVENTIVE MAINTENANCE CHECKS AND SERVICES INDEX (TM 11-5840-355-20-1, Section V, Chapter 3).
3. Utilize applicable manuals to assist in PMCS (TM 11-5840-355-30-1, TM 11-5840-355-30-2, TM 11-5840-355-30-4, TM 11-5840-364-30-1, TM 11-5840-364-30-2, and TM 11-5840-364-30-3).
4. Observe all safety warnings and cautions. Prevent damage to sensitive components, and observe the precautions given in the electrostatic discharge procedure.
5. Complete the required maintenance forms. All deficiencies, together with corrective actions taken, and are record on forms prescribe for maintenance in accordance with DA Pamphlet 750-8.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed routine checks like cleaning, dusting, washing, checking for frayed cables, stowing items not in use, covering unused receptacles, and checking for loose nuts and bolts.	—	—
2. Performed PMCS in accordance with PREVENTIVE MAINTENANCE CHECKS AND SERVICES INDEX (TM 11-5840-355-20-1, Section V, Chapter 3).	—	—
3. Utilized applicable manuals to assist in PMCS (TM 11-5840-355-30-1, TM 11-5840-355-30-2, TM 11-5840-355-30-4, TM 11-5840-364-30-1, TM 11-5840-364-30-2, and TM 11-5840-364-30-3).	—	—
4. Observed all safety warnings and cautions. Prevented damage to sensitive components, observed the precautions given in the electrostatic discharge procedure.	—	—
5. Completed the required maintenance forms. All deficiencies, together with corrective actions taken, were recorded on forms prescribed for maintenance in accordance with DA Pamphlet 750-8.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

DA FORM 2404

DA PAM 750-8

TM 9-1430-741-10

TM 9-1430-741-24&P

Related

D 20-1324

EM 0096

TM 9-1430-741-10-HR

TM 9-1430-741-BD

Subject Area 5: Intermediate Maintenance AN/TMQ-41 (Unit Trained)

**Repair the Power Control Unit of the AN/TMQ-41
093-94M-1901**

Conditions: In a contemporary operational environment you will be given the required parts to repair the power control unit of the AN/TMQ-41, a multimeter, an oscilloscope, an Organizational/Direct Support tool kit, spare parts, DA Pamphlet 750-8 and TM 11-6660-283-13.

Standards: Repair the power control unit of the AN/TMQ-41 radar set to an operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Apply power to AN/TMQ-41.
2. Determine what equipment you will need to troubleshoot the program.
 - a. Multimeter.
 - b. 115 V ac power source.
 - c. 28 V dc power source.
 - d. MS27467T17B065 connector to connect.
 - e. Hubbell (Cage 74545) connector.
3. Verify you have a fault and troubleshoot the fault in accordance with TM 11-6660-283-13 (Power Control Unit Flow Chart).
4. Identify the fault.
5. Repair the fault.
6. Verify the fault is fixed.
7. Return to operations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Applied power to AN/TMQ-41.	___	___
2. Determined what equipment you will need to troubleshoot the program.	___	___
3. Verified you had a fault by troubleshooting the fault in accordance with TM 11-6660-283-13 (Power Control Unit Flow Chart).	___	___
4. Identified the fault.	___	___
5. Repaired the fault.	___	___
6. Verified the fault was fixed.	___	___
7. Returned to operations.	___	___

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

DA PAM 750-8

TM 11-6660-283-13

Related

TB 11-5820-890-20-107

TB 11-5820-890-20-89

TB 11-6660-283-25

**Repair the Power Entry Assembly of the AN/TMQ-41
093-94M-1903**

Conditions: In a contemporary operational environment you will be given the required parts to repair the power entry assembly of the AN/TMQ-41, a multimeter, an oscilloscope, an Organizational/Direct Support tool kit, spare parts, DA Pamphlet 750-8 and TM 11-6660-283-13.

Standards: Repair the power entry assembly of the AN/TMQ-41 radar set to an operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Apply power to AN/TMQ-41.
2. Determine what equipment you will need to troubleshoot the program.
 - a. Multi meter.
 - b. 28 v dc power source.
 - c. 115 V ac power source.
 - d. MS90557C32412S connector to connector.
 - e. 115 ac to power entry assembly J1.
3. Verify you have a fault and troubleshoot the fault in accordance with TM 11-6660-283-13 (Power Entry Assembly Flow Chart).
4. Identify the fault.
5. Repair the fault.
6. Verify the fault is fixed.
7. Return to operations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Applied power to AN/TMQ-41.	_____	_____
2. Determined what equipment you will need to troubleshoot the program.	_____	_____
3. Verified you had a fault by troubleshooting the fault in accordance with TM 11-6660-283-13 (Power Entry Assembly Flow Chart).	_____	_____
4. Identified the fault.	_____	_____
5. Repaired the fault.	_____	_____
6. Verified the fault was fixed.	_____	_____
7. Returned to operations.	_____	_____

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

DA PAM 750-8

TM 11-6660-283-13

Related

TB 11-5820-890-20-107

TB 11-5820-890-20-89

TB 11-6660-283-25

Repair the Signal Entry Box of the AN/TMQ-41
093-94M-1905

Conditions: In a contemporary operational environment you will be given the required parts to repair the signal entry box of the AN/TMQ-41, a multimeter, an Organizational/Direct Support tool kit, spare parts, DA Pamphlet 750-8 and TM 11-6660-283-13.

Standards: Repair the signal entry box of the AN/TMQ-41 radar set to an operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Apply power to AN/TMQ-41.
2. Determine what equipment you will need to troubleshoot the program.
 - a. Multimeter.
 - b. Variable current-limited (100 mA or less) power source, 25 V dc to about 100 V dc.
 - c. MS3474W14-09S connector to allow connection of 28 V dc.
3. Verify you have a fault and troubleshoot the fault in accordance with TM 11-6660-283-13 (Signal Entry Box Flow Chart).
4. Identify the fault.
5. Repair the fault.
6. Verify the fault is fixed.
7. Return to operations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Applied power to AN/TMQ-41.	—	—
2. Determined what equipment you will need to troubleshoot the program.	—	—
3. Verified you had a fault by troubleshooting the fault in accordance with TM 11-6660-283-13 (Signal Entry Box Flow Chart).	—	—
4. Identified the fault.	—	—
5. Repaired the fault.	—	—
6. Verified the fault was fixed.	—	—
7. Returned to operations.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

DA PAM 750-8

TM 11-6660-283-13

Related

TB 11-5820-890-20-107

TB 11-5820-890-20-89

TB 11-6660-283-25

Repair the Signal Data Converter of the AN/TMQ-41
093-94M-1907

Conditions: In a contemporary operational environment you will be given the required parts to repair the signal data converter of the AN/TMQ-41, a multimeter, an Organizational/Direct Support tool kit, spare parts, DA Pamphlet 750-8 and TM 11-6660-283-13.

Standards: Repair the signal data converter of the AN/TMQ-41 radar set to an operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Apply power to AN/TMQ-41.
2. Verify you have a fault and troubleshoot the fault in accordance with TM 11-6660-283-13.
3. Identify the fault.
4. Repair the fault.
5. Verify the fault is fixed.
6. Return to operations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Applied power to AN/TMQ-41.	—	—
2. Verified you had a fault by troubleshooting the fault in accordance with TM 11-6660-283-13.	—	—
3. Identified the fault.	—	—
4. Repaired the fault.	—	—
5. Verified the fault was fixed.	—	—
6. Returned to operations.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

DA PAM 750-8
TM 11-6660-283-13

Related

TB 11-5820-890-20-107
TB 11-5820-890-20-89
TB 11-6660-283-25

Repair the Marwin Processor of the AN/TMQ-41
093-94M-1909

Conditions: In a contemporary operational environment you will be given the required parts to repair the Marwin processor of the AN/TMQ-41, a multimeter, an oscilloscope, an Organizational/Direct Support tool kit, spare parts, DA Pamphlet 750-8 and TM 11-6660-283-13.

Standards: Repair the Marwin processor of the AN/TMQ-41 radar set to an operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Apply power to AN/TMQ-41.
2. Verify you have a fault and troubleshoot the fault in accordance with TM 11-6660-283-13.
3. Identify the fault.
4. Repair the fault.
5. Verify the fault is fixed.
6. Return to operations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Applied power to AN/TMQ-41.	—	—
2. Verified you had a fault by troubleshooting the fault in accordance with TM 11-6660-283-13.	—	—
3. Identified the fault.	—	—
4. Repaired the fault.	—	—
5. Verified the fault was fixed.	—	—
6. Returned to operations.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

DA PAM 750-8
TM 11-6660-283-13

Related

TB 11-5820-890-20-107
TB 11-5820-890-20-89
TB 11-6660-283-25

Subject Area 6: Intermediate Maintenance M-93 and M-94 (Unit Trained)

**Repair the CPDU Assembly of Muzzle Velocity Radar Sets M-93 and M-94
093-94M-1707**

Conditions: In a contemporary operational environment you will be given the required parts to repair the defective control processor and display unit (CPDU) assembly of the M-93 or M-94 Chronograph, a multimeter, a direct support tool kit, DA Pamphlet 750-8, and TM 9-1290-359-14&P.

Standards: Repair the defective CPDU assembly of the M-93 or M-94 Chronograph Radar to an operational status. All maintenance forms were completed according to DA Pamphlet 750-8. All safety precautions were observed.

Performance Steps

1. Apply power to the CPDU.

2. Verify CPDU operates properly.

NOTE: If CPDU does not work properly, troubleshoot in accordance with TM 9-1290-364-14&P.

3. Verify status on the CPDU.

- a. CPDU Status Failed: CPDU troubleshoot in accordance with TM 9-1290-364-14&P.
- b. CPDU Status Failed: ANT PWR troubleshoot in accordance with TM 9-1290-364-14&P.
- c. CPDU Status Failed: ANT CABLE troubleshoot in accordance with TM 9-1290-364-14&P.
- d. CPDU Status Failed: ACCEL troubleshoot in accordance with TM 9-1290-364-14&P.
- e. CPDU does not exit from "MV Measure" Screen troubleshoot in accordance with TM 9-1290-364-14&P.

4. Follow the procedure if "ERROR is display in the MV field while attempting to measure a round in accordance with TM 9-1290-364-14&P.

5. Follow the procedure if measure velocity does not fall within limits or "ERROR is display while using Doppler Simulator during system test in accordance with TM 9-1290-364-14&P.

6. Check the CPDU display to see if the "MEASURE" mode with the Measure LED "ON".

NOTE: If this occurs, abort current operation and press TST KEY troubleshoot in accordance with TM 9-1290-364-14&P.

7. Check Doppler Simulator LED.

- a. If only one LED light, replace unit.
- b. If both LEDs do not light, replace batteries. If it still does not light, replace the unit.

8. Verify CPDU respond to key strokes.

NOTE: If CPDU does not respond to keyboard, dimmer, or contrast; troubleshoot in accordance with TM 9-1290-364-14&P.

9. Check Display Contrast Adjustment.

NOTE: If Contrast Knob has no effect on display, replace the unit.

Performance Steps

- 10. Check Display and keyboard dimmer adjustment.
NOTE: If Dimmer Knob has wrong effect on display or keyboard, replace the CPDU.
- 11. Verify that information display correctly.
NOTE: Troubleshoot in accordance with TM 9-1290-364-14&P.
- 12. Check to make sure "MEASURE" LED does not light or lights continuously.
NOTE: If this happens, replace the unit.
- 13. Follow the procedure if the CPDU remains in the "READY" state during firing and does not measure the round fire in accordance with TM 9-1290-364-14&P.
- 14. Determine what equipment you will need to troubleshoot the fault.
 - a. Toolbox.
 - b. Power Meter.
 - c. O-scope.
 - d. Function Generator.
 - e. Digital Counter.
- 15. Identify the fault.
- 16. Repair the fault.
- 17. Verify the fault is fixed.
- 18. Return to operations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Applied power to the CPDU.	—	—
2. Verified CPDU operated properly.	—	—
3. Verified status on the CPDU.	—	—
4. Followed the procedure if "ERROR is displayed in the MV field while attempting to measure a round in accordance with TM 9-1290-364-14&P.	—	—
5. Followed the procedure if measure velocity does not fall within limits or "ERROR is displayed while using Doppler Simulator during system test in accordance with TM 9-1290-364-14&P.	—	—
6. Checked the CPDU display to see if the "MEASURE" mode with the Measure LED "ON".	—	—
7. Checked Doppler Simulator LED.	—	—
8. Verified CPDU responded to key strokes.	—	—
9. Checked Display Contrast Adjustment.	—	—

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
10. Checked Display and keyboard dimmer adjustment.	—	—
11. Verified that information displayed correctly.	—	—
12. Checked to make sure "MEASURE" LED does not light or lights continuously.	—	—
13. Followed the procedure if the CPDU remains in the "READY" state during firing and does not measure the round fire in accordance with TM 9-1290-364-14&P.	—	—
14. Determined what equipment you needed to troubleshoot the fault.	—	—
15. Identified the fault.	—	—
16. Repaired the fault.	—	—
17. Verified the fault was fixed.	—	—
18. Returned to operations.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measures, show what was done wrong and how to do it correctly.

References

Required

DA PAM 750-8
TM 9-1290-364-14&P

Related

TM 3-4240-325-20&P

Skill Level 3

Subject Area 7: Maintenance Operations

Inspect Section/Shop Safety**093-SSG-3001**

Conditions: In a contemporary operational environment (COE), given a requirement to inspect an electronics or avionics maintenance shop area and given Army regulation (AR) 40-5, AR 385-10, Department of the Army (DA) Pamphlet 40-501, DA Pamphlet 385-1, Technical Bulletin (TB) 385-3, TB 385-4, TB Medical (MED) 523, unit and local standing operating procedures (SOPs), and unit safety checklist. This task can be performed in a field or garrison environment.

Standards: Conduct inspection to ensure that all Army, company, and maintenance shop safety policies, regulations, and local SOPs were followed; all safety hazards were identified; environmental risk assessment to determine high risks areas was performed; and all deficiencies were corrected. Establish an inspection schedule covering what to inspect and how frequently. Record deficiencies and recommended corrective actions and retained these reports to check progress. Follow up to ensure deficiencies had been corrected.

Performance Steps

1. Review the Army, company, and maintenance shop safety policies, regulations, and local SOPs.
2. Ensure that all of the Army safety references and company and maintenance shop SOPs are being followed.
3. Plan periodic safety inspections for all section/shop work areas.
 - a. Identify hazards to the environment prior to the inspection process.
 - b. Assess the probability of environmental damage/violations using environmental risk assessment matrices before the inspection process.
4. Schedule the inspection so that disruptions to normal operations are as little as possible.
5. Inspect areas with the greatest potential for accident severity and those having the highest accident frequency more frequently.
6. Develop a suitable checklist of items to be inspected in accordance with AR 385-10, AR 40-5, DA Pamphlet 40-501, DA Pamphlet 385-1, TB 385-3, TB 385-4, TB MED 523, and maintenance section/shop SOPs.
7. Inspect the maintenance section/shop to ensure that all test equipment calibration dates are current.
8. Inspect all of the equipment and benches for proper grounding within the maintenance section/shop areas.
9. Inspect the maintenance section/shop to ensure that a mounted safety board is present.
10. Inspect the maintenance section/shop to ensure that rubber floor mats or similar insulating materials are available for each repair position.
11. Inspect the maintenance section/shop to ensure that all power attachments, plugs, and connectors are serviceable with no exposed parts carrying electric current except the prongs.
12. Inspect and identify all of the physical and high-voltage hazards within the maintenance section/shop areas.
13. Inspect the maintenance section/shop to ensure it complies with host nation, local, state, and federal environmental laws and regulations.

Performance Steps

14. Brief the chain of command on the results, potential high-risk areas, and recommendations from the safety inspection.
15. Identify all safety hazards and took corrective action.
16. Ensure all deficiencies found during inspection have proper corrective action scheduled.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Reviewed the Army, company, and maintenance shop safety policies, regulations, and local SOPs.	—	—
2. Ensured that all of the Army safety references and company and maintenance shop SOPs were being followed.	—	—
3. Planned inspections so that all areas were covered periodically.	—	—
4. Scheduled the inspection so that normal operations were disrupted as little as possible.	—	—
5. Inspected areas with the greatest potential for accident severity and those having the highest accident frequency more frequently.	—	—
6. Developed a suitable checklist of items to be inspected in accordance with AR 385-10, AR 40-5, DA Pamphlet 40-501, DA Pamphlet 385-1, TB 385-3, TB 385-4, TB MED 523, and maintenance section/shop SOPs.	—	—
7. Inspected the maintenance section/shop to ensure that all test equipment calibration dates were current.	—	—
8. Inspected the maintenance section/shop to ensure that all equipment and benches were properly grounded.	—	—
9. Inspected the maintenance section/shop to ensure that a mounted safety board was present.	—	—
10. Inspected the maintenance section/shop to ensure that rubber floor mats or similar insulating materials were provided for each repair position.	—	—
11. Inspected the maintenance section/shop to ensure that all power attachments, plugs, and connectors were serviceable with no exposed parts carrying electric current except the prongs.	—	—
12. Inspected the maintenance section/shop to ensure that all physical and high-voltage hazards had been identified.	—	—
13. Inspected the maintenance section/shop to ensure it was complying with host nation, local, state, and federal environmental laws and regulations.	—	—
14. Briefed the chain of command on the results, potential high-risk areas, and recommendations from the safety inspection.	—	—
15. Identified all safety hazards and took corrective action.	—	—
16. Ensured that any deficiencies found were corrected.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed (P). Score the Soldier NO-GO if any performance measure is failed (F). If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

AR 385-10
AR 40-5
DA PAM 385-1
DA PAM 40-501
TB 385-3
TB 385-4
TB MED 523

Related

AR 200-1
FM 3-04.500
FM 4-30.3
TB 43-0129
TC 3-34.489

Manage Section/Shop Security
093-SSG-3002

Conditions: In a contemporary operational environment, given AR 25-2, AR 190-13, AR 380-5, AR 380-40, DA Pamphlet 190-51, FM 3-19.30, and local and unit standing operating procedures (SOPs). This task can be performed in a field or garrison environment.

Standards: Ensure that all Army security policies and regulations and the maintenance shop and local SOPs were followed. Identify and report all security deficiencies and ensured that all deficiencies were corrected.

Performance Steps

1. Review all of the Army security policies and regulations and the maintenance shop and local SOPs.
2. Ensure a work place risk analysis is performed.
3. Ensure that physical security policies, regulations, and SOPs are followed.
4. Ensure that classification and marking policies are followed.
5. Ensure that all security control policies and regulations are followed.
6. Ensure that personnel security and signal training policies are followed.
 - a. Initial security training and briefing for newly assigned personnel.
 - b. Refresher security training for assigned personnel.
 - c. Procedures for identifying and reporting insecurities.
7. Ensure that signal security (SIGSEC) policies and regulations are followed.
 - a. Ensure subordinates follow all Army and unit policies and regulations covering communications security (COMSEC) procedures.
 - b. Ensure subordinates follow all Army and unit policies and regulations covering electronics security (ELSEC) procedures.
8. Identify and report all security deficiencies and ensure that all deficiencies are corrected.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Reviewed all of the Army security policies and regulations and the maintenance shop and local SOPs.	—	—
2. Ensured a work place risk analysis was performed.	—	—
3. Ensured that physical security policies, regulations, and SOPs were followed.	—	—
4. Ensured that classification and marking policies were followed.	—	—
5. Ensured that all security control policies and regulations were followed.	—	—
6. Ensured that personnel security and signal training policies were followed.	—	—
7. Ensured that signal security (SIGSEC) policies and regulations were followed.	—	—
8. Identified and reported all security deficiencies and ensured that all deficiencies were corrected.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed (P). Score the Soldier NO-GO if any performance measure is failed (F). If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

AR 190-13
AR 25-2
AR 380-40
AR 380-5
DA PAM 190-51
FM 3-19.30

Related

AR 5-12
DA PAM 25-380-2
FM 34-60
FM 4-30.3

Maintain Section/Shop Calibration Program
093-SSG-3003

Conditions: In a contemporary operational environment, given the maintenance section/shop calibration program, to include test, measurement, and diagnostic equipment (TMDE) master listing for the program; DA Form 3758-R (Calibration and Repair Requirements Worksheet); DA Label 80 (US Army Calibrated Instrument); TB 43-180; TB 750-25; and company standing operating procedures (SOPs). This task can be performed in a field or garrison environment.

Standards: Maintain a master listing for all calibrated equipment assigned to the maintenance section/shop in accordance with TB 43-180, TB 750-25, and company SOPs. Review the section/shop calibration listing for equipment due calibration on a monthly basis and update status of all calibration equipment still turned in to the calibration support unit.

Performance Steps

1. Identify all equipment listed on section/shop hand receipts that might require a calibration label.
 - a. Test equipment.
 - b. Equipment modules.
 - c. Dummy loads.
 - d. Voltage test probes.
 - e. Radiation detection, indication, and computation (RADIAC) equipment.
 - f. Motor pool equipment.
 - g. Power supplies.
2. Determine which equipment identified was listed in TB 43-180.
 - a. Equipment that requires calibration.
 - b. Calibration not required (CNR) equipment.
3. Prepare DA Form 3758-R if any new equipment not listed in TB 43-180 required calibration.
4. Maintain a master listing for all calibrated items in the maintenance section/shop.
5. Schedule equipment for calibration
 - a. Stagger like equipment, when possible, so that equipment is always available on site.
 - b. Assign a higher priority for critical TMDE, when necessary.
 - c. Schedule plug-in modules and accessories for calibration with the major piece of equipment.
 - d. Review signature cards and orders, as required locally, to update customer files and for the first appointment.
6. Prepare CNR labels for remaining equipment, as required.
7. Turn in/pick up equipment from the calibration facility.
 - a. Turn in equipment with a minimum of accessories and covers.
 - b. Obtain signed and dated receipt for equipment.
 - c. Inspect equipment for damage and accessories before signing.
 - d. Obtain calibration listings when available.
8. Update calibration listing.
 - a. Verify calibration due dates.
 - b. Delete entries.
 - c. Add entries.
 - d. correct serial number, calibration date, and due date errors.

Performance Steps

9. Maintain a temporary storage area for calibrate before use (CBU) equipment.
 - a. Identify CBU equipment as appropriate.
 - b. Identify a limited access storage area.
 - c. Prepare DA Label 80 for CBU.
 - d. Update calibration listing for CBU items.
 - e. Store equipment until required.
 - f. Submit equipment for calibration prior to use.

Evaluation Preparation: Setup: Select one of the maintenance shop/section within the company hand receipt that contents test, measurement, and diagnostic equipment (TMDE).

Brief Soldier: Tell the Soldiers they are going to be evaluated on how they review the company's master listing of all calibration items and selected maintenance section/shop hand receipt for calibration equipment listed. They must verify entries, equipment for correct serial numbers, calibration due dates and update company calibration list with new and turned-in equipment on the selected shop/section hand receipt due calibration.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Identified all equipment listed on section/shop hand receipts that might require a calibration label.	_____	_____
2. Determined which equipment identified was listed in TB 43-180.	_____	_____
3. Prepared DA Form 3758-R if any new equipment not listed in TB 43-180 required calibration.	_____	_____
4. Maintained a master listing for all calibrated items in the maintenance section/shop.	_____	_____
5. Scheduled equipment for calibration.	_____	_____
6. Prepared CNR labels for remaining equipment, as required.	_____	_____
7. Turned in/picked up equipment from the calibration facility.	_____	_____
8. Updated calibration listing.	_____	_____
9. Maintained a temporary storage area for calibrate before use (CBU) equipment.	_____	_____

Evaluation Guidance: Score the Soldier GO if all performance measures are passed (P). Score the Soldier NO-GO if any performance measure is failed (F). If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References**Required**

DA FORM 3758-R
 DA LABEL 80
 TB 43-180
 TB 750-25

Related

DA PAM 750-3

Submit a Quality Deficiency Report (QDR)

093-SSG-3004

Conditions: In a contemporary operational environment, given the requirement to submit a QDR for a serious or recurring maintenance problem and given Army regulation (AR) 95-1, AR 725-50, Department of the Army (DA) Form 2404 (Equipment Inspection and Maintenance Worksheet), DA Form 2407 (Maintenance Request), Department of Defense (DD) Form 1575 (Suspended Tag-Materiel), DD Form 2332 (Product Quality Deficiency Report Exhibit), DA Pamphlet 750-8, DA Pamphlet 738-751, Standard Form (SF) Form 368 (Product Quality Deficiency Report), and Technical Bulletin (TB) 43-0001-series. This task can be performed in a field or garrison environment.

Standards: Identify conditions that indicate a quality deficiency exists, prepare the appropriate report form, and identify and retain QDR exhibits that had been disposed of.

Performance Steps

NOTE: Follow steps 1 through 9 for all equipment except aviation equipment. For aviation equipment, follow steps 10 through 17.

1. Identify one or more conditions that indicate a quality deficiency existed.
 - a. A condition in or with the equipment dangerous to people, other equipment, or the mission.
 - b. An item or equipment that does not work right or lasts as long as it should have because of bad design or materials.
 - c. Items that are not within the approved equipment specifications.
 - d. Low-quality workmanship.
 - e. Dangerous situations due to incorrect or missing data.
 - f. Maintenance problems.
 - g. Conditions that prevents use of the equipment.
 - h. Repeat problems that take a lot of time with no solutions in sight.
 - i. Problems requested to be reported by the national maintenance point (NMP).
 - j. Corrosion problems in or on parts, components, assemblies, weapon systems, and/or equipment.
2. Identify defect as a Category I or Category II deficiency.
 - a. Identify as a Category 1 deficiency any defect that--
 - (1) May have caused death, injury, or severe job illness.
 - (2) Would have caused loss or major damage to a weapon system.
 - (3) Would have critically restricted the combat readiness capabilities of the unit.
 - b. Identify any defect as Category II deficiency that does not meet the criteria for a Category I deficiency.
3. Prepare appropriate QDR for Category I or Category II.
 - a. Prepare Category I report in message format copy of SF Form 368 in accordance with DA Pamphlet 750-8.
 - b. Prepare Category II report on SF Form 368 in accordance with DA Pamphlet 750-8.
4. Forward SF Form 368 to the major subordinate command (MSC) within 48 hours (Category I deficiencies) or 5 working days (Category II deficiencies) after the defect or problem was found.

NOTE: Category I reports may be phoned in or brought in for immediate assistance, with message following within the 48-hour time frame.

NOTE: The MSC acknowledges receipt and begins screening stocks within 24 hours of the report.
5. Files one copy of the SF Form 368 until the Army screening point closes the case.

Performance Steps

6. Sends one copy of the SF Form 368 to the support maintenance activity.
NOTE: Sent SF Form 368 even if--
 - a. Correspondence indicates the problem is known to exist.
 - b. Other units send in a QDR on the same problem.
7. Identify defective equipment as exhibits.
8. Retain QDR exhibits in accordance with DA Pamphlet 750-8.
9. Follow disposition instructions received from the MSC action office responsible for the exhibits.
NOTE: Follow steps 10 through 17 for preparation of QDRs on aviation equipment.
10. Identify any of the following conditions that indicate an aviation quality deficiency exists in accordance with DA Pamphlet 738-751, Chapter 3.
 - a. A condition involving personnel safety or safety of flight (SOF) as defined in AR 95-1.
 - b. Suspected or confirmed materiel failure that causes a Class A, B, C, D, or E aircraft mishap.
 - c. Materiel failure or fault that would cause a hazard to personnel or equipment or hinder safe completion of the mission.
 - d. Equipment did not work properly because of bad design and/or materiel or low-quality workmanship during manufacture, modification, conversion, repair, overhaul, or rebuild.
 - e. Environmental conditions that cause the failure of aircraft or aviation associated equipment, to include mission related equipment, components and modules, repair parts, systems, and/or subsystems.
 - f. During initial test or use, found a defective stock funding of depot level repairables (SFDLR) item, and such defect was not caused by user accident, misuse, improper installation, and/or operation, unauthorized repair, or alteration.
11. Identify deficiencies as Category I or Category II.
 - a. Identify any of the following as a Category I deficiency.
 - (1) An unsafe condition, operation, or maintenance procedure for aircraft, mission related equipment, component and module, or repair part whose use was critical to airworthiness.
 - (2) Any failure that could be expected to cause loss of the aircraft and/or serious injuries to the aircrew or ground personnel.
 - (3) The reason for failure, identified or suspected, did not provide enough warning for the aircrew to complete a safe landing, and it was reasonable to assume that the problem could be present in other aircraft of the mission, design, and series (MDS).
 - (4) Incorrect or missing data in technical publications that may have caused a hazardous operational or maintenance problem.
 - b. Identify as a Category II deficiency any defect that did not meet the criteria for a Category I deficiency.
12. Prepare SF Form 368 for Category I or Category II deficiency in accordance with DA Pamphlet 738-751, Chapter 3.
13. Submit a Category I or Category II report in accordance with DA Pamphlet 738-751.
14. Distribute file copies of the SF Form 368 in accordance with DA Pamphlet 738-751.
NOTE: Sent SF Form 368 even if --
 - a. Manufacturer representatives have shown that they are aware of the problem.
 - b. Another unit within your command has already sent a deficiency report on the same problem.

Performance Steps

15. Identify defective equipment as exhibits.
16. Receive acknowledgment of receipt of Category I report within 48 hours or Category II report within 7 days from Aviation and Missile Command (AMCOM). The acknowledgement included the disposition instructions for exhibits.
17. Follow disposition instructions received from the AMCOM action office for the exhibits.

Performance Measures

NOTE: Followed steps 1 through 9 for all equipment except aviation equipment. For aviation equipment, followed steps 10 through 17.

	<u>GO</u>	<u>NO-GO</u>
1. Identified one or more conditions that indicated a quality deficiency existed.	—	—
2. Identified defect as a Category I or Category II deficiency.	—	—
3. Prepared appropriate QDR for Category I or Category II.	—	—
4. Forwarded SF Form 368 to the major subordinate command (MSC) within 48 hours (Category I deficiencies) or 5 working days (Category II deficiencies) after the defect or problem was found.	—	—
5. Kept one copy of the SF Form 368 until the Army screening point closed the case.	—	—
6. Sent one copy of the SF Form 368 to the support maintenance activity.	—	—
7. Identified defective equipment as exhibits.	—	—
8. Retained QDR exhibits in accordance with DA Pamphlet 750-8.	—	—
9. Followed disposition instructions received from the MSC action office responsible for the exhibits.	—	—

NOTE: Followed steps 10 through 17 for preparation of QDRs on aviation equipment.

10. Identified any of the following conditions that indicated an aviation quality deficiency existed in accordance with DA Pamphlet 738-751, Chapter 3.	—	—
11. Identified deficiencies as Category I or Category II.	—	—
12. Prepared SF Form 368 for Category I or Category II deficiency in accordance with DA Pamphlet 738-751, Chapter 3.	—	—
13. Submitted a Category I or Category II report in accordance with DA Pamphlet 738-751.	—	—
14. Distributed file copies of the SF Form 368 in accordance with DA Pamphlet 738-751.	—	—
15. Identified defective equipment as exhibits.	—	—
16. Received acknowledgment of receipt of Category I report within 48 hours or Category II report within 7 days from Aviation and Missile Command (AMCOM). The acknowledgement included the disposition instructions for exhibits.	—	—
17. Followed disposition instructions received from the AMCOM action office for the exhibits.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed (P). Score the Soldier NO-GO if any performance measure is failed (F). If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

AR 725-50
AR 95-1
DA FORM 2404
DA FORM 2407
DA PAM 750-8
DD FORM 1575
DD FORM 2332
SF FORM 368
TB 43-0001-SERIES

Related

AR 702-7
AR 702-7-1
DA PAM 738-751

**Submit Equipment Improvement Recommendation (EIR)
093-SSG-3005**

Conditions: You have found a better way to repair a piece of electronic equipment. In a contemporary operational environment (COE), submit an equipment improvement recommendation (EIR) given the following: Army regulation (AR) 672-20, Department of the Army (DA) Pamphlet 750-8, and Standard Form (SF) Form 368 (Product Quality Deficiency Report). This task can be performed in a field or garrison environment.

Standards: Prepare the appropriate report forms for a recommended equipment improvement and check AR 672-20 to see if the EIR qualified as a suggestion.

Performance Steps

1. Identify conditions that indicate a need to improve the performance and/or maintenance of equipment.
 - a. A condition in or with the equipment that was dangerous to people, other equipment, or the mission.
 - b. An item or piece of equipment that did not work right or last as long as it should because of bad design or materials.
 - c. Items that were not within the approved equipment specifications.
 - d. Low quality workmanship.
 - e. Dangerous situations due to incorrect or missing data.
 - f. Maintenance problems.
 - g. Conditions that prevented using the equipment.
 - h. Repeated problems that took a lot of time with no solutions in sight.
 - i. Problems requested to be reported by the national maintenance point (NMP).
2. Report Category I or Category II recommendations for improvements.
 - a. Reports Category I recommendations for any of the following improvements.
 - (1) Improvements that prevent death, injury, or severe job illness.
 - (2) Improvements that prevent loss or major damage to equipment.
 - (3) Improvements that will affect the combat readiness capabilities of the unit.
 - b. Reports as a Category II recommendation any recommendation that does not meet the criteria of a Category I equipment improvement recommendation.
3. Send in a Category I or Category II equipment improvement recommendation.
 - a. Prepares SF Form 368 in accordance with DA Pamphlet 750-8, Chapter 10.
 - b. Sends a message within 48 hours (Category I recommendation) or 5 days (Category II recommendation) after defect or problem was found.
 - c. Keeps one copy of the SF Form 368 until the Army screening point closed the case.
 - d. Sends one copy of the SF Form 368 to the support maintenance activity.
4. Check AR 672-20 to see if the EIR qualified as a suggestion.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Identified conditions that indicated a need to improve the performance and/or maintenance of equipment.	—	—
2. Reported Category I or Category II recommendations for improvements.	—	—
3. Sent in a Category I or Category II equipment improvement recommendation.	—	—
4. Checked AR 672-20 to see if the EIR qualified as a suggestion.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed (P). Score the Soldier NO-GO if any performance measure is failed (F). If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

AR 672-20
DA PAM 750-8
SF FORM 368

Related

DA PAM 738-751

Plan Work Flow
093-SSG-3006

Conditions: In a contemporary operational environment (COE), given Department of the Army (DA) Form 2407s (Maintenance Request) or DA Form 5990-Es (Maintenance Request [EGA])/job packets with various issue priority designators, a visible index file showing the shop workload summary, and Technical Manual (TM) 38-L09-11. This task can be performed in a field or garrison environment.

Standards: Distribute all DA Form 2407s or DA Form 5990-Es/job packets by issue priority designators, highest priorities first. Ensure the visible index file was up to date, legible, and complete according to TM 38-L09-11.

Performance Steps

1. Arrange the DA Form 2407s/DA Form 5990-Es/job packets by issue priority designators, highest priorities first.
2. Use the DA Form 2407s/DA Form 5990-Es/job packets in the same order to assign jobs to repairers.
3. Monitor work as the jobs went through the repair process.
4. Assign new jobs to the repairers as they completed those assigned.
5. Review all paperwork within the job packets for completeness.
6. Update the visible index file.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Arranged the DA Form 2407s/DA Form 5990-Es/job packets by issue priority designators, highest priorities first.	—	—
2. Used the DA Form 2407s/DA Form 5990-Es/job packets in the same order to assign jobs to repairers.	—	—
3. Monitored work as the jobs went through the repair process.	—	—
4. Assigned new jobs to the repairers as they completed those assigned.	—	—
5. Reviewed all paperwork within the job packets for completeness.	—	—
6. Updated the visible index file.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed (P). Score the Soldier NO-GO if any performance measure is failed (F). If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

DA FORM 2407
DA FORM 5990-E
TM 38-L09-11

Related

DA FORM 2407-1
DA PAM 738-751
DA PAM 750-8
FM 4-30.3

Direct Performance of Preventive Maintenance
093-SSG-3007

Conditions: In a contemporary operational environment (COE), given personnel to perform preventive maintenance checks and services (PMCS), Department of the Army (DA) Form 2408-14 (Uncorrected Fault Record), DA Form 2404 (Equipment Inspection and Maintenance Worksheet) or DA Form 5988-E (Equipment Inspection Maintenance Worksheet [EGA]), Department of Defense (DD) Form 314 (Preventive Maintenance Schedule and Record), DA Pamphlet 750-8, DA Pamphlet 738-751, equipment, and vehicle -10 series technical manuals (TMs). This task can be performed in a field or garrison under normal, extreme heat, and extreme cold environment conditions.

NOTE: All the information from DA Form 2408-14 is now included in DA Form 5988-E.

Standards: Perform all PMCS according to the applicable -10 series TMs. Complete DA Form 2404 or DA Form 5988-E and DA Form 2408-14 and DD Form 314 according to DA Pamphlet 750-8 or DA Pamphlet 738-751.

Performance Steps

1. Coordinate with the motor pool section prior to performing section/shop vehicle PMCS.
2. Review the DD Form 314 and the applicable -10 series TMs to conduct weekly vehicle PMCS.
 - a. Identify which PMCS service operation must be performed.
 - b. Identify each piece of equipment for which operation under conditions inspection must be performed.
 - (1) Operation under usual conditions.
 - (2) Operation under unusual conditions.
 - (a) Operation in extreme cold weather.
 - (b) Operation in extreme heat weather.
 - (c) Operation in dusty or sandy areas.
 - (d) Operation under rainy or humid conditions.
3. Identify hazards to the environment before starting PMCS.
4. Assign jobs and ensure that repairers know what PMCS must be performed.
5. Spot-check the work being performed and ensure that the repairers are using the applicable TMs.
6. Assess the probability of environmental damage/violations using environmental risk assessment matrices during PMCS.
7. Spot-check corrective actions taken for all defects listed on DA Form 2404.
8. Coordinate with the maintenance sergeant to repair vehicles requiring services beyond the driver's responsibility.
 - a. Ensure the repairer placed a drip pan under any equipment leaking fluids onto the ground.
 - b. Make sure parts needed for repair that are not available are entered on DA Form 5988-E or DA Form 2408-14.
9. Check the DD Form 314 for correctness.
10. Report vehicle status to section/shop supervisor.
11. Brief the chain of command on any observed environmental potentially high-risk areas during PMCS.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Coordinated with the motor pool section prior to performing section/shop vehicle PMCS.	—	—
2. Reviewed the DD Form 314 and the applicable -10 series TMs to conduct weekly vehicle PMCS.	—	—
3. Identified hazards to the environment before starting PMCS.	—	—
4. Assigned jobs and ensured that repairers knew what PMCS must be performed.	—	—
5. Spot-checked the work being performed and ensured that the repairers were using the applicable TMs.	—	—
6. Assessed the probability of environmental damage/violations using environmental risk assessment matrices during PMCS.	—	—
7. Spot-checked corrective actions taken for all defects listed on DA Form 2404.	—	—
8. Coordinated with the maintenance sergeant to repair vehicles requiring services beyond the driver's responsibility.	—	—
9. Checked the DD Form 314 for correctness.	—	—
10. Reported vehicle status to section/shop supervisor.	—	—
11. Briefed the chain of command on any observed environmental potentially high-risk areas during PMCS.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed (P). Score the Soldier NO-GO if any performance measure is failed (F). If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

DA FORM 2404
 DA FORM 2408-14
 DA FORM 5988-E
 DA PAM 738-751
 DA PAM 750-8
 DD FORM 314

Related

AR 200-1
 FM 4-30.3
 TC 3-34.489

Provide Technical Assistance to Repairers**093-SSG-3008**

Conditions: A repairer in the electronics/avionics maintenance shop requires technical assistance. In a contemporary operational environment (COE), given Department of the Army (DA) Form 2404 (Equipment Inspection and Maintenance Worksheet) or DA Form 5988-E (Equipment Inspection Maintenance Worksheet [EGA]), DA Form 2407 (Maintenance Request) or DA Form 5990-E (Maintenance Request [EGA]), DA Pamphlet 750-8, DA Pamphlet 738-751, and Technical Bulletin (TB) 385-4, provide needed assistance to the repairer. This task can be performed in a field or garrison environment.

Standards: Provide technical assistance that will enable the repairer to perform repair procedures correctly.

Performance Steps

1. Determine the type of assistance needed by the repairer, such as isolating the malfunction, repairing the malfunction, or making proper entries on the paperwork.
2. Review DA Form 2404 or DA Form 5988-E and DA Form 2407 or DA Form 5990-E to determine reason for maintenance or repair.
3. Verify repairer observes WARNING, CAUTION, and NOTE statements in applicable references and observed all safety precautions.
4. Review the repair procedures performed by the repairer.
5. Provide technical assistance to the repairer.
6. Counsel repairer on areas of technical weakness.
7. Recommend technical material and training to increase repairer's expertise.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Determined the type of assistance needed by the repairer, such as isolating the malfunction, repairing the malfunction, or making proper entries on the paperwork.	—	—
2. Reviewed DA Form 2404 or DA Form 5988-E and DA Form 2407 or DA Form 5990-E to determine reason for maintenance or repair.	—	—
3. Verified repairer observed WARNING, CAUTION, and NOTE statements in applicable references and observed all safety precautions.	—	—
4. Reviewed the repair procedures performed by the repairer.	—	—
5. Provided technical assistance to the repairer.	—	—
6. Counseled repairer on areas of technical weakness.	—	—
7. Recommended technical material and training to increase repairer's expertise.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed (P). Score the Soldier NO-GO if any performance measure is failed (F). If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

DA FORM 2404
DA FORM 2407
DA FORM 5988-E
DA FORM 5990-E
DA PAM 738-751
DA PAM 750-8
TB 385-4

Related

Perform Initial Inspections
093-SSG-3009

Conditions: In a contemporary operational environment (COE), given applicable technical manuals (TMs), the equipment to be inspected, Department of the Army (DA) Form 2404 (Equipment Inspection and Maintenance Worksheet) or DA Form 5988-E (Equipment Inspection Maintenance Worksheet [EGA]), DA Form 2407 (Maintenance Request) or DA Form 5990-E (Maintenance Request [EGA]), DA Pamphlet 750-8, and DA Pamphlet 738-751. This task can be performed in a field or garrison environment.

Standards: Perform the initial inspection, ensuring that the equipment was repairable according to the applicable TMs; identify all defects, and complete all maintenance forms according to DA Pamphlet 750-8 or DA Pamphlet 738-751.

Performance Steps

1. Check submitted paperwork for completeness and accuracy.
2. Inspect the equipment for physical damage and determined if it is feasible to repair the equipment.
3. Ensure that operator maintenance have been performed on the equipment.
4. Inventory the equipment to ensure that it is complete.
5. Ensure that all modification work orders (MWOs) are complete.
6. Perform self-tests or checks on the equipment, if necessary.
7. Record all defects or reasons for rejection the equipment on DA Form 2404 or DA Form 5988-E.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Checked submitted paperwork for completeness and accuracy.	___	___
2. Inspected the equipment for physical damage and determined if it was feasible to repair the equipment.	___	___
3. Ensured that operator maintenance had been performed on the equipment.	___	___
4. Inventoried the equipment to ensure that it was complete.	___	___
5. Ensured that all modification work orders (MWOs) had been completed.	___	___
6. Performed self-tests or checks on the equipment, if necessary.	___	___
7. Recorded all defects or reasons for rejecting the equipment on DA Form 2404 or DA Form 5988-E.	___	___

Evaluation Guidance: Score the Soldier GO if all performance measures are passed (P). Score the Soldier NO-GO if any performance measure is failed (F). If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

DA FORM 2404
DA FORM 2407
DA FORM 5988-E
DA FORM 5990-E
DA PAM 738-751
DA PAM 750-8

Related

DA PAM 750-1
FM 4-30.3
TM 750-245-4

Perform Final Inspections
093-SSG-3010

Conditions: In a contemporary operational environment (COE), given applicable technical manuals (TMs), equipment to be inspected, Department of the Army (DA) Form 2404 (Equipment Inspection and Maintenance Worksheet) or DA Form 5988-E (Equipment Inspection Maintenance Worksheet [EGA]), DA Form 2407 (Maintenance Request) or DA Form 5990-E (Maintenance Request [EGA]), DA Pamphlet 750-8, and DA Pamphlet 738-751. This task can be performed in a field or garrison environment.

Standards: Perform final inspection. Ensure that equipment was complete according to applicable TMs, all defects identified in previous inspections had been corrected, any additional defects had been recorded on DA Form 2404 or DA Form 5988-E, and all forms had been completed according to DA Pamphlet 750-8 or DA Pamphlet 738-751.

Performance Steps

1. Check the equipment to determine if it is complete and that all defects found on the initial and in-process inspections are complete.
2. Ensure that all forms and records are complete and correct.
3. Record any additional defects on DA Form 2404 or DA Form 5988-E and return the equipment to production control.
4. Sign and date the DA Form 2407 or DA Form 5990-E when the equipment passes its final inspection.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Checked the equipment to determine if it was complete and that all defects found on the initial and in-process inspections had been corrected.	—	—
2. Ensured that all forms and records were complete and correct.	—	—
3. Recorded any additional defects on DA Form 2404 or DA Form 5988-E and returned the equipment to production control.	—	—
4. Signed and dated DA Form 2407 or DA Form 5990-E when the equipment passed inspection.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed (P). Score the Soldier NO-GO if any performance measure is failed (F). If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

DA FORM 2404
DA FORM 2407
DA FORM 5988-E
DA FORM 5990-E
DA PAM 738-751
DA PAM 750-8

Related

DA PAM 750-1
FM 4-30.3
TM 750-245-4

Write a Standing Operating Procedure (SOP)**093-SSG-3011**

Conditions: In a contemporary operational environment (COE), given the unit's old SOP, Army regulation (AR) 750-1, Department of the Army (DA) Pamphlet 600-67, DA Pamphlet 750-3, Field Manual (FM) 4-30.3, FM 5-0, and Training Circular (TC) 43-4. This task can be performed in a field or garrison environment.

Standards: Write a new SOP that is reviewed and approved by the supervisor/commander. Implement all recommended changes.

Performance Steps

1. Develop a basic SOP format to ensure it meets organization/element specific needs and/or requirements for the maintenance facility.
 - a. Purpose statement.
 - b. Scope statement.
 - c. Organization statement.
 - d. Conformity statement.
 - e. References.
 - f. Annexes.
2. Include guidance in the SOP on the following as they pertain only to the maintenance facility.
 - a. Personnel administration.
 - b. Security.
 - c. Security and intelligence.
 - d. Area security.
 - e. Physical security of weapons and property.
 - f. Safety program.
 - g. Maintenance operations.
 - h. Management of hand receipts.
 - i. Standard warnings.
 - j. Alert procedures.
 - k. Chemical, biological, radiological, nuclear (CBRN) warfare.
 - l. Defense against nuclear attack.
 - m. Logistics.
 - n. Motor pool operations.
 - o. Motor movement and traffic control.
 - p. Tactical operations.
3. Ensure that all references used are current.
4. Staff the draft through the supervisor/commander.
5. Implement any approved SOP changes.
6. Obtain supervisor/commander signature on final version of SOP.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Developed a basic SOP format to ensure it met organization/element specific needs and/or requirements for the maintenance facility.	—	—
2. Included guidance in the SOP on the following as they pertained only to the maintenance facility.	—	—
3. Ensured that all references used were current.	—	—
4. Staffed the draft through the supervisor/commander.	—	—
5. Implemented any approved SOP changes.	—	—
6. Obtained supervisor/commander signature on final version of SOP.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed (P). Score the Soldier NO-GO if any performance measure is failed (F). If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

- AR 750-1
- DA PAM 600-67
- DA PAM 750-3
- FM 4-30.3
- FM 5-0
- TC 43-4

Related

**Perform In-Process Inspections
093-SSG-3012**

Conditions: In a contemporary operational environment, given applicable inspection forms and technical manuals (TMs), DA Pamphlet 750-8, and DA Pamphlet 738-751, conducts in-process inspection of a repairer performing repairs on equipment. This task can be performed in a field or garrison environment.

Standards: Perform in-process inspection. Ensure that the proper tools and equipment were being used and all safety rules and warnings were being followed according to applicable TMs. Complete all forms according to DA Pamphlet 750-8 or DA Pamphlet 738-751 and report inspection results.

Performance Steps

1. Use the proper tools and equipment during in-process inspection.
2. Use the proper technical manual repair procedures during in-process inspection.
3. Ensure that authorized repair parts and supplies are available.
4. Ensure that only authorize repairs are performed on the equipment.
5. Ensure that only authorize personnel make the repairs.
6. Ensure that all safety rules and warnings are used.
7. Ensure that all forms are filled out correctly.
8. Make an oral or written report of the inspection to the repair section chief and the quality control section supervisor.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Ensured that the proper tools and equipment were used.	—	—
2. Ensured that the proper repair procedures were followed.	—	—
3. Ensured that only authorized repair parts and supplies were used.	—	—
4. Ensured that only authorized repairs were performed on the equipment.	—	—
5. Ensured that only authorized personnel made the repairs.	—	—
6. Ensured that all safety rules and warnings were followed.	—	—
7. Ensured that all forms were filled out correctly.	—	—
8. Made an oral or written report of the inspection to the repair section chief and the quality control section supervisor.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed (P). Score the Soldier NO-GO if any performance measure is failed (F). If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required
DA PAM 738-751
DA PAM 750-8

Related
FM 4-30.3
TM 750-245-4

Maintain Property Accountability
093-SSG-3013

Conditions: In a contemporary operational environment (COE), perform this task given a quarterly review of all hand receipts with hand receipt holders in the maintenance section/shop, issued new equipment, and tagged unserviceable equipment for turn-in, Army regulation (AR) 25-400-2, AR 710-2, Department of the Army (DA) Form 2062 (Hand Receipt/Annex Number), DA Pamphlet 710-2-1, hand receipts, applicable equipment, and applicable technical manuals (TMs). This task can be performed in a field or garrison environment.

Standards: Issue supplies and equipment to hand receipt holders while maintaining property and supply accountability.

Performance Steps

1. Notify hand receipt holders of quarterly inventory.
2. Review file copies of all hand receipts and signature cards for each maintenance section/shop.
3. Assemble all new equipment to be issued out into separate groups for issuing to hand receipt holders during the quarterly inventory.
4. Issue new equipment to hand receipt holders before inventorying.
5. Inventory hand receipts.
6. Update each hand receipt holder's equipment shortage list, as required.
7. Ensure that only authorized personnel on the hand receipt holder signature card signs the hand receipt.
8. Ensure that all forms were filled out correctly.
9. File hand receipts in appropriate hand receipt holder files.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Notified hand receipt holders of quarterly inventory.	—	—
2. Reviewed file copies of all hand receipts and signature cards for each maintenance section/shop.	—	—
3. Assembled all new equipment to be issued into separate groups for issuing to hand receipt holders during the quarterly inventory.	—	—
4. Issued new equipment to hand receipt holders before inventorying.	—	—
5. Inventoried hand receipts.	—	—
6. Updated each hand receipt holder's equipment shortage list, as needed.	—	—
7. Ensured that only authorized personnel on the hand receipt holder signature card signed the hand receipt.	—	—
8. Ensured that all forms were filled out correctly.	—	—
9. Filed hand receipts in appropriate hand receipt holder files.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed (P). Score the Soldier NO-GO if any performance measure is failed (F). If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

AR 25-400-2
AR 710-2
DA FORM 2062
DA PAM 710-2-1

Related

Assess Battlefield Damage
093-SSG-3014

Conditions: In a contemporary operational environment (COE), supervise the performance of an organizational maintenance team or a field maintenance support team (MST) performing battlefield assessment. Given a disabled vehicle or equipment; repairers to assess the equipment; applicable -10, -20, and -30-series technical manuals (TMs), repair parts manuals, and tool kits; Department of the Army (DA) Form 2404 (Equipment Inspection and Maintenance Worksheet) or DA Form 5988-E (Equipment Inspection Maintenance Worksheet [EGA]), DA Form 2407 (Maintenance Request) or DA Form 5990-E (Maintenance Request [EGA]), DA Pamphlet 750-8, DA Pamphlet 738-751, Department of Defense (DD) Form 1577 (Unserviceable (Condemned) Tag - Materiel), DD Form 1577-1 (Unserviceable (Condemned) Label - Materiel), DD Form 1577-2 (Unserviceable (Repairable) Tag - Materiel), DD Form 1577-3 (Unserviceable (Repairable) Label - Materiel), Field Manual (FM) 4-30.3, and FM 4-30.31. This task can be performed in a field or garrison environment.

Standards: Supervise the organizational maintenance team or direct support (DS) MST that identified and performed repairs needed to restore a disabled piece of equipment to the minimum essential combat capabilities necessary to support a specific combat mission or to enable the equipment to self-recover. Complete all required paperwork according to DA Pamphlet 750-8, DA Pamphlet 738-751, FM 4-30.3, and FM 4-30.31.

Performance Steps

1. Brief the organizational maintenance team or DS MST on the upcoming mission to assess battlefield damage. (FM 4-30.3)
 - a. Identify point of contact at unit/site.
 - b. Identify the equipment to be assessed for battlefield damage.
 - c. Identify the equipment needed for the upcoming mission.
 - d. Explain logistics support.
 - e. Plan primary and secondary routes to unit.
 - f. Ensure team receives a copy of supported units' radio frequencies and call signs.
2. Monitor assigned personnel to the team according to their qualifications and availability to meet the mission needs.
3. Arrange for transportation to the site.
4. Ensure that the proper battlefield assessment procedures are followed.
 - a. Review the operator/crew assessment and the safety checks made.
 - b. Interview the operator/crew, if available.
 - c. Conduct visual inspection.
 - d. Perform self-test.
 - e. Test equipment with the organizational/DS maintenance equipment.
5. Ensure the MST provides technical assistance to the organizational maintenance team as required.
6. Ensure the MST prioritizes repairs according to battlefield damage time guidelines.
7. Ensure that all required maintenance forms are completed in accordance with DA Pamphlet 750-8 and DA Pamphlet 738-751.
 - a. DA Form 2404 or DA Form 5988-E.
 - b. DA Form 2407 or DA Form 5990-E.
 - c. DD Form 1577.
 - d. DD Form 1577-1.
 - e. DD Form 1577-2.
 - f. DD Form 1577-3.
8. Ensure a system assessment summary is completed and submitted properly.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Briefed the organizational maintenance team or DS MST on the upcoming mission to assess battlefield damage. (FM 4-30.3)	—	—
2. Monitored assigned personnel to the team according to their qualifications and availability to meet the mission needs.	—	—
3. Arranged for transportation to the site.	—	—
4. Ensured that the proper battlefield assessment procedures were followed.	—	—
5. Ensured the MST provided technical assistance to the organizational maintenance team, as required.	—	—
6. Ensured the MST prioritized repairs according to battlefield damage time guidelines.	—	—
7. Ensured that all required maintenance forms were filled out correctly in accordance with DA Pamphlet 750-8 and DA Pamphlet 738-751.	—	—
8. Ensured a system assessment summary was completed correctly and submitted.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed (P). Score the Soldier NO-GO if any performance measure is failed (F). If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

DA FORM 2404
 DA FORM 2407
 DA FORM 5988-E
 DA FORM 5990-E
 DA PAM 738-751
 DA PAM 750-8
 DD FORM 1577
 DD FORM 1577-1
 DD FORM 1577-2
 DD FORM 1577-3
 FM 4-30.3
 FM 4-30.31

Related

TM 750-245-4

**Manage Demand Supported Repair Parts Listed on the Prescribed Load List (PLL)
093-SSG-3015**

Conditions: In a contemporary operational environment (COE), conduct this task during the normal performance of your daily duties within an electronics /avionics maintenance shop. Manage demand supported repair parts for an electronics/avionics maintenance shop given Army regulation (AR) 710-2, Department of the Army (DA) Pamphlet 710-2-1, DA Form 2063-R (Prescribed Load List), DA Form 2064 (Document Register for Supply Actions), DA Form 3318 (Records of Demands-Title Insert), copy of Federal Logistics (FEDLOG) discs, unit's initial mandatory parts list (IMPL), unit's prescribed load list (PLL), and technical parts manuals. This task can be performed in a field or garrison environment.

Standards: Complete review and correct the prescribed load list (PLL) in accordance with the equipment technical parts manual, AR 710-2, and DA Pamphlet 710-2-1 for the electronics/avionics repair parts listed on the PLL.

Performance Steps

1. Review the unit's PLL for electronics/avionics maintenance shop's repair parts.
2. Verify that the electronics/avionics shop's repair parts qualify to be on the PLL list.
3. Review demand supported unit maintenance repair parts documents and ensure they meet the following:
 - a. Three demands made within the control period of 180 days for Active Army.
 - b. Parts were essential and had a maintenance use code of "O" (except for non-tactical telecommunications systems, air traffic control, or lifesaving systems).
4. Review non-demand supported unit maintenance repair parts documents and ensure they meet the following:
 - a. Approval by the first general officer staff level in the chain of command required in order to stock.
 - b. Parts essential, with a maintenance use code of "O" (except for non-tactical telecommunications systems, air traffic control, or lifesaving systems).
5. Review the initial stockage of repair parts for newly introduced end items as identified by the Support List Allowance Card (SLAC) deck.
 - a. The stockage level will not be reduced the first year.
 - b. If the end item is under warranty, the first year (as stipulated above) will begin upon expiration of warranty.
6. Review the mandatory stockage of repair parts as identified in the IMPL.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Reviewed the unit's PLL for electronics/avionics maintenance shop's repair parts.	—	—
2. Verified that the electronics/avionics shop's repair parts qualify to be on the PLL list.	—	—
3. Reviewed demand supported unit maintenance repair parts documents and ensured they met the following:	—	—
4. Reviewed non-demand supported unit maintenance repair parts documents and ensured they met the following:	—	—
5. Reviewed the initial stockage of repair parts for newly introduced end items as identified by the SLAC deck.	—	—
6. Reviewed the mandatory stockage of repair parts as identified in the IMPL.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed (P). Score the Soldier NO-GO if any performance measure is failed (F). If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References**Required**

AR 710-2
DA FORM 2063-R
DA FORM 2064
DA FORM 3318
DA PAM 710-2-1
FEDLOG

Related

FM 4-30.3

Monitor Bench Stock Operations
093-SSG-3016

Conditions: In a contemporary operational environment (COE), perform this task given Army regulation (AR) 710-2, Department of the Army (DA) Pamphlet 710-2-2, and a copy of Federal Logistics (FEDLOG) discs. This task can be performed in a field or garrison environment.

Standards: Maintain bench stock in accordance with AR 710-2 and DA Pamphlet 710-2-2.

Performance Steps

1. Ensure that the bench stock items are made up of low-cost expendable items.
2. Ensure the bench stock is stored near the work area.
3. Ensure that bench stock replenishment tags and lists are maintain with the bench stock.
4. Ensure that bench stock orders are on a prescribed schedule or as needed.
5. Ensure that the bench stock items are ordered under the correct urgency of need designator (UND).
6. Review the bench stock items list semiannually.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Ensured that the bench stock was made up of low-cost expendable items.	—	—
2. Ensured that the bench stock was stored near the work area.	—	—
3. Ensured that bench stock replenishment tags and lists were maintained with the bench stock.	—	—
4. Ensured that bench stock was ordered on a prescribed schedule or as needed.	—	—
5. Ensured that the bench stock was ordered under the correct urgency of need designator (UND).	—	—
6. Ensured that the bench stock was reviewed semiannually.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed (P). Score the Soldier NO-GO if any performance measure is failed (F). If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required
AR 710-2
DA PAM 710-2-2
FEDLOG

Related

**Monitor Shop Stock Operations
093-SSG-3017**

Conditions: In a contemporary operational environment (COE), perform this task given a current copy of the shop stock list, Army regulation AR 710-2, Department of the Army (DA) Pamphlet 710-2-2, and a copy of Federal Logistics (FEDLOG) discs. This task can be performed in a field or garrison environment.

Standards: Maintain the shop stock according to AR 710-2 and DA Pamphlet 710-2-2.

Performance Steps

1. Ensure all repair parts and consumables listed on the shop stock meet the criteria listed in AR 710-2 and DA Pamphlet 710-2-2.
2. Ensure each item is demand supported.
3. Ensure each item's stockage level is developed in accordance with DA Pamphlet 710-2-2.
4. Ensure that excess stocks are turned in within 10 days of review.
5. Ensure that replenishment of stocks' is based on the reorder point (ROP).
6. Ensure a temporary hand-receipted is issued for the controlled cryptographic item (CCI) repair parts required by the communications security (COMSEC) maintenance activities for diagnostic purpose.
7. Ensure an inventory of the shop stock items are scheduled for the review during the correct reviewing period.
8. Review the supply support activity (SSA) shop stock list to see if the unit commander has signed it.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Ensured repair parts and consumables listed on the shop stock met the criteria listed in AR 710-2 and DA Pamphlet 710-2-2.	—	—
2. Ensured each item was demand supported.	—	—
3. Ensured each item's stockage levels were developed in accordance with DA Pamphlet 710-2-2.	—	—
4. Ensured excess stocks were turned in within 10 days of review.	—	—
5. Ensured replenishment of stock was based on the reorder point (ROP).	—	—
6. Ensured a temporary hand-receipted was issued for the controlled cryptographic item (CCI) repair parts required by the communications security (COMSEC) maintenance activities for diagnostic purpose.	—	—
7. Ensured an inventory of the shop stock items were scheduled for the review during the correct reviewing period.	—	—
8. Reviewed the supply support activity (SSA) shop stock list to see if the unit commander had signed it.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed (P). Score the Soldier NO-GO if any performance measure is failed (F). If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

AR 710-2
DA PAM 710-2-2
FEDLOG

Related

**Inspect Maintenance Support Team Operations
093-SSG-3019**

Conditions: In a contemporary operational environment (COE), perform this task given the necessary personnel to perform an electronics/avionics maintenance support team (MST) operation, Department of the Army (DA) Pamphlet 611-21, DA Pamphlet 750-8, DA Pamphlet 738-751, and Field Manual (FM) 4-30.3. This task can be performed in a field or garrison environment.

Standards: Ensure the correct military occupational specialty holders were assigned to a support team, briefed, and provided with transportation.

Performance Steps

1. Monitor assigned personnel according to their qualifications and availability.
2. Arrange for transportation to the site.
3. Brief the support team on mission requirements.
 - a. Identify point of contact at unit.
 - b. Identify equipment needed for the support mission.
 - c. Explain logistics support.
 - d. Plan primary and secondary routes to unit.
 - e. Ensure team received a copy of supported units' radio frequencies and call signs.
4. Provide technical assistance to the support team as required.
5. Ensure that all maintenance forms are filled out correctly.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Monitored assigned personnel according to their qualifications and availability.	—	—
2. Arranged for transportation to the site.	—	—
3. Briefed the support team on mission requirements.	—	—
4. Provided technical assistance to the support team as required.	—	—
5. Ensured that all maintenance forms were filled out correctly.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed (P). Score the Soldier NO-GO if any performance measure is failed (F). If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required	Related
DA PAM 611-21	
DA PAM 738-751	
DA PAM 750-8	
FM 3-25.26	
FM 4-30.3	

Inspect Maintenance Reporting and Management Data

093-SSG-3020

Conditions: As a senior repairer, one of your responsibilities is to inspect the paperwork used in an electronics / avionics maintenance facility. In a contemporary operational environment (COE), you must inspect and manage all of the maintenance forms and records used in reporting the maintenance status of equipment repaired in the maintenance facility. If needed, the following forms, records, and publications will be available for each piece of equipment job-ordered: Department of the Army (DA) Form 2402 (Maintenance Tag), DA Form 2404 (Equipment Inspection and Maintenance Worksheet), DA Form 2405 (Maintenance Request Register), DA Form 2407 (Maintenance Request), DA Form 2407-1 (Maintenance Request Continuation Sheet), DA Form 2408-12 (Army Aviator's Flight Record), DA Form 2408-13 (Aircraft Status Information Record), DA Form 2408-13-1 (Aircraft Maintenance and Inspection Record), DA Form 2410 (Component Removal and Repair/Overhaul Record), Department of Defense (DD) Form 1574 (Serviceable Tag - Materiel), DD Form 1574-1 (Serviceable Label - Materiel), DD Form 1575 (Suspended Tag - Materiel), DD Form 1575-1 (Suspended Label - Materiel), DD Form 1576 (Test/Modification Tag - Materiel), DD Form 1576-1 (Test/Modification Label - Materiel), DD Form 1577 (Unserviceable (Condemned) Tag - Materiel), DD Form 1577-1 (Unserviceable (Condemned) Label - Materiel), DD Form 1577-2 (Unserviceable (Reparable) Tag - Materiel), DD Form 1577-3 (Unserviceable (Reparable) Label - Materiel), DA Pamphlet 750-8, and DA Pamphlet 738-751.

Standards: Inspect the electronics/avionics maintenance forms and records for errors and forms missing from the job packets.

Performance Steps

1. Locate closed-out and active job order packets within the electronics / avionics maintenance facility.
2. Match all job-ordered equipment serial numbers with closed-out and active job packets within the electronics / avionics maintenance facility.
3. Ensure that all required forms and records are inside the job order packets.
4. Verify that all forms and records within the job packets are properly completed.
5. Ensure that all listed discrepancies been corrected.
6. Ensure that all forms and reports are distributed or filed in accordance with DA pamphlets and Army regulations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Located closed-out and active job order packets within the electronics/avionics maintenance facility.	—	—
2. Matched all job-ordered equipment serial numbers with closed-out and active job packets within the electronics/avionics maintenance facility.	—	—
3. Ensured that all required forms and records were in the job order packets.	—	—
4. Verified that all forms and records within the job packets were properly completed.	—	—
5. Ensured that all discrepancies had been corrected.	—	—
6. Ensured that all forms and reports were distributed or filed in accordance with DA pamphlets and Army regulations.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed (P). Score the Soldier NO-GO if any performance measure is failed (F). If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References**Required**

DA FORM 2402
DA FORM 2404
DA FORM 2405
DA FORM 2407
DA FORM 2407-1
DA FORM 2408-12
DA FORM 2408-13
DA FORM 2408-13-1
DA FORM 2410
DA PAM 738-751
DA PAM 750-8
DD FORM 1574
DD FORM 1574-1
DD FORM 1575
DD FORM 1575-1
DD FORM 1576
DD FORM 1576-1
DD FORM 1577
DD FORM 1577-1
DD FORM 1577-2
DD FORM 1577-3

Related

FM 4-30.3
TM 38-L09-11

Review SAMS Reports
093-SSG-3021

Conditions: In a contemporary operational environment (COE), perform this task given Standard Army Maintenance System (SAMS) installed, completed set of required SAMS reports and forms, Automated Information System Manual (AISM) 25-L21-AHN-ZZZ-EM, AISM 25-L26-AHO-ZZZ-EM, Department of the Army (DA) Pamphlet 750-8, DA Pamphlet 738-751, and Field Manual (FM) 4-30.3.

NOTE: This task may be performed in a chemical, biological, radiological, and nuclear (CBRN) environment.

Standards: Review all required SAMS-1 reports and forms and correct discrepancies according to AISM 25-L21-AHN-ZZZ-EM and DA Pamphlet 750-8 or DA Pamphlet 738-751. File all reports properly and forward copies, as required.

Performance Steps

1. Ensure that the electronics/avionics maintenance operations are using all of the required SAMS-1 reports and forms.
2. Review all of the new copies of all SAMS-1 reports and forms needed to run the electronics/avionics maintenance operations.
3. Compare previous and newly printed SAMS-1 reports and forms for discrepancies.
4. Review the new SAMS-1 reports and forms for discrepancies.
5. Correct all identified discrepancies.
6. Ensure that all SAMS-1 reports and forms are distributed or filed in accordance with Army regulations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Ensured that all required SAMS-1 reports and forms required for electronics/avionics maintenance operations were being used.	—	—
2. Reviewed new copies of all SAMS-1 reports and forms needed to run the electronics/avionics maintenance operations.	—	—
3. Compared the previous SAMS-1 reports and forms with the newly printed reports and forms for discrepancies.	—	—
4. Reviewed the new SAMS-1 reports and forms for discrepancies.	—	—
5. Corrected all identified discrepancies.	—	—
6. Ensured that all SAMS-1 reports and forms were distributed or filed in accordance with Army regulations.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed (P). Score the Soldier NO-GO if any performance measure is failed (F). If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

AISM 25-L21-AHN-ZZZ-EM
AISM 25-L26-AHO-ZZZ-EM
DA PAM 738-751
DA PAM 750-8
FM 4-30.3

Related

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Chapter 4

Duty Position Tasks

4-1. MOSC 94M10. Troubleshoots radar and associated equipment assemblies, subassemblies, and modular and circuit elements with common and system peculiar test equipment for deficiencies and malfunctions. Repairs, removes, and/or replaces defective components and parts. Tests repaired system to ensure compliance with technical specifications. Inspects, tests, and adjusts system components and test equipment to specific tolerances. Determines serviceability and disposition of radar systems assemblies, subassemblies, and parts. Performs initial, in-process, on-site technical, and quality control inspections. Prepares and maintains equipment logs, equipment modification and utilization records, exchange tags, and calibration data cards.

4-2. MOSC 94M20. Performs duties shown in preceding skill level and provides technical guidance to lower grade personnel. Provides technical assistance to supported units. Installs equipment modifications. Completes maintenance and supply forms. Performs initial and final checkout and inspection of designated system items, assemblies, and subassemblies. Calibrates radar, organizational maintenance, and antenna alignment test sets.

4-3. MOSC 94M30. Provides technical assistance to supported units. Installs equipment modifications. Completes maintenance and supply forms. Performs initial and final checkout and inspection of designated system items, assemblies, and subassemblies. Calibrates radar, organizational maintenance, and antenna alignment test sets. The Staff Sergeant also establishes workload and repair priorities. Recommends procedures for receipt, storage, inspection, testing, and repair of SENTINEL, FIREFINDER, Surveillance radar, and associated equipment. Determines faulty work practices and demonstrates proper maintenance and troubleshooting techniques. Organizes and conducts OJT programs. Implements quality control measures. Supervises inspection and maintenance team. Establishes and maintains maintenance records. Prepares maintenance reports. Advises supervisors on operational and maintenance matters.

4-4. Additional Skill Identifiers (ASIs). The following ASIs are associated with MOS 94M:

- P5 - Master Fitness Trainer.
- 1X - Green Belt in Lean Six Sigma
- 1Y - Black Belt in Lean Six Sigma
- 1Z - Master Black Belt in Lean Six Sigma
- 2A - Non-Lethal Weapons Center
- 2B - Air Assault
- 2S - Battle Staff Operations (SL 3 and above only).
- 4A - Reclassification Training
- 5W - Jumpmaster
- 6T - Military Auditor (RC)
- 8P - Competitive Parachutist

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Appendix A

Sample DA Form 5164-R (Hands-On Evaluation)

This appendix provides a sample of DA Form 5164-R (see Figure A-1) for the tasks in this STP. The DA Form 5164-R allows the trainer to keep a record of the performance measures a Soldier passes or fails on each task. Trainers should use the following instructions when completing DA Form 5164-R.

Prior to Evaluating the Soldier.

- The form also can be downloaded from the Army Publishing Directorate website (www.apd.army.mil/forms).
- Enter the task title and 10-digit number for the task from the evaluation guide of the SM task summary.
- In column (a), enter the number of each performance measure from the evaluation guide.
- In column (b), enter the performance measure corresponding to the performance measure number in column (a). (You may abbreviate this information if necessary.)
- Enter the feedback statement from the evaluation guide just below the last performance measure.
- Locally reproduce the partially completed form if you are evaluating more than one Soldier on the task or the same Soldier on more than one task.

During the Evaluation.

- Enter the date just before evaluating the Soldier's task performance.
- Enter the evaluator's name and the Soldier's name and unit.
- For each performance measure in column (b), enter a check in column (c) PASS or column (d) FAIL as appropriate.
- Compare the number of performance measures the Soldier passes (and if applicable, which ones) against the task standard shown in the feedback statement. If the standard is met or exceeded, check the GO block under STATUS; otherwise, check the NO-GO block.

HANDS-ON EVALUATION <small>For use of this form, see STP 11-25S14-SM-TG; the proponent agency is TRADOC</small>		DATE 1 July 2007	
TASK TITLE Repair the LCU/HCU/Peripheral Function of the AN/TPQ-36(V)8 Shelter		TASK NUMBER 093-94M-1305	
ITEM a	PERFORMANCE STEP TITLE b	SCORE (Check One)	
		PASS c	FAIL d
1.	Check AC Power Distribution panel to see if the DC PWR Supply circuit breaker is on	<input checked="" type="checkbox"/> P	<input type="checkbox"/> F
2.	Observe DC Power Distribution panel to see if the battery Power 24 VDC circuit breaker is on	<input type="checkbox"/> P	<input checked="" type="checkbox"/> F
3.	On the LCU or HCU, set power switch to on and observe the normal indicators	<input checked="" type="checkbox"/> P	<input type="checkbox"/> F
4.	Verify LCD brightness and LCD contrast and adjust on the LCU or HCU	<input checked="" type="checkbox"/> P	<input type="checkbox"/> F
5.	After system boot is finished, check that the LCU or HCU responds to keyboard inputs	<input checked="" type="checkbox"/> P	<input type="checkbox"/> F
		<input type="checkbox"/> P	<input type="checkbox"/> P
		<input type="checkbox"/> P	<input type="checkbox"/> F
		<input type="checkbox"/> P	<input type="checkbox"/> F
		<input type="checkbox"/> P	<input type="checkbox"/> F
		<input type="checkbox"/> P	<input type="checkbox"/> F
		<input type="checkbox"/> P	<input type="checkbox"/> F
		<input type="checkbox"/> P	<input type="checkbox"/> F
		<input type="checkbox"/> P	<input type="checkbox"/> F
		<input type="checkbox"/> P	<input type="checkbox"/> F
		<input type="checkbox"/> P	<input type="checkbox"/> F
EVALUATOR'S NAME SSG LINDY RUFF		UNIT	
SOLDIER'S NAME PFC RYAN MILLER		STATUS <input type="checkbox"/> GO <input checked="" type="checkbox"/> NO GO	

SAMPLE

DA FORM 5164-R, SEP 85 EDITION OF DEC 82 IS OBSOLETE APD V2.01

Figure A-1. Sample of a Completed DA Form 5164-R

Appendix B

Sample DA Form 5165-R (Field Expedient Squad Book)

This appendix provides a sample of DA Form 5165-R (see Figure B-1) for the tasks in this STP. The DA Form 5165-R allows the trainer to keep a record of task proficiency for a group of Soldiers. Trainers should use the following instructions when completing DA Form 5165-R.

Prior to Evaluating the Soldier.

- The form also can be downloaded from the Army Publishing Directorate website (www.apd.army.mil/forms).
- Enter the SM task number and abbreviated task title for the evaluated tasks in the appropriate column. Use additional sheets as necessary. Locally reproduce the partially completed form if you are evaluating more than nine Soldiers.

During the Evaluation.

- Enter the names of the Soldiers you are evaluating, one name per column, at the top of the form. You may add the names of newly assigned Soldiers if there are blank columns.
- Under STATUS, record (*in pencil*) the date in the GO block if the Soldier demonstrated task proficiency to Soldier's manual standards. Keep this information current by always recording the most recent date on which the Soldier demonstrated task proficiency.
- Record the date in the NO-GO block if the Soldier failed to demonstrate task proficiency to Soldier's manual standards. Soldiers who failed to perform the task should be retrained and reevaluated until they can meet the standards. When that occurs, enter the date in the appropriate GO block and erase the previous entry from the NO-GO block.

After the Evaluation.

- Read down each column (GO/NO-GO) to determine the training status of that individual. This will give you a quick indication on which tasks a Soldier needs training.
- Read across the rows for each task to determine the training status of all Soldiers. You can readily see on which tasks to focus training. Line through the training status column of any Soldier who departs from the unit.

GLOSSARY**Section I****Acronyms and Abbreviations**

AC	alternating current
ACCP	Army Correspondence Course Program
AIPD	Army Institute for Professional Development
AISM	automated information systems manual
AIT	Advanced Individual Training
AMCOM	Aviation and Missile Command
AR	Army regulation
ARTEP	Army Training and Evaluation Program
ATG	Antenna Transmitter Group
ATTN	attention
BNCOC	Basic Noncommissioned Officer Course
BSU	Beam Steering Unit
CB	circuit breaker
CBRN	chemical, biological, radiological, and nuclear
CBU	calibrate before use
CCI	controlled cryptographic item
CDT	Control Display Terminal
CNR	calibration not required
COE	contemporary operational environment
COMSEC	communications security
CPDU	control processor and display unit
CTT	common task test
DA	Department of the Army
D.C.	District of Columbia
DC	direct current

DD	Department of Defense
DS	direct support
EIR	equipment improvement recommendation
ELSEC	electronics security
EPLRS	Enhanced Position Location and Reporting System
FEDLOG	Federal Logistics
FIT	fault isolation test
FM	field manual
Freq	frequency
HCU	Host Computer Unit
HQ	Headquarters
IFF	Identification Friend or Foe
IMPL	initial mandatory parts list
LCU	Lightweight Computer Unit
LO	lubrication order
MDS	mission, design, and series
METL	mission-essential task list
MOS	military occupational specialty
MOSC	military occupational specialty code
MSC	major subordinate command
MST	maintenance support team
MWO	modification work order
N/A	not applicable
NCO	noncommissioned officer
NMP	national maintenance point
No.	number
NSN	national stock number
OCS	Operator Control Station

PAM	pamphlet
PLL	Prescribed Load List
PMCS	preventive maintenance checks and services
PWR	power
QDR	Quality Deficiency Report
QT	Quarterly
RCT	Radar Control Terminal
RDL	Reimer Digital Library
ROP	reorder point
RSMR	Radar Status Monitor Routine
SAMS	Standard Army Maintenance System
SAMS-1	Standard Army Maintenance System-Level 1
SF	standard form
SFDLR	stock funding of depot level repairables
SIGSEC	signal security
SINCGARS	Single Channel Ground to Air Radio System
SL	skill level
SLAC	Support List Allowance Card
SM	Soldier's Manual
SMCT	Soldier's Manual of Common Tasks
SOF	safety of flight
SOP	standing operating procedure
SSA	supply support activity
STP	Soldier Training Publication
Sust	sustainment

TACFIRE	tactical fire
TB	technical bulletin
TB MED	technical bulletin (medical)
TC	training circular
TG	Trainer's Guide
TM	technical manual
TMDE	test, measurement, and diagnostic equipment
Tng	training
TRADOC	Training and Doctrine Command
UND	urgency of need designator
UNIT	Trained in the Unit
VA	Virginia
WLU	weapons location unit

Section II

Terms

FEDLOG

The logistics information system published by the Defense Logistics Information Service (DLIS). FED LOG contains information on more than 7 million stock numbers and 12 million part numbers. Updated monthly, FED LOG is available in CD-ROM or DVD format.

SAMS-1

Software package designed to manage maintenance operations, including work order registration, repair parts, stockage and requisition, manpower utilization, and readiness reporting.

REFERENCES

Required Publications

Required publications are sources that users must read in order to understand or to comply with this publication.

Army Regulations

AR 25-2	Information Assurance 24 October 2007
AR 25-400-2	The Army Records Information Management System (ARIMS) 2 October 2007
AR 40-5	Preventive Medicine 25 May 2007
AR 95-1	Flight Regulations 12 November 2008
AR 190-13	The Army Physical Security Program 30 September 1993
AR 380-5	Department of the Army Information Security Program 29 September 2000
AR 380-40	(O) Policy for Safeguarding and Controlling Communications Security (COMSEC) Material (U) 30 June 2000
AR 385-10	The Army Safety Program 23 August 2007
AR 672-20	Incentive Awards 29 January 1999
AR 710-2	Supply Policy Below the National Level 28 March 2008
AR 725-50	Requisition, Receipt, and Issue System 15 November 1995
AR 750-1	Army Materiel Maintenance Policy 20 September 2007

Department of Army Forms

DA forms are available from the APD website at www.apd.army.mil.

DA FORM 2062	Hand Receipt/Annex Number
DA FORM 2063-R	Prescribed Load List
DA FORM 2064	Document Register for Supply Actions
DA FORM 2402	Maintenance Tag
DA FORM 2404	Equipment Inspection and Maintenance Worksheet
DA FORM 2405	Maintenance Request Register
DA FORM 2407	Maintenance Request
DA FORM 2407-1	Maintenance Request Continuation Sheet
DA FORM 2408-12	Army Aviator's Flight Record
DA FORM 2408-13	Aircraft Status Information Record
DA FORM 2408-13-1	Aircraft Maintenance and Inspection Record
DA FORM 2408-14	Uncorrected Fault Record
DA FORM 2410	Component Removal and Repair/Overhaul Record
DA FORM 3318	Records of Demands-Title Insert
DA FORM 3758-R	Calibration and Repair Requirements Worksheet
DA FORM 5164-R	Hands-On Evaluation
DA FORM 5165-R	Field Expedient Squad Book
DA FORM 5988-E	Equipment Inspection Maintenance Worksheet (EGA)
DA FORM 5990-E	Maintenance Request (EGA)

Department of Army Pamphlets

DA PAM 25-30	Consolidated Index of Army Publications and Blank Forms 1 January 2007
DA PAM 40-501	Hearing Conservation Program 10 December 1998
DA PAM 190-51	Risk Analysis for Army Property 30 September 1993
DA PAM 385-1	Small Unit Safety Officer/NCO Guide 10 November 2008
DA PAM 600-67	Effective Writing for Army Leaders 2 June 1986
DA PAM 611-21	Military Occupational Classification and Structure 22 January 2007
DA PAM 710-2-1	Using Unit Supply System (Manual Procedures)(Standalone Pub) 31 December 1997
DA PAM 710-2-2	Supply Support Activity Supply System: Manual Procedures 30 September 1998
DA PAM 738-751	Functional Users Manual for the Army Maintenance Management System-Aviation (TAMMS-A) 15 March 1999
DA PAM 750-3	Soldiers' Guide for Field Maintenance Operations 28 September 2006
DA PAM 750-8	The Army Maintenance Management System (TAMMS) Users Manual 22 August 2005

Department of Defense Forms

*DD forms are available from the OSD website at
<http://www.dtic.mil/whs/directives/infomgt/forms/formsprogram.htm>*

DD FORM 314	Preventive Maintenance Schedule and Record
DD FORM 1574	Serviceable Tag - Materiel
DD FORM 1574-1	Serviceable Label - Materiel
DD FORM 1575	Suspended Tag - Materiel
DD FORM 1575-1	Suspended Label - Materiel
DD FORM 1576	Test/Modification Tag - Materiel
DD FORM 1576-1	Test/Modification Label - Materiel
DD FORM 1577	Unserviceable (Condemned) Tag - Materiel
DD FORM 1577-1	Unserviceable (Condemned) Label - Materiel
DD FORM 1577-2	Unserviceable (Repairable) Tag - Materiel
DD FORM 1577-3	Unserviceable (Repairable) Label - Materiel
DD FORM 2332	Product Quality Deficiency Report Exhibit

Field Manuals

FM 3-09.12	Tactics, Techniques, and Procedures for Field Artillery Target Acquisition (MCRP 3-16.1A) 21 June 2002
FM 3-19.30	Physical Security 8 January 2001
FM 3-25.26	Map Reading and Land Navigation 18 January 2005
FM 4-30.3	Maintenance Operations and Procedures 28 July 2004
FM 4-30.31	Recovery and Battlefield Damage Assessment and Repair (MCRP 4-11.4A)19 September 2006
FM 5-0	Army Planning and Orders Production 20 January 2005
FM 7-0	Training for Full Spectrum Operations 12 December 2008
FM 7-1	Battle Focused Training 15 September 2003

FM 25-4 How to Conduct Training Exercises 10 September 1984
 FM 25-5 Training for Mobilization and War 25 January 1985

Lubrication Orders

LO 11-5840-354-20 Radar Sets, AN/TPQ-36(V)1 (NSN 5840-01-043-4257) AN/TPQ-36(V)3 (5840-01-185-4244) and AN/TPQ-36(V)5 (5840-01-229-1276) 15 July 1987

Other Product Types

AISM 25-L21-AHN-ZZZ-EM Standard Army Maintenance System - Enhanced (SAMS-1E) End User Manual 15 August 2005
 AISM 25-L26-AHO-ZZZ-EM Standard Army Maintenance System - Enhanced (SAMS-2E) End User Manual 15 August 2005
 DA LABEL 80 US Army Calibrated Instrument
 FEDLOG Federal Logistics information system (Updated Monthly CD-ROM/DVD) Defense Logistics Information Service (DLIS), Defense Logistics Agency (DLA) <http://www.dlis.dla.mil/fedlog/default.asp>
 SF FORM 368 Product Quality Deficiency Report

Soldier Training Publications

STP 21-1-SMCT Soldier's Manual of Common Tasks Skill Level 1 14 December 2007
 STP 21-24-SMCT Soldier's Manual of Common Tasks (SMCT) Warrior Leader Skill Level 2, 3, and 4 9 September 2008

Technical Bulletins

TB MED 523 Control of Hazards to Health From Microwave and Radio Frequency Radiation and Ultrasound 15 July 1980
 TB 43-0001-SERIES Equipment Improvement Report and Maintenance Digest for Tank, Automotive, Armament and Chemical Equipment 1 October 2000
 TB 43-180 Interactive Electronic Technical Manual (IETM) for Calibration and Repair Requirements for the Maintenance of Army Materiel 1 January 2009
 TB 385-3 Fire Prevention and Protection: Military Gasoline Cans 7 June 1968
 TB 385-4 Safety Requirements for Maintenance of Electrical and Electronic Equipment 1 July 2008
 TB 750-25 Maintenance of Supplies and Equipment: Army Test, Measurement and Diagnostic Equipment (TMDE) Calibration and Repair Support (C&RS) Program 7 October 2008

Technical Manuals

TM 5-6115-585-12 Operator and Organizational Maintenance Manual for Generator Set, Diesel Engine Driven, Tactical, Skid Mounted, 10 kW, 1 Phase, 2 Wire; 1 Phase, 3 Wire and 3 Phase, 4 Wire; 120, 120/240 AND 120/208 V (DOD Model MEP-003A) Utility Class, 60 HZ (NSN 6115-00-465-1030) and (Model MEP-112A), Utility Class, 400 HZ (6115-00-465-1027) 25 July 1977

TM 9-1290-364-14&P	Operator's, Unit, Direct Support, and General Support Maintenance Manual including Repair Parts and Special Tools list through Depot Level for Conventional Muzzle Velocity System M94 Part NO: 12950994 (NSN 1290-01-412-5760) (EIC:3TD) and, Communication Adapter (MCA) Part No: 11838876 (1290-01-468-6533) 15 December 2001
TM 9-1430-741-10	Operator's Manual for Sentinel, AN/MPQ-64, (NSN 1430-01-420-8077) 31 December 2008
TM 9-1430-741-24&P	Organizational, Direct Support and General Support Maintenance and Repair Parts and Special Tools List (RPSTL) for Sentinel, AN/MPQ-64, (NSN 1430-01-420-8077) 31 December 2008
TM 11-5820-890-10-1	Operator's Manual for SINGARS Ground Combat Net Radio, ICOM Manpack Radio AN/PRC-119A (NSN 5820-01-267-9482) (EIC: L2Q) Short Range Vehicular Radio AN/VRC-87A (5820-01-267-9480) (EIC: L22) Short Range Vehicular Radio With Single Radio Mount AN/VRC-87C (5820-01-304-2045) (EIC: GDC) Short Range Vehicular Radio With Dismount AN/VRC-88A (5820-01-267-9481) (EIC: L23) Short Range Vehicular Radio With Dismount and Single Radio Mount AN/VRC-88C (5820-01-304-2044) (EIC: GDD) Short Range/Long Range Vehicular Radio AN/VRC-89A (5820-01-267-9479) (EIC: L24) Long Range Vehicular Radio AN/VRC-90A (5820-01-268-5105) (EIC: L25) Short Range/Long Range Vehicular Radio With Dismount AN/VRC-91A (5820-01-267-9478) (EIC: L26) Long Range/Long Range Vehicular Radio AN/VRC-92A (5820-01-267-9477) (EIC: L27) 1 September 1992
TM 11-5840-354-10	Operator's Manual for Radar Sets AN/TPQ-36(V)3 (NSN 5840-01-185-4244) (EIC: N/A) and AN/TPQ-36(V)5 (5840-01-229-1276) (EIC: N/A) 15 May 1992
TM 11-5840-354-10-HR	Hand Receipt Manual Covering Content of Components of End Item (COEI), Basic Issue Item (BII), and Additional Authorization Lists for Radar Set, AN/TPQ-36 (NSN 5840-01-043-4257) 10 March 1981
TM 11-5840-354-20	Unit Maintenance Manual (Antenna/Transceiver Removal and Installation Procedures) for Radar Sets AN/TPQ-36(V)3 (NSN 5840-01-185-4244) (EIC: N/A) AN/TPQ-36(V)5 (5840-01-229-1276) (EIC: IYE) AN/TPQ-36(V)7 (5840-01-229-1278) (EIC: IT6) AN/TPQ- 36(V)9 (NSN TBD) (EIC: N/A) 1 June 1993
TM 11-5840-354-20-1	Organizational Maintenance Manual (Functional Description and Maintenance) for Radar Sets AN/TPQ-36(V)1 (NSN 5840-01-084-2444), AN/TPQ-36(V)3 (5840-01-185-4244) and AN/TPQ-36(V)5 (5840-01-229-1276) 30 June 1983
TM 11-5840-354-20P	Organizational Maintenance Repair Parts and Special Tools Lists for AN/TPQ-36(V)1 Radar Set (US Version, 64K Memory) (NSN 5840-01-084-2444) and AN/TPQ-36(V)3 Radar Set (FMS Version, 64K Memory) (NSN 5840-01-185-4244) and AN/TPQ-36(V)5 Radar Set (US Version, 128K Memory) (NSN 5840-01-229-1276) 1 March 1987
TM 11-5840-354-30-1	Direct Support Maintenance Manual (Functional Description And Maintenance) for Antenna-Transceiver Group, OY-71(V)1/TPQ-36(V) (NSN 5840-01-084-5293) Used With Radar Set, AN/TPQ-36(V) 1 June 1993
TM 11-5840-354-30-2	Direct Support Maintenance Manual (Schematics and Wire Lists) for Antenna-Transceiver Group (Trailer) OY-71(V)1/TPQ-36(V) (NSN 5840-01-084-5293) (EIC: N/A) Used With Radar Set AN/TPQ-36(V) 1 June 1993
TM 11-5840-354-30-3	Direct Support Maintenance Manual (Extended Troubleshooting) for Antenna-Transceiver Group (Trailer) OY-71/TPQ-36(V) (NSN 5840-01-084-5293) (EIC: N/A) Used With Radar Set AN/TPQ-36(V) 15 May 1992

TM 11-5840-354-34P	Direct Support and General Support Maintenance Repair Parts and Special Tools Lists (Including Depot Maintenance Repair Parts and Special Tools) for AN/TPQ-36(V)1 Radar Set (NSN 5840-01-084-2444) & AN/TPQ-36(V) 3 Radar Set (5840-01-185-4244 & AN/TPQ-36(V)5 Radar Set (5840-01-229-1276) 1 March 1987
TM 11-5840-355-10	Operator's Manual for Radar Sets AN/TPQ-37(V)6 (NSN 5840-01-270-5100) EIC: (IYF) and AN/TPQ-37(V)8 (5840-01-400-3218) EIC: (N/A) 1 April 2002
TM 11-5840-355-20-1	Organizational Maintenance Manual (Functional Description and Maintenance) for Radar Sets, AN/TPQ-37(V)1 (NSN 5840-01-043-4258)(EIC: IYB), AN/TPQ-37(V)2 (5840-01-084-5374) (EIC: IYD), AN/TPQ-37(V)5 (5840-01-270-5101)(EIC: YIG) and AN/TPQ-37(V)6 (5840-01-270-5100)(EIC: IYF) 1 October 1981
TM 11-5840-355-20-2	Organizational Maintenance Manual (Antenna Removal and Installation Procedures) for Radar Set, AN/TPQ-37(V)1 (NSN 5840-01-043-4258) (EIC: IYB) AN/TPQ-37(V)2 (5840-01-084-5374) (EIC: IYD) AN/TPQ-37(V)5 (5840-01-270-5101) (EIC: IYG) and AN/ TPQ-37(V)6 (5840-01-270-5100) (EIC: IYF) 1 October 1981
TM 11-5840-355-20-3	Organizational Maintenance Manual (Transceiver Removal and Installation Procedures) for Radar Sets AN/TPQ-37(V)1 (NSN 5840-01-043-4258) (EIC: IYB) AN/TPQ-37(V)2 (5840-01-084-5374) (EIC: IYD) AN/TPQ-37(V)5 (5840-01-270-5101) (EIC: IYG) and AN/TPQ-37(V)6 (5840-01-270-5100) (EIC: IYF) 1 October 1981
TM 11-5840-355-20P	Unit Maintenance Repair Parts and Special Tools List for AN/TPQ-37(V)5 Radar Set (NSN 5840-01-270-5101) (EIC: IYG); AN/TPQ-37(V)6 RADAR SET (5840-01-270-5100) (EIC: IYB); and AN/TPQ-37(V)8 RADAR SET (5840-01-400-3218) (EIC: IT7); AND OA- 9018/TPQ-37(V) Generator Power Distribution Group (5840-01-086-4727) (EIC: N/A); and OA-9018/TPQ- 37(V) Generator Power Distribution Group (6115-01-400-3217) 1 April 2001
TM 11-5840-355-30-1	Direct Support Maintenance Manual (Functional Description and Maintenance) for Antenna-Transceiver Group, (Trailer) OY-72(V)1/TPQ-37(V) (NSN 5840-01-085-1604), OY-72(V)2/TPQ-37(V) (5840-01-085-1605), and Generator-Power Distribution Group OA-9018/TPQ-37(V) (5840-01-086-4727) Used W/Radar Set AN/TPQ-37(V) 31 December 1981
TM 11-5840-355-30-2	Direct Support Maintenance Manual (Schematics and Wire Lists) for Antenna-Transceiver Group, OY-72(V)/TPQ-37(V) (TRAILER) (NSN 5840-01-070-3848) and Generator-Power Distribution Group, OA-9018/TPQ-37(V) (5840-01-086-4727) Used With Radar Set, AN/TPQ-37(V) 31 December 1981
TM 11-5840-355-30-3	Direct Support Maintenance Manual for Radar Set, AN/TPQ-37(V) 30 December 1981
TM 11-5840-355-30-4	Direct Support Maintenance Manual (Extended Troubleshooting) for Antenna-Transceiver Group OY-72(V)1/TPQ-37(V) (NSN 5840-01-085-1604) and OY-72(V)2/TPQ-37(V) (5840-01-085-1605) Used With Radar Set AN/TPQ-37(V) 15 August 1989
TM 11-5840-355-34P	Direct Support and General Support Maintenance Repair Parts and Special Tools List (Including Depot Maintenance Repair Parts and Special Tools) for Radar Set AN/TPQ-37(V)5 (NSN 5840-01-270-5101), Radar Set AN/TPQ-37(V)6 (5840-01-270-5100) and Generator-Power Distribution Group OA-9018/TPQ-37(V) (5840-01-086-4727) 1 November 1988

TM 11-5840-364-20 Unit Maintenance Manual (Removal and Installation Procedures) for Operations Control Group (Shelter) OK-398(V)2/TPQ (NSN 5840-01-229-1198) (EIC: N/A), OK-398(V)3/TPQ (5840-01-344-8500) (EIC: N/A), OK-398(V)4/TPQ (NSN 5840-01-383-7220) (EIC: N/A) Used With Radar Sets AN/TPQ-36(V), AN/TPQ-37(V), AN/TPQ-37(V) and Operations Central OK-398(V)6/TPQ (NSN 5895-01-400-3216) (EIC:N/A) OK-398(V)8/TPQ (NSN 5895-01-516-8914)(EIC: N/A) Used With Radar Set AN/TPQ-37(V)8 1 October 2006

TM 11-5840-364-20P Organizational Maintenance Repair Parts and Special Tools List for OK-398(V)1/ TPQ(V) Operators Control Group (NSN 5840-01-085-1606) and OK-398(V)2/ TPQ Operators Control Group (5840-01-229-1198) Common Name "Shelter" Parts of AN/TPQ-36 and AN/TPQ-37(V) Radar Sets 1 March 1987

TM 11-5840-364-30-1 Direct Support Maintenance Manual (Functional Description and Maintenance) for Operations Control Group, (Shelter) OK-398(V)1/ TPQ (NSN 5840-01-085-1606) OK-398(V)2/ TPQ (5840-01-229-1198) Used W/Radar Sets AN/TPQ-36(V) and AN/TPQ-37(V) 17 November 1981

TM 11-5840-364-30-3 Direct Support Maintenance Manual (Extended Troubleshooting) for Operations Control Group (Shelter) OK-398(V)1/TPQ (NSN 5840-01-085-1606) (EIC: N/A), OK-398(V)2/TPQ (5840-01-229-1198) (EIC: N/A), and OK-398(V)4/TPQ (NSN TBD) (EIC: N/A) Used With Radar Sets AN/TPQ-36(V) and AN/TPQ-37(V) 15 August 1989

TM 11-5840-364-34P Direct Support and General Support Maintenance Repair Parts and Special Tools Lists (Including Depot Maintenance Repair Parts and Special Tools) for Operations Control Group, OK-398(V)1/TPQ (5840-01-085-1606) and OK-398(V)2/TPQ Operations Control Group (5840-01-229-1198) (Common Name "Shelter") Part of AN/TPQ-36(V) and AN/TPQ-37(V) Radar Sets 1 March 1987

TM 11-5840-378-10 Operator's Manual For Radar Sets AN/TPQ-36(V) (NSN 5840-01-185-4244) (EIC: N/A) AND AN/TPQ-36(V)5 (5840-01-229-1276) (EIC: IYE) and AN/TPQ-36(V)7 (NSN 5840-01-229-1278) (EIC: IT6) 1 July 2000

TM 11-5840-378-20&P Unit Maintenance Manual (Functional Description and Maintenance) (Including Repair Parts and Special Tools List) for Radar Sets AN/TPQ-36(V)3 (NSN 5840-01-185-4244) (EIC: N/A) and AN/TPQ-36(V)5 (5840-01-229-1276) (EIC: IYE) 1 June 1993

TM 11-5840-380-10 Operator's Manual for Radar Set AN/TPQ-36(V)8, (NSN 5840-01-390-0529) (EIC:Q68) 1 February 2000

TM 11-5840-380-10-HR Illustrated Hand Receipt Covering Components of End Item List (COEIL) Items, Basic Issue Item List (BIIL) Items, and Additional Authorization List (AAL) items for AN/TPQ-36(V)8 Radar Set (NSN: 5840-01-390-0529) (EIC: Q68) with G-86/TPQ-36(V) Generator Set, Trailer Mounted (NSN: 6115-01-372-6394) and (NTN) Equipment Trailer Group 1 September 2006

TM 11-5840-380-23-1 Unit and Direct Support Maintenance Manual (Functional Description and Maintenance Instructions) for Radar Set AN/TPQ-36(V)8 (NSN 5840-01-390-0529) (EIC:Q68) 1 February 2000

TM 11-5840-380-23-2 Unit and Direct Support Maintenance Manual (Extended Troubleshooting and Wiring Lists) for Radar Set AN/TPQ-36(V)8 (NSN 5840-01-390-0529) (EIC:Q68) 15 February 2007

TM 11-5840-380-23P Unit and Direct Support Repair Parts and Special Tools List for OK-398 (V)5/TPQ Operations Central (NSN 5895-01-390-0524)(EIC:N/A) and Equipment Trailer Group (NSN N/A)(EIC:N/A) for AN/TPQ-36(V)8 Radar Set (NSN 5840-01-390-0529) (EIC:Q68) 1 February 2000

TM 11-6660-283-13	Operator's, Unit and Direct Support Maintenance Manual, Meteorological for Measuring Set AN/TMQ-41 (NSN 6660-01-386-3906) (EIC: N/A) 1 September 1995
TM 38-L09-11	Functional Users Manual for Maintenance Reporting and Management (MRM) (S&I CDR, USALOGC, ATTN: ATCL-SP, FT LEE, VA 23801-6000) 4 February 1985

Training Circulars

TC 43-4	Commander's and Shop Officer's Guide for Support Maintenance Management 8 May 1996
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Related Publications

Related publications are sources of additional information. They are not required in order to understand this publication.

Army Correspondence Course Program Subcourses

MM 0702	Basic Electricity Mathematics (Edition A). 1 June 1998
MM 0703	Basic Electricity Part I (Edition B). 22 September 1998
MM 0704	Basic Electricity Part II (Edition 7). 1 June 1998
MM 0705	Electronics, Part I (Edition 5). 1 January 1988
MM 0706	Electronics, Part II (Edition 5). 1 January 1988
MM 0707	Computer Fundamentals (Edition 8). 1 June 1995

Army Regulations

AR 5-12	Army Management of the Electromagnetic Spectrum 1 October 1997
AR 200-1	Environmental Protection and Enhancement 13 December 2007
AR 702-7	Product Quality Deficiency Report Program 20 July 1993
AR 702-7-1	Reporting of Product Quality Deficiencies Within the US Army 25 April 2005

Army Training and Evaluation Program

ARTEP 9-062-MTP	Mission Training Plan for the Headquarters, Ordnance Group, Conventional Ammunition, Direct Support/General Support 13 July 1990
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Department of Army Pamphlets

DA PAM 25-380-2 Security Procedures for Controlled Cryptographic Items
10 January 1991

DA PAM 750-1 Commanders' Maintenance Handbook 2 February 2007

Field Manuals

FM 3-04.500 Army Aviation Maintenance 23 August 2006

FM 4-30.3 Maintenance Operations and Procedures 28 July 2004

FM 34-60 Counterintelligence 3 October 1995

Lubrication Orders

LO 11-5840-354-20 Radar Sets, AN/TPQ-36(V)1 (NSN 5840-01-043-4257) AN/TPQ-36(V)3
(5840-01-185-4244) and AN/TPQ-36(V)5 (5840-01-229-1276)
15 July 1987

LO 11-5840-355-20 Radar Set AN/TPQ-37(V)5 (NSN 5840-01-270-5101) (EIC: IYG)
AN/TPQ-37(V)6 (5840-01-270-5100) (EIC: IYF) 15 May 1992

Other Product Types

EM 0096 TM 9-1430-Sentinel, Technical Manuals for Sentinel AN/MPQ-64 (This
product included the following items: TB 9-1430-741-20-1(071115),
TM 9-1430-741-10(071115), TM 9-1430-741-24&P(071115), TM 9-1430-
741-BD(071115), TM 43-0002-30(071115), TM 43-0003-53(071115),
TB 9-1430-741-20-2(020930)) 15 November 2007

Technical Bulletins

TB 11-5820-890-20-89 Installation Instructions for Installation Kit, Electronic Equipment, MK-
2790/VRC (NSN 5895-01-416-2885) (EIC:N/A) to Permit Installation of
Radio Set AN/VRC-92 Series in a Meteorological Measuring Set (MMS)
AN/TMQ-41 1 September 1999

TB 11-5820-890-20-107 Installation Instructions for Installation Kit, Electronic Equipment,
MK-2582/VRC (NSN 5895-01-431-3287) (EIC: N/A) to Permit Installation
of Radio Set AN/VRC-87/88/90 Series in an Integrated Meteorologic
System (IMETS) AN/TMQ-41 1 September 1999

TB 11-6660-283-25 Warranty Program for Meteorological Measuring Set AN/TMQ-41
(NSN 6660-01-386-3906) (EIC: N/A) 1 February 1996

TB 43-0129 Safety Requirements for Use of Antenna and Mast Equipment
15 June 1986

Technical Manuals

TM 3-4240-325-20&P Unit Maintenance Manual (Including RPSTL) for Filter Unit, Gas-
Particulate: 100 CFM, 120 V, 50, 60, and 400 HZ, M93 (NSN 4240-01-
231-6515) 1 September 1991

TM 9-1430-741-BD Battlefield Damage Assessment and Repair for Sentinel, AN/MPQ-64,
(NSN 1430-01-420-8077) 31 December 2008

TM 9-1430-741-10-HR Hand Receipt Covering Contents of Components of End Items (COEI),
Basic Issue Items (BII), and Additional Authorization List (AAL) for

Sentinel AN/MPQ-64 and for Sentinel AN/MPQ-64A1
21 November 2006

TM 11-5840-355-10-3 Operator's Manual for (Camouflage Procedures) Radar Sets AN/TPQ-37(V)1 (NSN 5840-01-043-4258) AN/TPQ-37(V)2 (5840-01-084-5374) AN/TPQ-37(V)4 (5840-01-185-4243) AN/TPQ-37(V)5 (5840-01-270-5101) and AN/TPQ-37(V)6 (5840-01-270-5100) 1 April 1989

TM 11-5840-363-40 General Support Maintenance Manual (Card Test and Repair) for Radar Set, AN/TPQ-36 (NSN 5840-01-043-4257) and AN/TPQ-37(V) (5840-01-043-4258) 24 August 1982

TM 750-245-4 Direct Support and General Support for Quality Control Inspector's Inspection Criteria 25 January 1971

Training Circulars

TC 3-34.489 The Soldier and the Environment 8 May 2001

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27 February 2009

By Order of the Secretary of the Army:

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