

Summary Report for Individual Task
091-94R-1402
Repair Transponder Set AN/APX-100 V (*)
Status: Approved

Distribution Restriction: Approved for public release; distribution is unlimited.

Destruction Notice: None

Foreign Disclosure: FD6 - This product/publication has been reviewed by the product developers in coordination with the FT. Lee/ USACASCOM foreign disclosure authority. This product is releasable to students from foreign countries on a case-by-case basis.

Condition: You are in an Operational Environment (OE), with a non mission capable Transponder Set AN/APX-100 V(*) that has been submitted to your Shop along with DA Form 2407, Maintenance Request and DA Form 2404, Equipment Inspection and Maintenance Worksheet. Your supervisor has assigned the work order to you for repair. At your workstation you have the following items: Receiver-transmitter RT-1157A/APX-100(V); Transponder Test Set AN/APM-305A; Dual-trace Oscilloscope AN/USM-488; Digital Multimeter AN/PSM-45A; Tool Kit TK-100/G; DA Form 2404; DA Form 2407, TM 11-5895-1037-30&P; DA Pam 738-751, Functional Users Manual for the Army Maintenance Management System Aviation and local Standard Operating Procedure (SOP). NOTE: Substitutions for equipment may be made per test equipment modernization (TEMOD) publications.. Some iterations of this task should be performed in MOPP 4.

Standard: Restore the Transponder Set AN/APX-100 V(*) to fully mission capable per TM 11-5895-1037-30&P. Complete DA Form 2407 per DA Pam 738-751 without error.

Special Condition: None

Safety Risk: Low

MOPP 4: Sometimes

Task Statements

Cue: Your supervisor has directed you to repair a non-mission capable Transponder Set AN/APX-100 V (*) submitted to your shop. Complete DA Form 2407 per DA PAM 738-751 without error.

DANGER
None

WARNING
Use of compressed air can create an environment of propelled foreign particles. Use compressed air only at the recommended pressure. Proper eye protection is required.
Isopropyl alcohol is flammable and toxic to skin, eyes, and respiratory tract. Avoid skin and eye contact. Good general ventilation is normally adequate. Keep away from open flames or other sources of ignition.

CAUTION
This equipment contains electrostatic discharge (LSD) sensitive devices. Use the procedures contained in TM 43-0158 (Army) or NAVAIR 01-1A-23 (Navy) to prevent damage to or destruction of these devices.
DO NOT APPLY 28 VOLT DC POWER TO THE CD-29/UPM-155 ANALOG CONTROL MULTIPLEXER (ACM) UNTIL DIRECTED TO DO SO BY THE AN/UPM-155 TEST SET.
DO NOT PRESS FUNCTION ENTER ON THE AN/UPM-155 TEST SET WHILE 28 VOLT DC POWER IS APPLIED TO THE CD-29/UPM-155 ANALOG CONTROL MULTIPLEXER (ACM).

Remarks: None

Notes: None

Performance Steps

1. Obtain all required tools, test equipment and reference materials.
2. Complete appropriate blocks on DA Form 2407 per DA Pam 738-751.
3. Perform visual inspection.
4. Set up test equipment per TM 11-5895-1037-30&P.
5. Verify faults listed on DA Form 2407 using appropriate troubleshooting chart in TM 11-5895-1037-30&P.
6. Perform troubleshooting procedure on the AN/APX-100 V (*) using the troubleshooting chart in TM 11-5895-1037-30&P.
7. Identify defective component (s) per TM 11-5895-1037-30&P.
8. Replace defective component (s) per TM 11-5895-1037-30&P.
9. Perform operational checks per TM 11-5895-1037-30&P.
10. Complete appropriate blocks on DA Form 2407 per DA PAM 738-751.
11. Tag defective component (s) for turn-in per DA PAM 738-751.
12. Notify supervisor upon completion of task.

(Asterisks indicates a leader performance step.)

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 measure, show the Soldier what was done wrong and how to do it correctly.

Evaluation Preparation: Ensure all items required in the condition statement (or appropriate substitutions) are on hand and all safety requirements are met.

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Obtained all required tools, test equipment , and reference materials.			
2. Completed appropriate blocks on DA Forms per DA Pam 738-751.			
3. Performed visual inspection.			
4. Properly set up test equipment per TM 11-5895-1037-30&P.			
5. Verified faults listed on DA Form 2407 using appropriate troubleshooting chart per TM 11-5895-1037-30&P.			
6. Performed troubleshooting procedures on the AN/APX-100 V(*)using the troubleshooting chart in TM 11-5985-1037-30&P.			
7. Identified defective component (s) per TM 11-5895-1037-30&P.			
8. Replaced defective component (s) per TM 11-5895-1037-30&P.			
9. Performed operational checks per TM 11-5895-1037-30&P.			
10. Completed appropriate blocks on DA Form 2407 per DA Pam 738-751.			
11. Tagged defective component (s) for turn-in per DA Pam 738-751			
12. Notified supervisor upon completion of task.			

Supporting Reference(s):

Step Number	Reference ID	Reference Name	Required	Primary
	DA FORM 2404	EQUIPMENT INSPECTION AND MAINTENANCE WORKSHEET	Yes	No
	DA FORM 2407	MAINTENANCE REQUEST	Yes	No
	PAM 738-751	FUNCTIONAL USER'S MANUAL FOR THE ARMY MAINTENANCE MANAGEMENT SYSTEM-AVIATION (TAMMS-A) http://www.apd.army.mil/pdffiles/p738_751.pdf	No	No
	TM 11-5895-1037-30&P	INTERMEDIATE MAINTENANCE WITH ILLUSTRATED PARTS BREAKDOWN FOR TRANSPONDER SET AN/APX-100(V) PART NUMBERS 4036360-0507 THRU 4036360-0510, 4036360-0512 THRU 4036360-0517, 4036360-0519 THRU 4036360-0520, 403	Yes	No

Environment: Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to FM 3-34.5 Environmental Considerations and GTA 05-08-002 ENVIRONMENTAL-RELATED RISK ASSESSMENT. In an Operational Environment, it is the responsibility of the Soldier and DA Civilians to protect the environment from damage. All operations must conform to the Army Environmental Program, TC 3-34.489 (The Soldier and the Environment), FM 3-100.4 (Environmental Consideration in Military Operations), and local, state, and federal environmental policies, the Clean Air Act (CAA), CAA amendments, National Ambient Air-Quality Standards (NAAQS), as well as Occupational Safety and Health Administration (OSHA), Hazard Communication Standard for Industry, 29 CFR, part 1910.

Safety: In a training environment, leaders must perform a risk assessment in accordance with ATP 5-19, Risk Management. Leaders will complete the current Deliberate Risk Assessment Worksheet in accordance with the TRADOC Safety Officer during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection, FM 3-11.5, Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Decontamination. Incidental to Army operations and activities, all operations must provide for public safety, safe and healthful work places, procedures, and equipment. Observe all safety precautions when using lifting devices and handling heavy parts. Observe all safety and/or environmental precautions regarding electricity, radiation, radio frequency (RF), fuel, lubricants, high pressures, and refrigerants. Provide ventilation for exhaust fumes during equipment operation and use hearing protection when required in accordance with AR 385-10, (The Army Safety

Program) the Clean Air Act (CAA), CAA amendments, National Ambient Air-Quality Standards (NAAQS), and the Occupational Safety and Health Administration (OSHA) Hazard Communication standard.

Prerequisite Individual Tasks : None

Supporting Individual Tasks : None

Supported Individual Tasks : None

Supported Collective Tasks : None