

**D E P A R T M E N T   O F   T H E   A R M Y   T E C H N I C A L   M A N U A L**

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**OPERATOR'S AND ORGANIZATIONAL MAINTENANCE MANUAL  
INTERCOMMUNICATION STATIONS LS-147A/FI, LS-147B/FI,  
LS-147C/FI, AND LS-147D/FI**

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**Headquarters, Department of the Army, Washington 25, D.C.**

**5 June 1961**

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**WARNING**

**HIGH VOLTAGE**

is used in the operation  
of this equipment.

**DEATH ON CONTACT**

may result if operating  
personnel fail to observe  
safety precautions.

**DON'T TAKE CHANCES!**

Be careful when working on the 115-volt ac line connections. Turn off the power and disconnect the line cord plug from the ac source before making any connections or before working inside the cabinet. Before connecting the LS-147(\*)/FI to a 115-volt ac source, be sure that the chassis is connected to the same ground as the ac source.

This reprint includes all changes in effect at the time of publication - Changes 1 through 3.

**TECHNICAL MANUAL**  
**Operator's and Organizational Maintenance Manual**  
**INTERCOMMUNICATION STATIONS LS-147A/FI, LS-147B/FI,**  
**LS-147C/FI, AND LS-147D/FI**

TM 11-5830-221-12

CHANGES No. 1

HEADQUARTERS,  
 DEPARTMENT OF THE ARMY  
 WASHINGTON 25, D.C., 5 June 1963

TM 11-5830-221-12, 5 June 1961, is changed as follows:

*Page 5.* After paragraph 1 add paragraph 1.1.

### 1.1. Index of Publications

Refer to the latest issue of DA Pam 310-4 to determine whether there are any new editions, changes, or additional publications pertaining to your equipment. DA Pam 310-4 is an index of current technical manuals, technical bulletins, supply bulletins, lubrication orders, and modification work orders that are available through publication supply channels. The index lists the individual parts (-10, -20, -35P, etc.) and the latest changes to and revisions of each equipment publication.

Delete paragraph 2 and substitute:

## 2. Forms and Records

*a. Reports of Maintenance and Unsatisfactory Equipment.* Use equipment forms and records in accordance with the instructions in TM 38-750.

*b. Report of Damaged or Improper Shipment.* Fill out and forward DD Form 6 (Report of Damaged or Improper Shipment) as prescribed in AR 700-58 (Army), NAVSANDA Publications 378 (Navy), and AFR 71-4 (Air Force).

*c. Comments on Manual.* Forward all comments on this publication direct to: Commanding Officer, U.S. Army Electronics Materiel Support Agency, ATTN: SELMS-MP, Fort Monmouth, N.J. (DA Form 1598 (Record of

Comments on Publications), DA Form 2496 (Disposition Form), or letter may be used.)

*Page 11.* Delete paragraphs 13 and 14 and substitute:

## 13. Scope of Operator's Maintenance

The maintenance duties assigned to the operator of the LS-147(\*)/FI are listed below together with a reference to the paragraph covering the specific maintenance function. The duties assigned require no special tools or test equipment.

*a.* Daily preventive maintenance checks and services (par. 14.2).

*b.* Weekly preventive maintenance checks and services (par. 14.3).

*c.* Visual inspection (par. 15).

*d.* Equipment performance checklist (par. 16).

*e.* Replacing fuses (par. 17).

## 14. Operator's Preventive Maintenance

Preventive maintenance is the systematic care, servicing, and inspection of the equipment to prevent the occurrence of trouble, to reduce downtime, and to assure that the equipment is serviceable.

*a. Systematic Care.* The procedures given in paragraphs 14.1 through 17 cover routine systematic care and cleaning essential to proper upkeep and operation of the LS-147(\*)/FI.

**b. Preventive Maintenance Checks and Services.** The preventive maintenance checks and services charts (pars. 14.2 and 14.3) outline functions to be performed at specific intervals. These checks and services are to maintain Army electronic equipment in a combat serviceable condition; that is in good general (physical) condition and in good operating condition. To assist operator's in maintaining combat serviceability, the charts indicate what to check, how to check, and what the normal conditions are; the *References* column lists the illustrations, paragraphs, or manuals that contain supplementary information. If the defect cannot be remedied by the operator, higher echelon maintenance or repair is required. Records and reports of these checks and services must be made in accordance with the requirements set forth in TM 38-750.

Add paragraphs 14.1, 14.2, and 14.3 after paragraph 14:

#### 14.1. Preventive Maintenance Checks and Services Periods

Preventive maintenance checks and services of the LS-147(\*)/FI are required on a daily and weekly basis.

a. Paragraph 14.2 specifies checks and services that must be accomplished daily and under the special conditions listed below if the LS-147(\*)/FI is used in transportable, mobile, or fixed installations.

- (1) When the equipment is initially installed.
- (2) When the equipment is reinstalled after removal for any reason.
- (3) At least once each week if the equipment is maintained in a standby condition.

b. Paragraph 14.3 specifies *additional* checks and services that must be performed *once* each week.

#### 14.2. Daily Preventive Maintenance Checks and Services Chart

| Sequence No. | Item                              | Procedure                                                                                                                                                                                                                                                            | References                               |
|--------------|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| 1            | LS-147(*)/FI .....                | Inspect the exterior of the LS-147(*)/FI for completeness. Requisition missing items.                                                                                                                                                                                | App. III and figs. 1, 2, 3, 7, 8, and 9. |
| 2            | Cabinet exterior and front panel. | <b>Warning:</b> Cleaning Compound is flammable and its fumes are toxic. Do not use near flame and provide adequate ventilation. Dampen (not wet) a cloth with cleaning compound and clean front panels and cases; dry front panels and cases with a lint-free cloth. | Figs. 1, 2, and 3.                       |
| 3            | Knobs and switches .....          | While making operating checks (item 4 below), observe that the mechanical action of each knob is smooth and free of external and internal binding.                                                                                                                   | Figs. 1, 2, and 3.                       |
| 4            | Operation .....                   | Perform operating checks as indicated in equipment performance checklist.                                                                                                                                                                                            | Par. 16.                                 |

#### 14.3. Weekly Preventive Maintenance Checks and Services Chart

| Sequence No. | Item                                      | Procedure                                                                                             | References                    |
|--------------|-------------------------------------------|-------------------------------------------------------------------------------------------------------|-------------------------------|
| 1            | Cabinet exterior .....                    | Tighten loose screws, bolts, and mountings.                                                           | Figs. 1, 2, and 3.            |
| 2            | Exposed metal surfaces .....              | Inspect for rust and corrosion.                                                                       | Figs. 1, 2, and 3.            |
| 3            | Signal wire lines .....                   | Check to see that the signal wire lines are firmly connected to the binding posts at rear of cabinet. | Figs. 1, 2, and 3.            |
| 4            | Power cord, plug, and ground connections. | Inspect power cord and plug for cracks, frays, or bent plug prongs. See that the chassis is grounded. | Par. 9 and figs. 7, 8, and 9. |