RECORDING SET, AN/USH-9

DESCRIPTION OF COAST GUARD ELECTRONIC EQUIPMENT
NAME

Recording Set, AN/USH-9, for use with Loran C Receivers.

FUNCTIONAL DESCRIPTION

This set will permit recording of envelope and cycle time difference information on two pairs of Loran C signals simultaneously. This set has an expanded scale feature to permit high sensitivity measurements. The recorder will indicate 360° rotation of the retransmitting potentiometer shaft.

RELATION TO OTHER EQUIPMENT

This set differs from AN/USH-7 and AN/USH-8 in the following manner:

(1) AN/USH-7 - This set will permit simultaneous recording of envelope and cycle phase shift information from a master and two slave stations.

(2) AN/USH-8 - This set will permit recording of envelope and cycle time difference information on two pairs of Loran C signals simultaneously. The set does not have the expanded scale feature for sensitive measurements.

The retransmitting potentiometer is linear since loading and effect of vacuum tube circuit is negligible.

EQUIPMENT REQUIRED BUT NOT SUPPLIED

Not Applicable, Recording AN/USH-9 completely self-contained.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

(1) Type of Reception and/or Transmission - Voltage signal from transmitting potentiometers in Loran Equipment.

(2) Frequency Range - 50 or 60 cps.

(3) Power Output - Not Applicable.

(4) Output Signal Characteristics for Visual Output - Permanent ink record on paper.

(5) Ranges as Rated - Recording Ammeters, 1 MA, D-C.

(6) Accuracies - Recording Ammeters, ME-179/U, ± 1% of full scale deflection.

(7) Power Source Required - 115 V, a-c single phase.

(8) Heat Dissipation - Not Applicable.

(9) Pertinent Electrical and Mechanical
Characteristics of Individual Units -

Recording Ammeters: Dual Channel, Galvanometric Type, Rectilinear, Ink Recording Instruments, 1 MA d-c full scale deflection on each channel.

Chart Drive: 115 V, a-c, 50 or 60 cps.

Marker Pens: 115 V, a-c, 50 or 60 cps.

Power Supply: PP-2636/U.

(10) Where and How Installed - Component of complete Loran System.

(11) Overall Dimensions - Height 40"', Width 20", Depth 20".

(12) Number of Operators Required - Not Applicable.

MANUFACTURER'S DATA

Texas Instruments Incorporated
3609 Buffalo Speedway
Houston 6, Texas

Recording Set, AN/USH-9
Contract Tcg-41218, November 20, 1959

Electrical Equipment Cabinet
Drawing No. 88284

Control Unit - Drawing No. 88292
Power Supply - Drawing No. 88307
Texas Instruments Recording Ammeter Model DR 1M 1M-A16-LR 16-R-ED.

TUBE AND SEMICONDUCTOR COMPLEMENT

Control Unit

4 Zener Diodes, Semiconductor, Silicon, H.E. Type 1N471.

4 Total

4 Shield, Electron Tube, IERC Type TRTR-6020H.

4 Shield Base, Electron Tube, CJ Type 9SB 1.

4 Tube, Electron, G.E. Type 5814A.

12 Total

Power Supply

2 Tube, Voltage Amplifier, RCA Type 12AX7.

1 Tube, Voltage Regulator, RCA Type 5651.

DESCRIPTION OF COAST GUARD ELECTRONIC EQUIPMENT
6 Tube, Power Amplifier, RCA Type 6W6-GT.

2 Tube, Power Rectifier, RCA Type 5U4-GB

11 Total

REFERENCE DATA AND LITERATURE


SHIPPING DATA

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<th>OVERALL DIMENSIONS (Inches)</th>
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DESCRIPTION OF COAST GUARD ELECTRONIC EQUIPMENT
## EQUIPMENT SUPPLIED

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**DESCRIPTION OF COAST GUARD ELECTRONIC EQUIPMENT**