EQUIPMENT
CABINET AND
CONTROL UNIT
CY-2808/USH-8

AMMETER
RECORDING
ME-179/U

POWER SUPPLY
PF-2539/U

RECORDING SET, AN/USH-8

DESCRIPTION OF COAST GUARD ELECTRONIC EQUIPMENT
NAME

Recording Set, AN/USH-8, 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. 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-9 in the following manner:

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

(2) AN/USH-9 - This set has an expanded scale feature to permit more sensitive measurements of envelope and cycle time difference information on two pairs of Loran C signals simultaneously. The retransmitting potentiometer is compensated to allow for loading effect of Recording Ammeter.

EQUIPMENT REQUIRED BUT NOT SUPPLIED

Not Applicable, Recording Set AN/USH-8 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,

DESCRIPTION OF COAST GUARD ELECTRONIC EQUIPMENT
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-2539/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-8

Electrical Equipment Cabinet - Drawing No. 153830

Power Supply - Drawing No. 153832

Control Unit - Drawing No. 152757

Texas Instruments Recording Ammeter

Model DR 1M 1M-A 16-LR 16-R-ED.

TUBE AND SEMICONDUCTOR COMPLEMENT

Power Supply

1 Rectifier, Semiconductor, Silicon, GE Type 4JA-411-CX135

2 Rectifiers, Semiconductor, Silicon, GE Type 4JA-4BX-117

1 Rectifier, Semiconductor, Silicon, GE Type 1N1487/852

2 Rectifiers, Semiconductor, Silicon, TI Type 652CO/1N752A

6 Total

4 Transistors, Germanium, RCA Type 2N561

1 Transistor, Germanium, RCA Type 2N270

5 Transistors, Germanium, RCA Type 2N217

1 Transistor, Germanium, RCA Type 2N647

11 Total

DESCRIPTION OF COAST GUARD ELECTRONIC EQUIPMENT
## REFERENCE DATA AND LITERATURE


## SHIPPING DATA

<table>
<thead>
<tr>
<th>NO. OF BOXES</th>
<th>CONTENTS</th>
<th>VOL. (Cu. Ft.)</th>
<th>OVERALL DIMENSIONS (Inches)</th>
<th>WEIGHT PACKED (Lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Electrical Equipment Cabinet</td>
<td>14.7</td>
<td>24 24 44</td>
<td>112</td>
</tr>
<tr>
<td>1</td>
<td>Control Unit, Power Supply</td>
<td>4.6</td>
<td>18-1/2 17-1/2 24-1/2</td>
<td>66</td>
</tr>
<tr>
<td>1</td>
<td>Recording Ammeter, Ink, Filler-primer Syringe, Pen Cleaner</td>
<td>4.6</td>
<td>18-1/2 17-1/2 24-1/2</td>
<td>65</td>
</tr>
</tbody>
</table>

## EQUIPMENT SUPPLIED

<table>
<thead>
<tr>
<th>NO. OF UNITS</th>
<th>CONTENTS</th>
<th>VOL. (Cu. Ft.)</th>
<th>OVERALL DIMENSIONS (Inches)</th>
<th>WEIGHT (Lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Electrical Equipment Cabinet</td>
<td>9.84</td>
<td>20 20 40</td>
<td>62</td>
</tr>
<tr>
<td>1</td>
<td>Control Unit</td>
<td>.62</td>
<td>8 19 7</td>
<td>15</td>
</tr>
<tr>
<td>1</td>
<td>Power Supply</td>
<td>.55</td>
<td>14-3/8 19 3-1/2</td>
<td>35</td>
</tr>
<tr>
<td>1</td>
<td>Recording Ammeter, Ink, Filler-primer Syringe, Pen Cleaner</td>
<td>1.08</td>
<td>15 13-1/2 9-1/4</td>
<td>45</td>
</tr>
</tbody>
</table>

## DESCRIPTION OF COAST GUARD ELECTRONIC EQUIPMENT