

## SUMMARY OF DATA

**PURPOSE**

The facsimile set, NSN 5815-99-971-8698 provides a picture 18 inches by 22 inches of chart information received by line. It supersedes the Mufax Model D-649-L.

**MODE OF OPERATION**

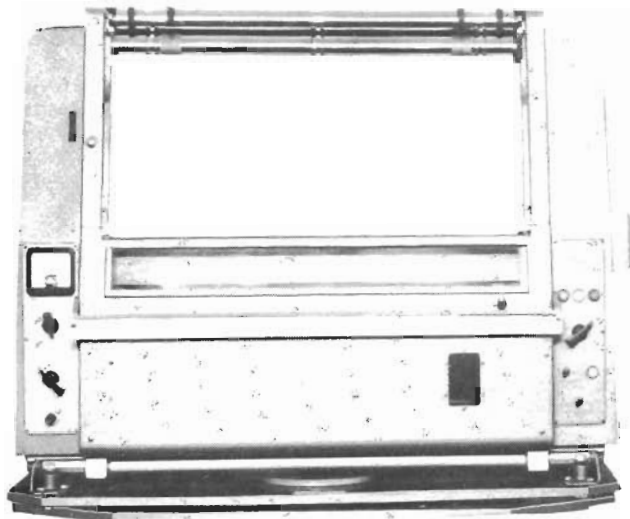
Amplitude modulation in the band 1 to 5 kHz.

**BRIEF DESCRIPTION**

The chart recorder amplifies and detects amplitude modulated signals. Its d.c. output is used to "burn" an electro-sensitive paper in a series of horizontal lines of varying intensity, thus reproducing the chart.

**DIMENSIONS**

Height	22½ in.
Width	28½ in.
Depth	12½ in.
Weight	150 lb

**PRINCIPAL CHARACTERISTICS**

Input Signal	: A.M. sub-carrier (1800 to 4000 Hz)
Input Level	: +5 dBm to -40 dBm (normally 0 dBm is black)
Input Impedance	: 600 ohms balanced 2-wire
Control Signals	: 5 secs Start signal; 300 Hz at 96 lines/inch 675 Hz at 48 lines/inch 5 secs Stop signal 450 Hz
Phasing Signals	: 'A' fully automatic, black 95% white 5%, minimum duration 15 s 'B' semi-automatic, black 50% white 50%, minimum duration 20 s
Helix Speeds	: 60, 90 and 120 revs/min Automatic or manual selection
Line Definition	: 96 line/inch 48 line/inch
Fork Frequency	: 100 Hz adjustable by 40 parts in 10 <sup>6</sup>

**POWER REQUIREMENTS**

105 to 125 V, or 200 to 240 V, 50 to 60 Hz. Consumption 150 W.

**HANDBOOKS**

BR 2493 Handbook for Recording Outfits RED(1) and RED(2)

**ESTABLISHMENT LIST**

S1490 Recording Outfits RED(1) and (2)

**INSTALLATION SPECIFICATION**

B996/PRE.1	Mufax Equipment
B1117/PRE.1	Outfits RED(1) and (2)

## COMMERCIAL EQUIVALENT

Muirhead Model D-649-L!E1 Chart Recorder (MUFAX)  
Muirhead Model K-156-B FST-A.M. Converter

**NOTE** The corresponding shipborne receiving equipment is Recording Outfit RED(2). This is similar to the Outfit RED(1) but has additionally a Converter F.S. 5815-99-971-8699. The signals are received by radio, using FST or F.M. sub-carrier, and the output of the receiver is at a mean frequency of 2550 Hz. When receiving LF there is a shift of  $\pm 150$  Hz; when receiving HF the shift is  $\pm 400$  Hz. (The higher frequency corresponds to a white signal). The receiver output is connected to the FST/A.M. Converter which passes on intelligence as an amplitude modulation on 1800 Hz for processing as in line operation.