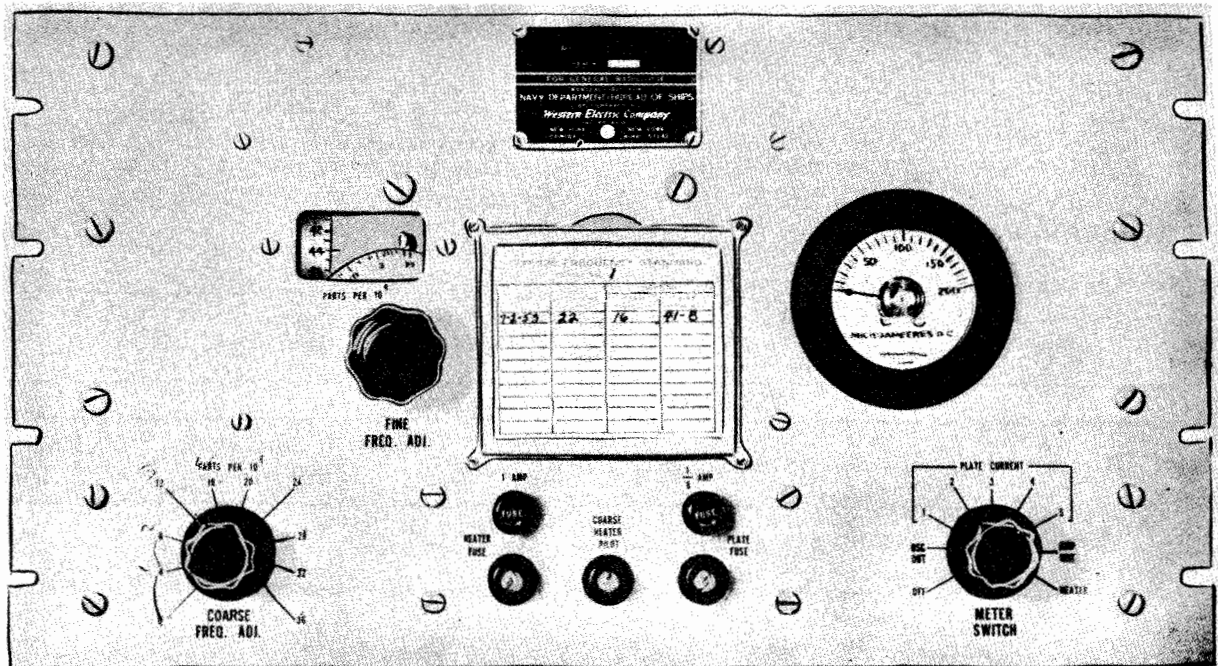


April 1958

RF OSCILLATOR

Test-Frequency Measuring

O-76/U, O-76A/U



RF Oscillator O-76A/U

FUNCTIONAL DESCRIPTION

The O-76/U and O-76A/U is a stable crystal oscillator designed for use as a frequency standard. The frequency can be maintained approximately constant, irrespective of moderate changes in ambient temperature, humidity, and air pressure.

The frequency may be calibrated from standard frequency transmissions of the Bureau of Standards or the time signal transmissions of the Naval Observatory.

Data on this sheet reflects the following field changes. FC1 (O-76 A/U).

RELATION TO OTHER EQUIPMENT

The O-76/U is Western Electric Co type D-175730 Frequency Standard. The O-76A/U is Western Electric Co type D-175730-L2 Frequency Standard.

Equipment Required but not Supplied: Coaxial Cable w/PL-295 plugs or equiv.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

FREQUENCY: 100 kc, 1 band.

FREQUENCY CONSTANT: Approximately one part in 10⁸ per day.

FREQUENCY CONTROL: 100 kc GT cut crystal in Meacham bridge oscillator with close temperature control.

AMBIENT TEMPERATURE

O-76/U: 60 deg F to 104 deg F.

O-76A/U: 32 deg F to 113 deg F.

CALIBRATION

COURSE FREQUENCY ADJ: 0 to 3.6 cps.

FINE FREQUENCY ADJ: 0 to 0.5 cps.

POWER SOURCE REQUIRED: 115 v \pm 10%, 60 cps, single ph, 1.0 amp; 6.3 v \pm 10%, 60 cps, single ph, 2.25 amp; or 135 v DC \pm 10%, 0.05 amp max.

MANUFACTURER'S OR CONTRACTOR'S DATA

Western Electric Co Inc, NY, NY.

Contract: NObsr-39395, dated 23 December 1947 (O-76/U).

Contract: NObsr-57282 (O-76A/U).

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O-76/U, O-76A/U**RF OSCILLATOR**

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TUBE AND/OR CRYSTAL COMPLEMENT

(4) 6AC7 (1) 6V6GT/G
 Total Tubes: (5)
 (1) 99996.7 cps
 Total Crystals: (1)

Oscillator O-76/U.
 NAVSHIPS 91729: Technical Manual for RF
 Oscillator O-76A/U.

TYPE CLASSIFICATION DESIGN COGNIZANCE BUSHIPS PROCUREMENT COGNIZANCE STOCK NO. R.D.B. IDENT. NO.
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REFERENCE DATA AND LITERATURE

NAVSHIPS 91124: Technical Manual for RF

EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	RF Oscillator O-76/U or O-76A/U	10-15/16 x 17-3/16 x 19	90