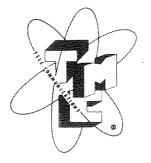
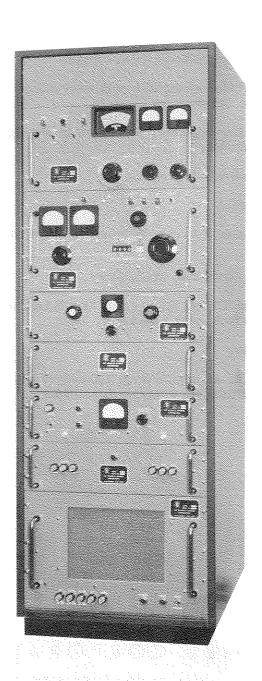
SALES SERVICE BULLETIN NUMBER 241



Controlled Precision Oscillator, Model CPO-1

(AN/URA-31)

SPECIFICATION FILES



The TMC Model CPO-1, Controlled Precision Oscillator, is a stabilized general purpose frequency generating system adjustable to 320,000 frequencies over the frequency range of 1.75 to 33.75 megacycles in 100 cycle steps with a basic stability of 1 part in 108 per day.

All frequency determining elements in CPO-1 are derived from a 1 mc source to provide the stability of 1 part in 10^8 . In addition to the master 1 mc standard, the unit provides an emergency standard with a stability of 1 part in 10^6 per day. The Model CPO-1 may also be connected to an external standard of greater stability without degeneration of that standard.

A phase detector comparison circuit with direct meter indication allows the built-in standard to be compared to and corrected to a master or station standard.

The Model CPO-1 is housed in an attractive relay rack enclosure. The control portion of the unit requires only 25 1/4 inches of rack space. All other units may be mounted separately in the event this makes for a more convenient installation package.

TECHNICAL SPECIFICATIONS:

FREQUENCY RANGE:

1.75 to 33.75 megacycles in 100 cps steps.

FREQUENCY CONTROL:

All frequency determining elements referenced to

a built-in 1 mc source.

FREQUENCY STABILITY:

1 part in 10^8 per day under normal fixed station

operating conditions.

OUTPUT POWER:

Continuously adjustable from zero to 1 watt.

OUTPUT IMPEDANCE:

72 ohms nominal.

SPURIOUS SIGNALS:

All non-harmonic spurious frequencies down at

least 60 db.

INPUT POWER:

115/230 volts, 50-60 cps, single phase.

SIZE:

All units of the CPO-1 require only 52 1/2 inches

of standard 19 inch relay rack space.

WEIGHT:

Approx. 415 lbs.

COMPONENTS AND CONSTRUCTION:

All equipment is manufactured in accordance with JAN/MIL specifications wherever practicable.

THE TECHNICAL MATERIEL CORPORATION

700 FENIMORE ROAD

CABLE TEPEI MAMARONECK, N.Y.



MAMARONECK, NEW YORK

IN CANADA: TMC (CANADA) LTD. OTTAWA, ONTARIO