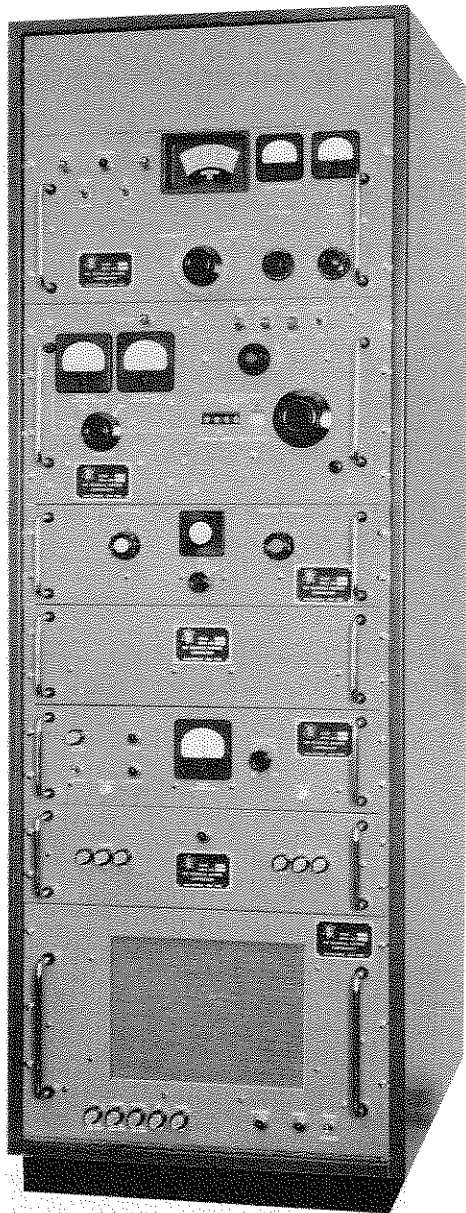


## SALES SERVICE BULLETIN NUMBER 241A

Controlled Precision Oscillator, Model CPO-1

(AN/URA-31)



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  $10^8$  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 above 60 cycles 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.

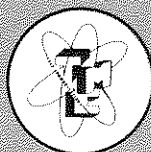
COMPONENTS AND CONSTRUCTION: All equipment is manufactured in accordance with JAN/MIL specifications wherever practicable.

THE TECHNICAL MATERIEL CORPORATION

700 FENIMORE ROAD

MAMARONECK, NEW YORK

CABLE  
TEPEI  
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COMMUNICATION ENGINEERS

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