Figure 1-1. AN/PRM-21, Covers Removed.

Figure 2-1. AN/PRM-21, on Tripod.
FUNCTIONAL DESCRIPTION

The AN/PRM-21 is designed to measure the field intensity of the master and slave station pairs associated with loran transmissions and of continuous wave radio frequency signals.

RELATION TO OTHER EQUIPMENT

The AN/PRM-21 is similar to the TS-318/UP.

EQUIPMENT REQUIRED BUT NOT SUPPLIED

Antenna, vertical 10 to 60 feet.
Battery, 12v (Alternate power source).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

FREQUENCY RANGE: 1700 to 4000 kilocycles.
FIELD STRENGTH RANGE:
(a) With self contained loop antenna 30 microvolts per meter to 15 volts per meter.
(b) With 60 foot vertical antenna (not supplied) 1 microvolt per meter to 15 volts per meter.
OPERATING POWER REQUIREMENTS:
(a) Alternating current 115 V ± 10%, 50 to 600 cycles, single phase.
(b) Direct current (Alternate power requirement) 12 VDC.
SPECIAL FEATURES:
(a) Three inch oscilloscope presentation of received signal.
(b) Synchronizing Oscillator:
   (1) PURPOSE: To provide identification of repetition rate of received signals.
   (2) PRESENTATION: Synchronizing Oscillator controls sweep oscillator, repetition rate is indicated on dials.
(c) Calibrating oscillator:
   (1) PURPOSE: Calibration of synchronizing oscillator.
   (2) PRESENTATION: Lissajous figures with oscilloscope sweep.
OVERALL DIMENSIONS:
(a) Length 18 1/2 inches.
(b) Width 17 1/8 inches.
(c) Height 12 inches.

MANUFACTURERS DATA

INDUSTRIAL TELEVISION, INC., 359 Lexington Ave., Clifton, New Jersey
Contract: Tcg 39771, (CG-33, 477-A)
Dated: 19 November 1954
Basic Equipment: METER, FIELD INTENSITY (LORAN) AN/PRM-21 ITI type IT-185R
Major parts:
   METER, FIELD INTENSITY (LORAN), IM-114/PRM-21, ITI type IT-185R
   ANTENNA, LOOP, AT-676/PRM-21, ITI Part No. D-2726
   COUPLER, ANTENNA, CU-494/PRM-21, ITI Part No. D-2725
   12' Battery Cable, ITI Part No. 23B-2283-1
   4' Battery Cable, ITI Part No. 23B-2283-2
   8' Power Cable, ITI Part No. 23B-2284
   Viewing Hood, ITI Part No. 30A-2285

TUBE AND CRYSTAL COMPLEMENT

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REFERENCE DATA AND LITERATURE