

TD-2 RADIO SYSTEM

1. GENERAL

1.01 This section outlines the maximum testing intervals for making maintenance tests and adjustments. Reference should be made to Section R90.304 and to the maintenance sections of the Practices listed at the end of Section R90.305 for the methods of making these tests.

(a) Daily

Check frequency at output of FM terminal transmitter.
Check frequency deviation of 63A Signal Generator test signal.
Check system continuity.
Check distortion with 63A Signal Generator test signal.
Check distortion with a test pattern.

(b) Weekly

Check all operating voltages and currents.
Check waveguide air pressure.
Check operation of air cooling system for vacuum tubes.
Run gas engine for 15 minutes from either local or remote control.
Check lubrication, oil, water and battery for gas engine.
Check voltages of plant batteries.
Check discharge fuse alarms.
Inspect air supply filter and clean if necessary.

(c) Monthly

Check over-all radio bay performance and alignment.
Check operation of low-power alarm.
Check activity of short-life tubes.
Check alignment of FM transmitter.
Check alignment of FM receiver.
Shut off enough rectifiers for several hours to cause all idle units to start.

Make over-all system video transmission measurements.

Make modulation measurements on selected voice channels.
Check operation of DC blower motor.

(d) Semiannually

Check all alarms.
Check activity of all tubes.
Clean relays and check performance.
Inspect all plugs and connectors.
Inspect commutator and brushes of motor driven autotransformer.
Grease water pump of engine-alternator.
Oil governor switch, governor linkage and overspeed trip.
Clean carburetor air intake filter.
Inspect neon pilot lights on control panels and switching amplifiers for brightness.
Inspect the antennas.

(e) Annually

Add 3-5 drops of oil to bearings of blower motors for tube cooling system.
Run emergency power with full load for 7 hours.
Grease fan, alternator and starter motor bearings.
Flush crankcase and refill.
Oil overrunning clutch.

(f) Biannually

Wipe out bottom of crankcase.
Oil synchronous motor and clutch pinion bearings.

(g) Miscellaneous

Grease bearings of voltage regulator motor every 10 years.
Replace the oil filter of the gas engine after 150 hours of operation.

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