SUGGESTED FIELD INVESTIGATION METHOD FOR CIRCULATING GROUND CURRENTS BETWEEN ANTENNA SYSTEMS AND THE 3RD WIRE GROUND OF AC OUTLETS

PURPOSE:

To avoid performance problems (hum in pix) and severe equipment damage of CTC-131M monitors and CTC-132 equipped projection TV receiver/monitors.

PROCEDURE:

Note: Make all tests with the television receiver completely disconnected.

- Measure the leakage current between the antenna leads and the 3rd wire ground connection of the AC outlet to be used for the Receiver/Monitor -- using the 120V leakage tester (UL 1410-50.7) as described in RCA Service Data. Testing should be started on the protected range of the meter to avoid damage to the measurement equipment.

  A measurement of 5 ma or over would indicate a potential shock hazard to the user or installer and must be corrected.

- If the leakage current measured is below 5 ma, measure the short circuit AC current flow between the 3rd wire ground connection of the outlet and the antenna leads -- connect an AC current meter in series with 12 guage jumper wires.

  A measured current in excess of 7 amps will overrate components in the chassis system and can cause multiple component failure in the receiver.

  AC currents of 2.5 amps or greater can cause hum interference in the picture, especially in projection models.

- Any such condition must be corrected to assure proper performance/ reliability of the receiver in the specific installation.