

L MULTIPLEX TERMINALS
LMX-1
EMERGENCY PILOT SUPPLY
EMERGENCY PILOT GENERATOR CIRCUITS
TESTS

Procedures for measuring and adjusting the pilot generator output, measuring rectifier direct current, and adjusting the Sensitrol* relay are described. These procedures supersede similar procedures described in Section 356-081-503. *Equipment Test Lists are affected.*

APPARATUS

Receiving Test Equipment (Section 356-010-500) having the following characteristics:

Frequency: 308 to 8320 kHz

Power: -32.8 dBm

Impedance: 75 ohms

P2BJ Cord

KS-14510 Volt-Ohm-Milliammeter (or equivalent)

STEP	PROCEDURE
	<p><i>Note:</i> These tests should normally be made with the equipment out of service. However, except for restrapping the amplifier output pad or the fixed pad, or for tube replacement, certain tests can be made on an in-service basis provided care is taken not to interrupt service.</p> <p>1 Prepare and calibrate receiving test equipment (RTE) for a 75-ohm terminated measurement of -32.8 dBm at the frequency under test (Fig. 1).</p> <p>2 Make patch (1), Fig. 1 for the frequency under test.</p> <p>3 Adjust the RTE for a peak reading and read the power output.</p> <p><i>Requirement:</i> -32.8 dBm \pm0.1 dB</p>

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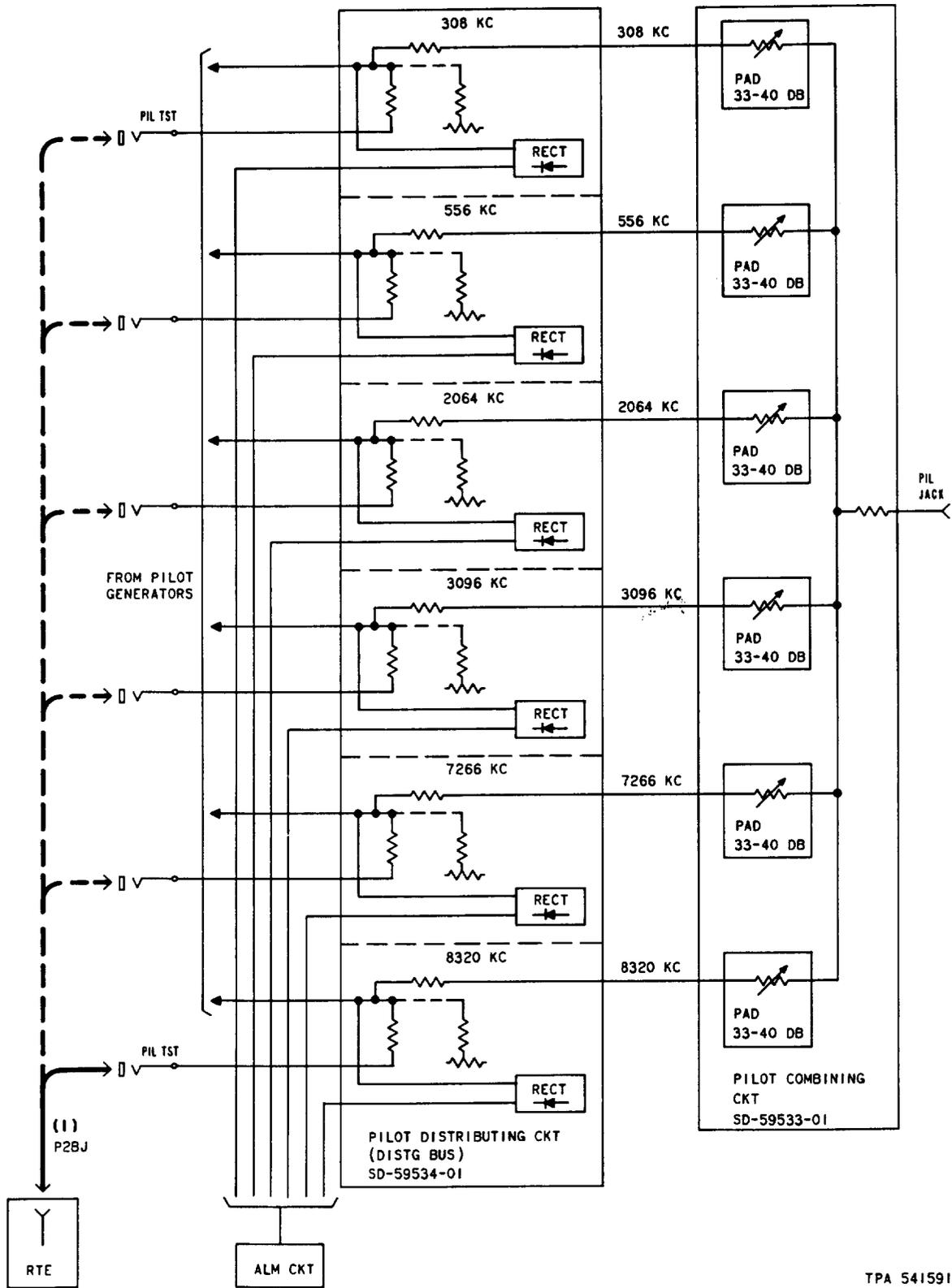


Fig. 1—Pilot Generator Circuits for Emergency Use Only—Measurement of Pilot Generator Output

STEP	PROCEDURE
4	<p>If the requirement of Step 3 is met, proceed to Step 5; if the requirement is not met but is within ± 0.3 dB, adjust the OUTPUT CONTROL of the pilot generator under test. If the requirement is not within ± 0.3 dB, proceed as follows:</p> <p>Caution: Before performing the following substeps, the generator under test must be removed from service (refer to Section 356-052-501).</p> <ul style="list-style-type: none"> (a) Perform tube tests on the pilot generator per Section 356-150-501. If any tubes are changed, perform tests per Sections 356-174-501 and 356-174-502 before proceeding. (b) Set the OUTPUT control at its midposition and strap the output pad (per SD-59531-01) to give an output at the PIL TST jack as close to the requirement as possible. (c) Repeat Step 3.
5	<p>Turn the zero adjust screw on the Sensitrol relay so that the pointer reads zero (center scale).</p> <p>Note 1: If there is reason to suspect the varistor unit supplying power to the Sensitrol, disconnect the AA lead of the varistor circuit associated with the pilot distributing bus and connect a dc microammeter built out to 6000 ohms between the terminals AA and GA. Be careful in making this measurement since the varistor may be connected to a working bus.</p> <p>Note 2: It is necessary that power be applied continuously to the temperature control circuit associated with the varistor for a period of 24 hours before the above current measurement is made.</p> <p>Requirement: The meter should read 30 ± 8 microamperes. If this requirement is not met, replace the varistor unit. Reconnect the lead.</p>
6	Repeat Steps 1 through 5 for all remaining frequencies.
7	Remove all test patches and restore circuit to normal.