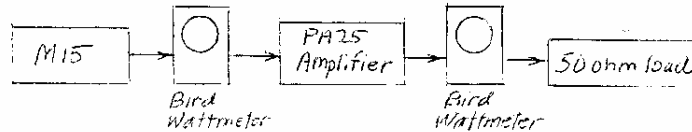


Set-up sketch:



Procedure:

1. apply power supply voltages to M15 and PA25
2. ground push-to-talk bus for both the M15 and the PA25 (causes M15 to go into transmit mode, applies rf drive signal of approx. 5 watts from M15 to the PA25's amplifier circuits, pulls in relays in the PA25 and applies bias to the PA25's power mosfet transistor)
3. record input and output power
4. repeat for 118.000, 127.500 and 136.975 Mhz.

Results:

Mhz	watts in	watts out	gain, dB
118.000	4.4	27.1	7.9
127.500	4.3	25.0	7.6
136.975	4.2	23.6	7.5

Part 2.987—Modulation Characteristics

There is no provision for modulation within the PA25. For 6K00A3E modulation of the driving transmitter, the percent modulation at the amplifier output will equal the percent modulation at the amplifier input, up to approximately 50% modulation. Above this level, the modulation at the PA25 output will be somewhat less than the input modulation. It is assumed that the driving transmitter, which is not a part of this application, will always be a type accepted transmitter, usually with it's own methods for limiting modulation percentage.

Part 2.989—Occupied Bandwidth

The occupied bandwidth of the RF output of the PA25 is determined by the signal from the driving transmitter. The amplifier will have only a very small effect on this value.

Part 2.991—Spurious Emissions at the Antenna Terminals

These tests were performed at Smith Electronics Co., 8200 Snowville Rd., Cleveland, OH 44141, by Mr. James Pollack. They have an approved open field test site and are registered with the FCC for conducting tests for FCC authorizations.

Equipment used:

1. Bird Model 43 RF Wattmeter with 100 watt 100-250 Mhz element