

Each equipment tested as follows:

RECEIVE MODE: signal source adjusted for 5kHz deviation, F mod 1kHz.

Trio  
TR9130

Test No ?

1) Set equipment to FM: test dial calibration at 145MHz	-663Hz
2) Set generator level for 12dB s+n to n at 145 MHz: record level	0.24uV emf
3) Set generator level for 12dB s+n to n at 144 MHz: record level	0.24uV emf
4) Set generator level for 12dB s+n to n at 145.975: record level	0.28uV emf
5) Connect 50 ohm dummy load to antenna: record any spurious signals across tuning range of equipment	none
6) Set equipment to 145MHz: couple two generators through a combiner: adjust one for 20dB s+n to n: tune second generator to 145.250 MHz CW and increase signal to level which creates a 1dB degradation in signal to noise ratio at 145MHz: record the levels of both generators	0.63uV emf @ 145MHz 35.5mV emf @ 145.25MHz
7) As for test 6: tune second generator to 145.025MHz, 5kHz deviation: increase level of generator 2 until a 1dB degradation in signal to noise ratio occurs or adjacent channel breakthrough becomes evident with CW on generator one: record the levels of both generators	0.63uV emf @ 145MHz 0.8mV emf @ 145.025MHz
8) Set equipment to 145MHz: sweep a 1mV signal (into 50 ohms) from 450 kHz slowly through to 200MHz: record and quantify any responses	none
9) Set equipment to SSB (USB): test dial calibration at 145MHz	-640Hz
10) Set CW generator level for 12dB s+n to n at 145MHz: record level	0.7uV emf
11) Connect 50 ohm dummy load to antenna input: record any spurious signals across tuning range of equipment	none
12) Set equipment to 145MHz: couple two generators through a combiner: adjust CW signal level for 20dB s+n to n with one generator: set other generator to 145.05MHz and increase level of this CW signal until signal to noise ratio is degraded by 1dB: record the level of both generators	1.8uV emf @ 145MHz 20mV emf @ 145.05MHz
13) As for test 12 but set second generator to 145.006MHz	1.8uV emf @ 145MHz 2.0mV emf @ 145.006MHz
14) Set equipment to 145MHz: sweep a 1mV signal (into 50 ohms) from 450kHz slowly through to 200MHz: record and quantify any unscheduled responses	none
<b>TRANSMIT MODE: Supply voltage 13.8V unless otherwise stated, antenna socket connected to 50 ohm dummy load.</b>	
15) Set equipment to FM: test dial calibration at 145MHz	-663Hz
16) Measure power output	22w
17) Measure power output at 12V supply voltage	18.5w
18) Record and quantify any spurious emissions in output spectrum	none
19) Set equipment to SSB (USB): connect two-tone generator to microphone input and increase the level of two equal tones until the PEP output reaches the level designated in the manufacturer's specification: record the level of intermodulation products in the output spectrum	3rd order 32dB below tones 5th order 35dB below tones
20) As for test 19 but increase the level of both equal tones by 14dB: record PEP output level	20w
21) As for test 20: Record intermodulation products	3rd order 18dB below tones 5th order 36dB below tones
22) As for test 19: adjust level of two equal tones to produce an output corresponding to 6dB below the rated output level: record results as per test 19	3rd order 30dB below tones 5th order 36dB below tones
23) Check transmit operation for sensitivity to high VSWR on output, look for any instability at 3:1 VSWR, single tone full output	No instability at 3:1 VSWR
24) Operate for 10 seconds at infinite VSWR (short and open circuit on output): Check for satisfactory operation following this test.	Satisfactory