

this Schedule, on any other frequency specified in subclause (1) of this clause in a period not exceeding 20 seconds:

(b) It shall be possible to change the receiver from operation on any frequency to operation, within the terms of this Schedule, on any other frequency specified in subclause (1) of this clause and reduce the frequency error in the A3J and A3A modes to less than 30 Hz in not more than 30 seconds, except that it shall be possible to set the receiver to 2182 kHz in not more than 10 seconds.

(11) Transmitter Meters—

(a) The transmitter shall incorporate an indicator of aerial current. Failure of this indicator shall not disconnect the aerial:

(b) Other indicators or meters shall be included, as necessary, to enable the transmitter to be checked and adjusted.

(12) Alarm Signal Generating Device—The transmitter shall provide facilities for readily using, by approved means, the radiotelephone alarm signal generating device. The performance requirements for this device are listed in Part II of this Schedule.

(13) Automatic Delay—If it is necessary to delay the application of power to any part of the transmitter after switching on, the delay shall be provided automatically.

(14) Facilities for Two-Way Communication—

(a) For simplex operation, the equipment shall be capable of being changed rapidly from 'transmit' to 'receive' and vice versa:

(b) A non-locking switch shall be provided for transmit-receive switching, which, in its normal position, leaves the equipment in the receive condition with the loudspeaker in circuit. When the equipment is in the transmit condition, the microphone shall be in circuit, and the loudspeaker shall be disconnected automatically:

**5. Standard Test Conditions—**(I) General—Standard test conditions are those conditions which shall apply for the purpose of testing the equipment for the minimum requirements of this Schedule. They are identified throughout this Schedule by initial capital letters and are defined in the following subclauses.

(2) Test Voltage—The Standard Test Voltage shall be the voltage applied to the primary supply input terminals of the equipment. For lead-acid battery operated equipment it shall be 2.2 volts per cell, and for equipment operated from a supply other than lead-acid batteries it shall be within plus and minus 2 percent of the value stated by the manufacturer to be the nominal supply voltage.

(3) Extremes of Supply Voltage—The equipment shall meet the requirements of this Schedule, unless otherwise stated, for a supply voltage variation of plus 10 percent and minus 15 percent relative to the Standard Test Voltage for equipment operated from a battery of secondary cells, and plus and minus 10 percent relative to the Standard Test Voltage for equipment operated from a supply other than a battery of secondary cells.

(4) Ambient Air Temperature—For the duration of the tests, the Standard Ambient Air Temperature shall be between 15°C and 30°C except when otherwise specified herein.

(5) Climatic and Durability Tests—Except where otherwise stated herein, the equipment shall meet the requirements of the vibration, dry heat, damp heat, corrosion, and low-temperature tests specified in the Fourteenth Schedule.

The following tests shall be included in the performance checks:

- (a) Transmitter Power Output—clause 6 (7):
- (b) Transmitter Frequency Error—clause 6 (2) (a)
- (c) Transmitter Frequency Variation due to Vibration—clause 6 (2) (c)—Vibration test only:

(d) Transmitter Unwanted Emissions—clause 6 (5):

(e) Receiver Sensitivity—clause 7 (3):

(f) Receiver Audio Output—clause 7 (6):

(g) Receiver Frequency Error—clause 7 (11) (a)

(4) Receiver Frequency Variation due to Vibration—clause 7 (11)(c)

(6) Transmitter Modulation—For standard tests the transmitter shall be modulated to—(a) A depth of 25 percent for A3H emissions (sideband power of 12dB below the carrier power):

(b) Produce 25 percent of the rated peak envelope power (see clause 6 (1)) for A3A and A3J emissions—when a sinusoidal tone of 1000 Hz (Standard Test Modulation) is applied at the audio input terminals. The total harmonic distortion of the modulating source shall not exceed 1 percent.

(7) Transmitter Test Load—The transmitter Standard test Load shall be a non-reactive resistor in series with a capacitor. The values of the components of the Standard Test Load for each test frequency are given in the following table:

1,606 kHz and 2,182 kHz	10 ohms and 200 pF
4,139.5 kHz ..	20 ohms and 160 pF
6,213.5 kHz ..	35 ohms and 150 pF

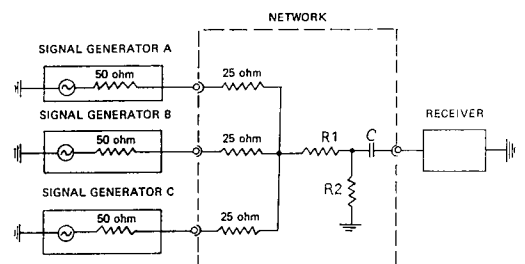
This requirement shall in no way imply that the transmitter should operate satisfactorily into these loads only. The Standard Test Load shall be so designed that the power loss by radiation is negligible.

(8) Receiver Standard Test Signals—

(a) The Standard Test Signal for use on equipment set for the reception of A3H and A3 emissions shall consist of an A2 signal of the carrier frequency modulated to a depth of 30 percent with a 1000 Hz tone:

(b) The Standard Test Signal for use on equipment set for the reception of A3A and A3J emissions shall consist of an unmodulated signal (AO emission) 1000 Hz above the carrier

(9) Receiver Test Signal Standard Input Network—The input network is for the application of signals from 1, 2, or 3 signal generators to the input of the receiver, and consists of a screened network as shown below:



The values of R1, R2, C, and the network attenuation  $\alpha$  for each test frequency are given in the following table:

Test Frequency	R1	R2	C	$\alpha$
1,606 kHz and 2,182 kHz	70 ohm	11 ohm	200 pF	22 dB
4,139.5 kHz ..	64 ohm	26 ohm	160 pF	18.5 dB
6,213.5 kHz ..	52 ohm	64 ohm	150 pF	15 dB

If the outputs of less than 3 signal generators are to be applied to the receiver, any unused input shall be terminated with a 50 ohm shielded termination.