of sub-clause (1) of this clause at the maximum setting of the manual audio-frequency gain control required by clause 2 (3) (a) of this Part of this Schedule may maintain an output constant to within 6 dB at the two alarm-signal tone frequencies, 1300 Hz and 2200 Hz, as the manual gain control is turned down to reduce the output level of noise or speech. At all settings of this control, and irrespective of the adjustment of the preset control of audio-frequency gain required by clause 2 (3) (b)) of this Part of this Schedule, the intelligibility of speech reception must be miaintained.

(3) The maximum response frequencies of the filters, if used, shall be within ± 1.5 percent of the nominal frequencies of 1300 and 2200 Hz. The discrimination should not exceed 3 dB at frequencies within 3 percent of the maximum response frequency.

15. Radiation—The receiver shall not in normal service produce a field exceeding 0.1μV/metre at a distance of 1 nautical mile. This shall normally be regarded as satisfactory if the following requirements are met:

The receiver shall be placed centrally in a screened earthed enlosure of dimensions at least 1.8 m. cube. The earth terminal of the receiver shall be connected to the inside of the screen.

The aerial terminal shall be connected through an unscreened four-turn rectangular search coil (of dimensions 30 cm. square) and an unscreened lead to a resistive measuring instrument mounted outside the enclosure, having, its other terminal earthed.The receiver shall be energised.

The power measured by the measuring instrument shall not exceed 4×10^{-10} watts, irrespective of the resistance of the measuring instrument or the adjustment of the receiver. At the discretion of the testing officer, the search coil may be moved during the test in any way, provided it does not approach within 15 cm. of the receiver case; or it may be short-circuited.

16. Protective Arrangements-(1) All parts and wiring shall be protected fromn accidental access, and shall be isolated automatically from all sources of high voltage when the means of protection are removed. The term "high voltage" shall be taken to apply to all circuits in which the direct and alternating voltages (other than radio-frequency voltages) combine to give instantaneous voltages greater than 50 volts.

(2) The receiver shall incorporate a fuse or fuses.

(3) Provision shall be made for protecting the receiver and muting its output when the ship's own radiotelephone transmitter is radiating on 2182 kHz.

(4) The receiver shall be capable of withstanding for 15 minutes without damage 30 volts r.m.s. applied to its aerial terminals via a dummy aerial in accordance with clause 4 (2) of this Part of this Schedule, at any frequency in the maritime mobile bands between 100 kHz and 25 MHz.

17. Construction—In all respects the mechanical and electrical construction and the finish of the receiver shall conform to good standards of engineering practice, and the receiver shall be suitable for use on board ships at sea.

18. Additional Safeguards to be Incorporated Where the Equipment Includes Semiconductor Devices—(1) Where semiconductor devices are incorporated in the equipment, the following requirements shall be met:

(a) Under all conditions of service referred to in clause 3 of this Part of this Schedule, the maker's maximum ratings for each type of semiconductor device shall not in any respect be disregarded. In particular, the makers recommended maximum junction temperature shall never be eceeded

(b) The semiconductor devices shall be effectively protected from damage if the power supply is subject to transient voltage changes:

(c) When the receiver is operated from a battery of secondary cells,the semiconductor devices shall not be damaged by a sustained increase in power supply voltage of 25 percent relative to the nominal batttery voltage:

(d) Means shall be incorporated for the protection of semiconductor devices from damage due to the accidental reversal of power supply polarity.

(2) Although it is not practicable to specify the intensity of r.f.fields which may be encountered, attention is drawn to the need for screening and filtering to protect the semiconductor devices from damage due to r.f. energy.

THIRD SCHEDULE

Climatic and Durability Tests

Interpretation

In this Schedule—

(a) References to Class B equipment shall be construed as references to equipment appropriate for use only below deck or in a deckhouse or other similar compartment:

(b) References to Class X equipment shall be construed as references to equipment appropriate for use or storage in the open or in an open boat.

Part II

Climatic and Durability Testing of Marine Radio Equipment

1. General—All marine radio equipment submitted for type tests shall be subjected to any or all of the tests herein specified, at the discretion of the type-testing authority. The type-testing authority may, at its discretion, agree to vary the sequence of the tests, and may also waive any of the tests specified where the manufacturer is able to provide evidence that the appropriate requirements of this Schedule are met.

2. Classification of Marine Equipment—For the purpose of these tests, marine radio equipment shall be divided into two classes, viz,Class B and Class X, as defined in Part 1 of this Schedule.

3. Testing Procedure—(1) The testing sequence shall be as follows:

Class	*Nature of Test*
B, X	Visual inspection and performance test.
B, X	Inspection under vibration.
X	Bump test.
B, X	Dry-heat cycle.
B, X	Damp-heat cycle.
B, X	Low-temperature cycle.
X	Rain test.
X	Immersion test.
B, X	Corrosion test.
X	Mould-growth test.
B, X	Visual inspection and performance test.

(2) The sequence given in subclause (1) of this clause shall be followed at least once.

(3) Unless otherwise specified, power shall be supplied to the equipment only during the periods specified for the electrical tests.

(4) Unless otherwise specified in the relevant performance Schedule,the voltage applied to the equipment during the tests shall be the Standard Test Voltage.

(5) Class B equipment shall be subjected to Inspection under Vibration, normal range (clause 5 (2) (a)), and shall not be subjected to Inspection under Vibration, extended range (clause 5 (2) (b)).

(6) For Class X equipment, the manufacturer shall have the option of submitting the equipment either to Inspection under Vibration,normal range (clause 5 (2) (a)) and the Bump Test (clause 5 (3)),or, as an alternative Inspection under Vibration, extended range (clause)5 (2) (b)).

4. Performance Checks—Except where otherwise stated, the term 'performance check', as used in this Schedule, shall be taken to mean a shortened form of the test required by the