

(4) Selectivity—(a) The receiver shall meet the following requirements for the selectivity preceding the final detector:

When operating on a frequency of . .	500 k Hz	2,182 k Hz
Response to be uniform to within 6 dB over the range	495–505 k Hz	2,177–2,187 k Hz
At least 40 dB discrimination relative to the response at mid-band to be obtained at all frequencies	Below 470 k Hz and above 530 k Hz	Below 2,147 k Hz and above 2,217 k Hz

(b) The audio-frequency response characteristic of the receiver shall be within a range of 8 dB for modulation frequencies between 400 and 3000 Hz. The response shall fall substantially for frequencies outside these limits.

(5) Sensitivity and Signal/Noise Ratio—The standard output level quoted in subclause (3) of this clause shall be obtained

(a) With a 500 kHz test signal at a level of 40 dB above 1 μ V, and under this condition the signal/noise ratio shall be at least 15 dB:

(b) With a 2182 kHz test signal at a level of 30 dB above 1 μ V, and under this condition the signal/noise ratio shall be at least 15 dB.

(6) Control of Receiver-gain—Control of receiver-gain shall be provided by means of a single manual control.

(7) Output Limiting—An efficient and automatic means shall be provided to limit the output of the receiver during the reception of strong signals, without introducing undue distortion.

8. Operating Facilities Common to Transmitter and Receiver—(1) All manual controls shall be of such size and form as to permit of normal adjustment being performed by a person wearing thick gloves.

(2) The number of manual controls shall be kept to the minimum required to meet the provisions of this specification. However, the equipment shall incorporate manual send/receive switching, and, where necessary in order to provide rapid changeover from “receive” to “send”, there shall be a “transmitter standby” switch position.

(3) The operation of the manual controls shall not be impeded by, nor shall it impede, the generation of electrical energy.

9. Construction—In all respects the mechanical and electrical construction and the finish of the equipment shall conform to good standards of engineering practice, and the equipment shall be suitable for use in survival craft.

10. 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 maker’s recommended maximum junction temperature shall never be exceeded:

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

(c) When the equipment 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 battery voltage:

(d) Means shall be incorporated for the protection of the 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.

APPENDIX

Recommendations in Respect of an External Power Supply.

1. If an additional external device is provided to supply power to the equipment, it should meet the requirements of this Appendix. The term “device” includes any container in which the external source of energy is housed.

2. The device should, unless otherwise stated, meet the requirements applied to the equipment by clauses 2 (2) and 3 of the equipment specification in this Part of this Schedule.

3. The device should be capable of being readily connected to the equipment so that the correct polarity is ensured.

4. The device should not emit substances which may in any way be injurious to personnel or damaging to the equipment or the fabric of a survival craft. This requirement should be met, whether the device is in the stored condition or in normal use.

5. The device should be capable of supplying electrical power to the equipment over a period of 72 hours, during which time the transmitter should be in operation on full power for two consecutive minutes three times per hour, each two minute period being separated by 18 minutes, during which time the receiver should be in operation.

6. The device should be capable of fulfilling the requirements of clause 5 of this Appendix after it has been stored for 18 months.

FIFTH SCHEDULE

Tools, Measuring Instruments, Spare Parts, etc.

Part I

Radiotelegraph Ships

Tools

One contact burnisher.

One 15 cm. smooth file.

One jointing knife.

One pair 18 cm. wireman’s insulated pliers.

One pair 15 cm. long nose pliers with side cutters.

*One insulated screwdriver, not less than 20 cm. in length, with 6 mm blade.

*One insulated grub screwdriver with 3 mm blade

*One watch screwdriver with 1.5 mm blade.

*One set of spanners (flat and box) sizes 0, 2, 6, and 8 B.A.

*One spanner adjustable to 25 mm. gap.

†One 6 mm. hand drill.

†One set of high-speed twist drills, tapping and clearance sizes 0-8 B.A.

One clamp vice.

One electric soldering-iron to suit ship’s voltage with a power consumption of not less than 50 watts or more than 70 watts.

One electric soldering iron to suit ship’s voltage with a power consumption of not more than 25 watts.

One dusting brush.

One ball-pein hammer.

One hacksaw and blades.

A tool box or compartment for containing the foregoing tools and capable of being locked.

*Where special nuts and screws are used for fastening, suitable tools shall be provided.

†These items need not be provided in ships other than those engaged on international voyages.

Measuring Instruments.

One hydrometer.

One dipping Centigrade thermometer.

One ammeter capable of measuring direct current from 1 milliampere to 500 milliamperes; One voltmeter capable of measuring alternating and direct-current voltage from 1 volt to