(a) *Transmitter*—The transmitter shall be capable of A3H operation on 2182 kHz and shall also be capable of—

(i) For Class I fishing boats, A3H and A3J operation on at least 6 other frequencies:

(ii) For Class Class II fishing boats A3H and A3J operation on at least 4 other frequencies, as specified by the Secretary of Commerce, in the Maritime Mobile Bands between 1605 kHz and 6525 kHz, except that after the 1st dav of January 1978 A3H emissions shall be limited to frequencies below 4 MHz and after the 1st day of January 1982 A3H emissions shall be limited to 2182 kHz only.

Transmitters for installation in Class I and Class II fishing boats wishing to participate in the Public Correspondence Service shall also provide for transmission of type A3A emissions:

(b) *Receiver*—The receiver shall be capable of receiving A3, A3A, A3H, and A3J signals in the Maritime Mobile Bands within the range 1605 to 6525 kHz. This requirement shall be met by spot frequency reception on 2182 kHz together with facilities for operation on at least 6 other spot frequencies for Class II fishing boats and at least 4 other spot frequencies for Class II fishing boats. Reception of A3A emissions by a receiver operating in the A3J mode shall be acceptable.

Envelope detection shall be used for reception of 2182 kHz.

(2) *Frequency Selection*—Single-frequency and two-frequency simple operation shall be possible.

(3) *Power Supply*—The equipment shall be capable of being operated from the source or sources of electrical energy required by these rules for a radiotelephone installation.

(4) *Receiver Output*—The receiver shall have have provision for loudspeaker reception.

(5) *Sideband*—The upper sideband only shall be used.

(6) *Transmitter Controls*—The transmitter shall comply with the following requirements in regard to the number and type of external controls:

(a) Selection of the frequency of 2182 kHz shall be by not more than 2 controls. For frequencies other than 2182 kHz, more than 2 controls may be used only in the case of generation of the frequencies by means of an unprogrammed synthesiser or similar device:

(b) Unless aerial tuning is automatic, a fine-tuning control shall be provided to enable the transmitter to be adjusted to maximum output with any practical combination of aerial characteristics and frequency. The range of the control must not permit tuning to any spurious frequency derived from the frequency of operation:

(c) A non-locking control shall be provided to enable radiation of 1 or more frequencies for tuning purposes:

(d) A power reduction control shall be provided to enable reduced power operation as required by clause 6 (8) of this Schedule

(e) The control or controls which select 2182 kHz shall be clearly and distinctly marked, and a positive indication that 2182 kHz has been correctly selected shall be given:

(f) It shall be possible by means of a single control to change from any type of emission to any other type for which the transmitter has been designed to operate, except that on 2182 kHz selection of the A3H mode shall be automatic. The positions on the switch shall be clearly and distinctly marked:

(g) A control to switch the equipment on and off (with the exception of heating circuits as provided for in subclause (9) of this clause) shall be provided. This control may have a standby position:

(h) A special control for the disconnection of heating circuits from the power supply as provided for in subclause (9) of this clause may be provided:

(i) If additional controls are provided, they shall be for use only for transmission in frequency bands additional to that required in subclause (1) of this clause or for operation of the alarm signal generator specified in Part II (A) of this Schedule or for both purposes.

(7) Receiver Controls—

(a) Selection of the frequency of 2182 kHz shall be by not more than 2 controls. For frequencies other than 2182 kHz, more than 2 controls may be used only in the case of selection of the frequencies by means of an unprogrammed synthesiser or similar device:

(b) The control or controls which select 2182 kHz shall be clearly and distinctly marked, and a positive indication that 2182 kHz has been correctly selected shall be given:

(c) It shall be possible, by means of a single control, to change from reception of any type of emission to any other type for which the equipment has been designed to operate, except that on 2182 kHz selection of the A3/A3H mode shall be automatic. The positions on the switch shall be clearly and distinctly marked:

(d) The receiver shall be fitted with a clarifier (a fine-tuning control to adjust slightly the nominal tune frequency of the receiver), The tuning range of the clarifier shall be within 250 $\pm$ 50 Hz above and below the setting determined in clause 7 (ii) of this Schedule. The rate of adjustment of the clarifier control shall not exceed 3 Hz per degree of rotation. The frequency of the transmitter shall not be affected by operation of the receiver clarifier control, and when the receiver is switched for A3H reception the clarifier shall be disconnected:

(e) If an externally adjustable aerial tuning control is provided, the receiver shall meet the requirements of this Schedule on any frequency in the Maritime Mobile Bands between 1605 kHz and 6525 kHz, irrespective of the setting of this control.

(f) If a device is fitted to reduce the effect of impulsive noise it shall be fitted with an on-off switch:

(g) A manual audio gain control shall be provided:

(h) A control to switch the receiver on and off, with a standby if desired shall be provided.

(8) Size of Controls—All controls shall be of such size as to permit normal adjustments to be performed by a person wearing thick gloves.

(9) Warming-up Period—(a) The equipment shall be operational 1 minute after switching on. It shall meet the requirements of this Schedule after 5 minutes, except as provided in paragraph (b) of this subclause:

(b) If the equipment includes parts which require to be heated for longer than 5 minutes in order to operate correctly, for example crystal ovens, then those parts can be allowed a warming-up period of up to 30 minutes from the instant of application of power to them. After this, the rest of the equipment shall be switched on and the requirements of this Schedule shall be met:

(c) Where paragraph (b) of this subclause is applicable, the power supplies to the heating circuits shall be arranged so that they remain operative when other supplies to the equipment or within the equipment are switched off. It shall,however, be possible, for maintenance or emergency purposes,to readily disconnect such circuits from the power supply by an approved method. If a special switch for these,circuits is provided on the equipment, the function of the switch shall be clearly indicated, and the operating instructions shall state that the circuits should normally be left connected to the supply voltage; a visual indication that power is connected to such circuits shall be available on the front panel; if necessary, an indicator shall be provided specially for this.

(10) Frequency Adjustment—

(a) It shall be possible to change the transmitter from operation on any frequency to operation, within the terms of