

(c) Means must be provided for adequately charging any batteries used as a reserve power supply for the required radiotelephone installation. A device must be provided which, during charging of the batteries, gives a continuous indication of charging.

(d) The reserve power supply must be available within one minute.

(e) The station licensee, when directed by the Commission, must prove by demonstration as prescribed in paragraphs (e)(1), (2), (3) and (4) of this section that the reserve power supply is capable of meeting the requirements of paragraph (a) of this section as follows:

(1) When the reserve power supply includes a battery, proof of the ability of the battery to operate continuously for the required time must be established by a discharge test over the required time, when supplying power at the voltage required for normal operation to an electric load as prescribed by paragraph (e)(3) of this section.

(2) When the reserve power supply includes an engine driven generator, proof of the adequacy of the engine fuel supply to operate the unit continuously for the required time may be established by using as a basis the fuel consumption during a continuous period of one hour when supplying power, at the voltage required for normal operation, to an electrical load as prescribed by paragraph (e)(3) of this section.

(3) For the purposes of determining the electrical load to be supplied, the following formula must be used:

(i) One-half of the current of the radiotelephone while transmitting at its rated output, plus one-half the current while not transmitting; plus

(ii) Current of the required receiver; plus

(iii) Current of the source of illumination provided for the operating controls prescribed by § 80.969; plus

(iv) The sum of the currents of all other loads to which the reserve power supply may provide power in time of emergency or distress.

(4) At the conclusion of the test specified in paragraphs (e) (1) and (2) of this section, no part of the reserve power supply must have excessive temperature rise, nor must the specific gravity

or voltage of any battery be below the 90 percent discharge point.

§ 80.967 Antenna system.

The antenna must be omnidirectional, vertically polarized and located as high as practicable on the masts or superstructure of the vessel.

§ 80.969 Illumination of operating controls.

(a) The radiotelephone must have dial lights which illuminate the operating controls at the principal operating position.

(b) Instead of dial lights, a light from an electric lamp may be provided to illuminate the operating controls of the radiotelephone at the principal operating position. If a reserve power supply is required, arrangements must permit the use of that power supply for illumination within one minute.

§ 80.971 Test of radiotelephone installation.

At least once during each calendar day a vessel subject to the Great Lakes Radio Agreement must test communications on 156.800 MHz to demonstrate that the radiotelephone installation is in proper operating condition unless the normal daily use of the equipment demonstrates that this installation is in proper operating condition. If equipment is not in operating condition, the master must have it restored to effective operation as soon as possible.

Subpart U—Radiotelephone Installations Required by the Bridge-to-Bridge Act

§ 80.1001 Applicability.

The Bridge-to-Bridge Act and the regulations of this part apply to the following vessels in the navigable waters of the United States:

(a) Every power-driven vessel of 20 meters or over in length while navigating;

(b) Every vessel of 100 gross tons and upward carrying one or more passengers for hire while navigating;

(c) Every towing vessel of 7.8 meters (26 feet) or over in length, measured from end to end over the deck excluding sheer, while navigating; and