§ 80.967

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 in-

stallation 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
- (d) Every dredge and floating plant engaged, in or near a channel or fairway, in operations likely to restrict or affect navigation of other vessels. An unmanned or intermittently manned floating plant under the control of a dredge shall not be required to have a separate radiotelephone capability.

[51 FR 31213, Sept. 2, 1986, as amended at 57 FR 61012, Dec. 23, 1992; 58 FR 44954, Aug. 25, 1993]

$\S 80.1003$ Station required.

Vessels subject to the Bridge-to-Bridge Act must have a radiotelephone installation to enable the vessel to participate in navigational communications. This radiotelephone installation must be continuously associated with the ship even though a portable installation is used. Foreign vessels coming into U.S. waters where a bridge-tobridge station is required may fulfill this requirement by use of portable equipment brought a board by the pilot. Non portable equipment, when used, must be arranged to facilitate repair. The equipment must be protected against vibration, moisture, temperature and excessive currents and voltages.