

**§ 80.267 Requirements for survival craft nonportable radio equipment.**

(a)(1) The radio transmitter must meet the following requirements:

Operating frequency (kHz)	Frequency tolerance		Type of emission	Modulation percentages (average of modulation percentage of positive and negative peaks)	Modulation frequency	Average power output into specified artificial antenna	Artificial antenna
	Parts <sup>1</sup> in 10 <sup>6</sup>	HZ <sup>2</sup>					
500 .....	5,000	20	A2A and A2B or H2A and H2B.	Not less than 70	Not less than 450 nor greater than 1350 Hertz.	Not less than 30 watts.	10 ohms resistance and 100 picofarads capacitance.
8364 .....	200	50	A2A or H2A Ides.	.....do .....	.....do .....	Not less than 40 watts.	40 ohms resistance.

<sup>1</sup> For equipment approved before November 30, 1977.  
<sup>2</sup> For equipment approved after November 29, 1977.

(2) The transmitter must have an antenna current meter.

(b) Survival craft non-portable receivers must meet the following requirements:

(1) The audio output must be one milliwatt at a signal to noise power ratio of at least 10 to 1, when the receiver is supplied through the following artificial antennas with the respective radio frequency signals:

Operating frequency, (kHz)	Signal strength (microvolts)	Modulation factor	Modulation (Hz)	Artificial antenna
500 .....	200	0.3	400	15 ohms resistance and 100 picofarads capacitance.
8364 .....	1,000	0.3	400	40 ohms resistance.

(2) When the receiver is adjusted for A2A or H2A emission on 500 kHz and 8364 kHz the noise power present in the output of the receiver must be determined with an unmodulated input signal of the indicated strength;

(3) The audio output of the receiver must be capable of at least 8 dB above one milliwatt at the rated load impedance.

[51 FR 31213, Sept. 2, 1986, as amended at 63 FR 36607, July 7, 1998]

**§ 80.269 Technical requirements for radiotelephone distress frequency watch receiver.**

(a) The radiotelephone distress frequency watch receiver is comprised of a receiver, a loudspeaker and a radiotelephone auto alarm device.

(b) The radiotelephone distress frequency watch receiver must meet the following requirements:

(1) The receiver must be capable of being switched to 2182 kHz and of receiving signals of at least A2A, A2B, H2A and H2B emissions;

(2) The receiver sensitivity must provide a SINAD of 20 dB at the audio output when a 30 microvolt signal with A2A, A2B, H2A, or H2B emission modulated 30% at 400 Hz is applied to the receiver RF terminals;

(3) The audio output of the receiver must be at least 50 milliwatts at the rated load impedance;

(4) The receiver must be provided with an auto alarm device which mutes the receiver (silences the loudspeaker) unless the radiotelephone alarm signal or the signal preceding a vital navigational warning is received. When the auto alarm is activated the receiver audio output level must be louder than the output level of the received speech signal. Additionally, the receiver must meet the following requirements:

(i) When the receiver is muted its audio output power must be less than 1 milliwatt;

(ii) If tone filters are used to process the 1300 Hz and 2200 Hz tones the tolerance of their center frequency must be ±1.5 percent of the alerting frequency.