

Coast Guard, DHS

§ 160.066-5

and legible for the expected life of the device.

[CGFR 64-30, 29 FR 7388, June 6, 1964, as amended by CGD 72-163R, 38 FR 8122, Mar. 28, 1973; CGD 73-246R, 39 FR 36967, Oct. 16, 1974; CGD 75-008, 43 FR 9772, Mar. 9, 1978; CGD 92-045, 58 FR 41609, Aug. 4, 1993; CGD 95-028, 62 FR 51215, Sept. 30, 1997; USCG-1998-4442, 63 FR 52191, Sept. 30, 1998]

§ 160.064-6 Examinations, tests and inspections.

(a) *Manufacturer's inspection and tests.* Manufacturers of listed and labeled water safety buoyant devices shall maintain quality control of the materials used, manufacturing methods and the finished product so as to meet the applicable requirements, and shall make sufficient inspections and tests of representative samples and components produced to maintain the quality of the finished product. Records of tests conducted by the manufacturer and records of materials, including affidavits by suppliers that applicable requirements are met, entering into construction shall be made available to the recognized laboratory inspector or to the Coast Guard marine inspector, or both, for review upon request.

(b) *Laboratory inspections and tests.* Such examinations, inspections and tests as are required by the recognized laboratory for listed and labeled devices produced will be conducted by the laboratory inspector at the place of manufacture or other location at the option of the laboratory.

(c) *Test facilities.* The laboratory inspector, or the Coast Guard marine inspector assigned by the Commander of the District in which the factory is located, or both, shall be admitted to any place in the factory where work is being done on listed and labeled products, and either or both inspectors may take samples of parts or materials entering into construction or final assemblies, for further examinations, inspections, or tests. The manufacturer shall provide a suitable place and the apparatus necessary for the performance of the tests which are done at the place of manufacture.

(d) *Additional tests, etc.* Unannounced examinations, tests, and inspections of samples obtained either directly from the manufacturer or through commer-

cial channels may be made to determine the suitability of a product for listing and labeling, or to determine conformance of a labeled product to the applicable requirements. These may be conducted by the recognized laboratory or the United States Coast Guard.

[CGFR 64-30, 29 FR 7388, June 6, 1964, as amended by CGD 73-246R, 39 FR 36967, Oct. 16, 1974]

§ 160.064-7 Recognized laboratory.

(a) A manufacturer seeking Coast Guard approval of a product under this subpart shall follow the approval procedures of subpart 159.005 of this chapter, and shall apply for approval directly to a recognized independent laboratory. The following laboratories are recognized under § 159.010-7 of this part, to perform testing and approval functions under this subpart:

Underwriters Laboratories, 12 Laboratory Drive, P.O. Box 13995, Research Triangle Park, NC 27709-3995, (919) 549-1400.

(b) Production oversight must be performed by the same laboratory that performs the approval tests unless, as determined by the Commandant, the employees of the laboratory performing production oversight receive training and support equal to that of the laboratory that performed the approval testing.

[CGD 93-055, 61 FR 13931, Mar. 28, 1996]

Subpart 160.066—Distress Signal for Boats, Red Aerial Pyrotechnic Flare

SOURCE: CGD 76-183a, 44 FR 73050, Dec. 17, 1979, unless otherwise noted.

§ 160.066-1 Type.

(a) Red aerial pyrotechnic distress signals specified by this subpart must be either self-contained or pistol launched, and either meteor or parachute assisted type.

(b) [Reserved]

§ 160.066-5 Design, construction, and manufacturing requirements.

(a) Each signal must be either:

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(1) A self-contained unit with all necessary components for firing the signal, or

(2) A cartridge intended for firing from a signal pistol that is approved under Subpart 160.028 of this chapter.

(b) Each signal unit must have an interior chamber which contains the main propulsion charge and which is constructed so that it is capable of withstanding the forces generated by ignition without rupture, crack, or deformation of any kind.

(c) Signals must be constructed in lots numbered serially by the manufacturer. A new lot must be started when:

(1) Any change in construction details occurs;

(2) Any change in sources of raw materials occurs;

(3) Production is started on a new production line or on a previously discontinued production line; or

(4) A lot exceeds 30,000 units.

§ 160.066-7 Performance requirements.

(a) Each signal must:

(1) Burn "vivid red" when tested as specified in §160.021-4(d)(7) for at least 5.5 seconds.

(2) Have a peak luminous intensity of at least 10,000 candela.

(3) Burn a total of not less than 1,000 candleminutes (Cm) using the formula

$$I \times T = Cm$$

Where:

I=the luminous intensity measured as in subsection (c);

T=the total burn time of the device in minutes; and

Cm=the candle-minute rating of the device.

(4) Burn out completely before falling back to the level of launch.

(5) Function in a manner that would not cause burns or injury to an unprotected person firing the signal in accordance with the manufacturer's instructions.

(6) Not malfunction in a manner that would cause burns or injury to an unprotected person firing the signal in accordance with the manufacturer's instructions.

(b) Each signal must meet the requirements of paragraph (a) after:

(1) Submersion in water for 24 hours, or

(2) If protected by a sealed container, submersion in water for 24 hours inside the sealed container immediately followed by submersion for 10 minutes without the container, and

(3) Being exposed to the Elevated Temperature, Humidity, and Storage Test in §160.066-13(b).

(c) Testing for burn time and luminous intensity pursuant to paragraphs (a)(1) and (a)(2), respectively, shall be conducted in conformity with the following requirements and procedures:

(1) The chart speed of the light measuring equipment shall not be slower than 5 seconds per inch;

(2) The chart sweep of the light measuring equipment shall not be slower than .5 seconds for full scale;

(3) The first and last seconds of the burn shall be eliminated in measuring luminous intensity;

(4) The time during which the candle burns (excluding first and last seconds of burn) is to be used to determine the luminous intensity by averaging the readings taken during the burning; and

(5) Burn time is to be measured from first light of the signal to dark.

§ 160.066-9 Labeling.

(a) Each signal must be legibly and indelibly marked with the following information:

(1) The manufacturer's name,

(2) The designed burning time of the pyrotechnic candle(s),

(3) The specific signal pistol for which the signal is designed, if any,

(4) The lot number,

(5) The Coast Guard approval number,

(6) Operation and storage instructions,

(7) The month and year of expiration determined by §160.066-10, and

(8) The words:

"Aerial Flare. Acceptable as a Day and Night Visual Distress Signal for boats as required by 33 CFR 175.110. For Emergency Use Only".

(b) If the signal is too small to contain all of the information required by paragraph (a) and any labeling which may be required by paragraph (d), the information required by paragraphs (a) (2), (6), and (8) may be printed on a separate piece of paper packed with each