(i) The boat shall be suspended freely from the releasing gear and the length, breadth and depth measured. The boat shall then be flooded with water equal to 1½ times the weight of the boat, persons, equipment, and provisions and fuel (if motor driven) less the weight of the boat. This is represented by the following formula:

$$\text{Water added} = 1.5 \times (\text{empty boat} + \text{equipment} + \text{provisions} + \text{fuel} + \text{people}) - \text{empty boat}$$

The length, breadth and depth shall be measured in this loaded condition and, again, after the load has been removed. The loaded deflections and the permanent deformations shall not significantly exceed those recorded for the prototype in the pre-approval tests. Also, while flooded, the exterior of the hull shall be examined for leaks or other defects. After the boat is drained, the attachment of the release gear shall be carefully examined.

(ii) All provision tanks shall be tested by a static head above the tank top of 2 feet of water without showing leakage or permanent deformation.

(iii) The plastic fuel tanks shall be tested by a static head above the tank top of 10 feet of water without showing leakage or permanent deformation.

(c) *Marking.* (1) A corrosion resistant nameplate shall be affixed at the bow of each lifeboat on which is stamped the name of the manufacturer, serial number, approval number, dimensions of the lifeboat, cubic capacity, buoyancy capacity, net weight of the boat in Condition A and Condition B, the number of persons for which the lifeboat is approved, together with the Marine Inspection Office identification letters, the date, and the letters U.S.C.G. *Condition A* includes buoyancy and water tanks and provision stowage compartments but no equipment, provisions, water or persons. *Condition B* includes full required provisions and equipment, persons allowed at 10 cubic feet or by seating test whichever is less at 165 pounds and 3 quarts of water (6.25 pounds)—per person.

[CGFR 65–9, 30 FR 11467, Sept. 8, 1965, as amended by CGD 72–133R, 37 FR 17040, Aug. 24, 1972; CGD 75–186, 41 FR 10437, Mar. 11, 1976]

§ 160.035–14 Procedure for approval of lifeboats.

(a) Before action is taken on any design of lifeboat, plans covering fully the arrangement and construction of the lifeboat, material specifications, together with a lines drawing, stowage arrangement, seating arrangement, and other details shall be submitted to the Commandant through the Commander of the Coast Guard District in which the lifeboat is built. The plans for approval must be detailed to a degree that the lifeboat can be constructed from the plans submitted.

(b) If the drawings required in paragraph (a) of this section are satisfactory, the manufacturer shall notify the Commander of the Coast Guard District in which the lifeboat is built in writing when fabrication is to commence. A marine inspector will be assigned to witness the construction procedure in accordance with the plans, verify the tests required by §160.035–11 for metal lifeboats and §160.035–12 for additional tests required for F.R.P. lifeboats. Also, the manufacturer shall provide the necessary tools and facilities required to conduct the tests. The Coast Guard shall have the right to require such other additional tests as reasonably may be deemed necessary, either with the completed boat or component parts, depending upon the particular construction methods and materials used by the builder, or any unusual conditions or circumstances which may arise during the construction or testing.

(c) At the time that the tests are successfully completed, the manufacturer shall present to the marine inspector four corrected copies of the plans noted in paragraph (a) of this section, including any corrections, changes, or additions which may have been found necessary during construction or testing. If the manufacturer desires more than one set of approved plans, additional copies shall be submitted at that time.

(d) Upon receipt of corrected drawings and satisfactory test reports, the Commandant will issue a certificate of approval. No change shall be made in the design or construction without first receiving permission of the Commandant via the Commander of the

Coast Guard District in which the lifeboat is built.

Subpart 160.036—Hand-Held Rocket-Propelled Parachute Red Flare Distress Signals

SOURCE: CGD 76–048a and 76–048b, 44 FR 73081, Dec. 17, 1979, unless otherwise noted.

§ 160.036–1 Incorporation by reference.

(a) The following is incorporated by reference into this subpart:

(1) ''The Universal Color Language'' and ''The Color Names Dictionary'' in *Color: Universal Language and Dictionary of Names,* National Bureau of Standards Special Publication 440, December 1976.

(b) NBS Special Publication 440 may be obtained by ordering from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402 (Order by SD Catalog No. C13.10:440).

(c) Approval to incorporate by reference the material listed in this section was obtained from the director of the Federal Register on November 1, 1979. The material is on file in the Federal Register library.

§ 160.036–2 Type.

(a) Handheld rocket-propelled parachute red flare distress signals specified by this subpart shall be of one type which shall consist essentially of a completely self-contained device which can be fired from the hand to provide a rocket-propelled parachute red flare distress signal.

(b) [Reserved]

§ 160.036–3 Materials, workmanship, construction and performance requirements.

(a) *Materials.* The materials used in handheld rocket-propelled parachute red flare distress signals shall conform strictly to the specifications and drawings submitted by the manufacturer and approved by the Commandant. In general, all exposed parts shall be corrosion-resistant or properly protected against corrosion.

(b) *Workmanship.* Handheld rocket-propelled parachute red flare distress signals shall be of first class workmanship and shall be free from imperfections of manufacture affecting their appearance or that may affect their serviceability.

(c) *Construction.* The exterior case of the cartridge shall be made of a suitable metal and shall protect against the entrance of moisture. The construction shall be such that the parachute and pyrotechnic candle will be expelled at approximately the maximum altitude reached.

(d) *Performance.* Signals shall meet all of the inspection and test requirements contained in § 160.036–4.

§ 160.036–4 Approval and production tests.

(a) *Approval tests.* The manufacturer must produce a lot of at least 100 signals from which samples must be taken for testing for approval under § 160.036–7. The approval tests are the operational tests and technical tests in paragraphs (c) and (d) of this section. The approval tests must be conducted by an independent laboratory accepted by the Commandant under § 159.010 of this chapter.

(b) *Production inspections and tests.* Production inspections and tests of each lot of signals produced must be conducted under the procedures in § 159.007 of this chapter. Signals from a rejected lot must not be represented as meeting this Subpart or as being approved by the Coast Guard. If the manufacturer identifies the cause of the rejection of a lot of signals, the signals in the lot may be reworked by the manufacturer to correct the problem. Samples from the rejected lot must be retested in order to be accepted. Records shall be kept of the reasons for rejection, the reworking performed on the rejected lot, and the results of the second test.

(1) *Lot size.* For the purposes of sampling the production of signals, a lot must consist of not more than 30,000 signals. Lots must be numbered serially by the manufacturer. A new lot must be started with:

(i) Any change in construction details,

(ii) Any changes in sources of raw materials, or

(iii) The start of production on a new production line or on a previously discontinued production line.