

**§ 160.027-7**

**46 CFR Ch. I (10-1-13 Edition)**

nominal cross-section dimensions not less than 100 mm (4 in.) by 12.5 mm ( $\frac{1}{2}$  in.). The space between adjacent slats must not exceed the width of the slats. The space between each frame member and the adjacent slat must not exceed twice the width of the slats. The platform must be riveted together at each intersection of—

- (i) Frame members,
- (ii) Slats, and
- (iii) Frame members and slats.

(2) A plywood platform must be made of exterior or marine type plywood with surfaces that are either “A” or “B” grade as commonly designated in the plywood industry. Holes 35 mm ( $1\frac{3}{8}$  in.) to 50 mm (2 in.) in diameter must be drilled through the platform. The number of holes must be at least the number equal to  $(L-25)(W-25)/225$ , where L is the length of the platform in cm and W is the width of the platform in cm. (The formula is  $(L-10)(W-10)/36$  where L and W are measured in inches.) The thickness of the plywood must be at least—

- (i) 12.5 mm ( $\frac{1}{2}$  in.) for life floats of 10 persons capacity and under,
- (ii) 16 mm ( $\frac{5}{8}$  in.) for life floats between 11 and 25 persons capacity inclusive, and
- (iii) 19 mm ( $\frac{3}{4}$  in.) for life floats of 26 persons capacity and over.

(3) A platform of construction differing from that described in either (1) or (2) of this paragraph will be approved if it has holes to permit the passage of water and if it passes the tests in § 160.027-7. The number of holes must be the same as required for a plywood platform. If the platform is netting on a frame, the netting must be constructed of cordage with a breaking strength of at least 1600 N (355 lb.). The netting must be constructed on not more than 5 cm (2 in.) centers and must be knotted together at each point where the lines intersect.

(c) Each platform must be of a material that is resistant to deterioration by exposure to weather or must have a surface that protects it from deterioration by exposure to weather. For a wood platform, this surface must be at least two coats of water resistant spar varnish, or two coats of marine paint.

(d) Each part of the platform, including surfaces, edges, and rivets must be

smooth and must not have cutting edges, points, or splinters which would be dangerous for bare feet.

(e) The platform must be arranged so that under normal stowed conditions, it can be retained in the center of the float and can be readily released from this position for use.

(f) The platform must be suspended from the body of the float by a net or an equivalent arrangement, which when fully extended, holds the top of the platform approximately 900 mm (36 in.) below the center of the float body.

(1) The net must be constructed of cordage with a minimum breaking strength of 1600 N (355 lb.). The net must be attached to the platform through holes on centers that do not exceed 165 mm ( $6\frac{1}{2}$  in.).

(2) If the platform is suspended from the body of the float by an arrangement other than a net as described in paragraph (c)(1) of this section, the arrangement must be of equivalent to the net in terms of strength, resistance to tangling, and allowing the platform to freely pass through the center of the life float body.

**§ 160.027-7 Pre-approval tests for alternate platform designs.**

(a) The tests in this section are for life float platforms that do not meet the requirements of either § 160.027-3(b) (1) or (2).

(b) The float body must be supported so that the platform is suspended in the air by the net or equivalent supporting arrangement. The platform must be loaded evenly with a weight equal to 60 percent of the weight of the total number of persons for which the float is to be rated, assuming a weight of 75 kg (165 lb.) per person. The weight must be allowed to remain on the platform for ten minutes after which it is removed. The supporting arrangement and platform must not show any evidence of damage or permanent deformation as a result of this test.

(c) The float body must be supported so that the platform is suspended in the air by the net or equivalent supporting arrangement. A bag of sand, shot or similar granular material weighing 90 kg (200 lb.) must be dropped onto the center of the platform

from a height of 3 m (10 ft.). The supporting arrangement and platform must not show any damage that would affect the serviceability of the float or platform.

(d) As part of the buoyancy test required in §160.010-7(e) of this chapter, the platform must be loaded with weights equal to  $\frac{1}{2}$  the rated capacity of the float. There must be no damage to the supporting arrangement or platform as a result of this test.

NOTE: Since the weights on the platform will be submerged during this test, allowance must be made for the displacement of the submerged weights. The weight required is calculated by the formula  $W=(18d)/(d-4895)$ , where W is the required submerged weight per person (in kg) and d is the density of the material (in kg/m<sup>3</sup>). (In customary U.S. units, the formula is  $W=40d/(d-63)$  where W is in lb. and d is in lb./ft.<sup>3</sup>).

### Subpart 160.028—Signal Pistols for Red Flare Distress Signals

SOURCE: CGD 76-048a and 76-048b, 44 FR 73078, Dec. 17, 1979, unless otherwise noted.

#### § 160.028-2 Type.

(a) Each signal pistol for launching a parachute distress signal that meets subpart 160.024 of this part must be of the center-firing type having chamber and bore dimensions within the limits indicated by Figure No. 160.028-2(a).

(b) A signal pistol for launching an aerial flare not under paragraph (a) of this section may have any chamber and bore dimensions if they are not the dimensions for a conventional round of ammunition.

#### § 160.028-3 Materials, workmanship, construction, and performance requirements.

(a) *Materials.* The materials used in signal pistols shall conform strictly to the specifications and drawings submitted by the manufacturer and approved by the Commandant. In general, all parts shall be corrosion-resistant or properly protected against corrosion. The ejection mechanism shall be of material possessing excellent wearing qualities.

(b) *Workmanship.* Signal pistols shall be of first class workmanship and shall be free from imperfections of manufac-

ture affecting their serviceability or appearance.

(c) *Construction and performance requirements.* (Pistols intended for signals meeting Subpart 160.024). Signal pistols shall be of rugged construction and shall operate satisfactorily in firing and ejecting pistol-projected parachute red flare distress signals of the type covered by Subpart 160.024. The ejection mechanism shall be of sturdy design capable of withstanding rough and repeated usage. The overall size and weight of signal pistols should be kept to a minimum consistent with adequate strength and safety. When the pistol is cocked and the trigger is pulled, the firing pin shall project between 1.52 mm and 2.54 mm (0.060 in. and 0.100 in.) beyond the face plate of the frame. When the barrel is locked in the firing position, the barrel chamber shall be not more than 0.25 mm (0.010 in.) from the face plate of the frame.

#### § 160.028-4 Approval and production tests.

(a) *Approval test.* An independent laboratory accepted by the Commandant under §159.010 of this chapter must test three pistols in accordance with the operational test in paragraph (c) of this section.

(b) *Production inspections and tests.* Production inspections and tests of each pistol must be conducted under the procedures in §159.007 of this chapter. Each pistol which passes the production inspections and tests must be stamped with the letters "P.T." Each pistol which fails the test must not be represented as meeting this subpart or as being approved by the Coast Guard.

(1) *Inspections and tests by the manufacturer.* The manufacturer's quality control procedures must include the inspection of the pistols during production, and inspection of the finished pistols, to determine that the pistols are being produced in accordance with the approved plans. Each pistol must be tested in accordance with the operational test in paragraph (c) of this section, except that checking of the chamber and bore dimensions is not required.

(2) *Inspections and tests by an independent laboratory.* An independent laboratory accepted by the Commandant