

Independent laboratory has the same meaning as 46 CFR 159.001-3. A list of accepted independent laboratories is available from the Commandant and online at <http://cgmix.uscg.mil>.

Light load means the weight of the complete rescue boat empty and does not include fuel, required equipment, or the equivalent weight of persons. This is also known as the “condition A” weight.

Officer in Charge, Marine Inspection (OCMI) means an officer of the Coast Guard designated as such by the Commandant and who fulfills the duties described in 46 CFR 1.01-15(b). The “cognizant OCMI” is the OCMI who has immediate jurisdiction over a vessel or geographic area for the purpose of performing the duties previously described.

SOLAS means the International Convention for the Safety of Life at Sea, 1974, as amended.

[USCG-2010-0048, 76 FR 63007, Oct. 11, 2011, as amended by USCG-2013-0671, 78 FR 60159, Sept. 30, 2013]

§ 160.170-5 Incorporation by reference.

(a) Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, the Coast Guard must publish notice of change in the FEDERAL REGISTER and the material must be available to the public. All approved material is available for inspection at Coast Guard Headquarters. Contact Commandant (CG-ENG-4), Attn: Lifesaving and Fire Safety Division, U.S. Coast Guard Stop 7509, 2703 Martin Luther King Jr. Avenue SE., Washington, DC 20593-7509. You may also inspect this material at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030 or go to http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html. You may obtain copies of the material from the sources specified in the following paragraphs.

(b) American Society for Testing and Materials (ASTM), 100 Barr Harbor

Drive, P.O. Box C700, West Conshohocken, PA 19428-2959.

(1) ASTM A 36/A 36M-08, Standard Specification for Carbon Structural Steel, (approved May 15, 2008), IBR approved for § 160.170-7 (“ASTM A 36”).

(2) ASTM A 276-08a, Standard Specification for Stainless Steel Bars and Shapes, (approved October 1, 2008), IBR approved for § 160.170-7 (“ASTM A 276”).

(3) ASTM A 313/A 313M-08, Standard Specification for Stainless Steel Spring Wire, (approved October 1, 2008), IBR approved for § 160.170-7 (“ASTM A 313”).

(4) ASTM A 314-08, Standard Specification for Stainless Steel Billets and Bars for Forging, (approved October 1, 2008), IBR approved for § 160.170-7 (“ASTM A 314”).

(5) ASTM A 653/A 653M-08, Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process, (approved July 15, 2008), IBR approved for §§ 160.170-7, 160.170-13, and 160.170-15 (“ASTM A 653”).

(6) ASTM F 1166-07, Standard Practice for Human Engineering Design for Marine Systems, Equipment, and Facilities, (approved January 1, 2007), IBR approved for § 160.170-7 (“ASTM F 1166”).

(c) International Maritime Organization (IMO), Publications Section, 4 Albert Embankment, London SE1 7SR, United Kingdom, +44 (0)20 7735 7611, <http://www.imo.org/>.

(1) IMO Resolution A.760(18), Symbols Related to Life-Saving Appliances and Arrangements, (adopted November 4, 1993), IBR approved for § 160.170-19 (“IMO Res. A.760(18”).

(2) Life-Saving Appliances, including LSA Code, 2010 Edition, (2010), pages 7-71 (“IMO LSA Code”), IBR approved for §§ 160.170-3 and 160.170-7.

(3) Life-Saving Appliances, including LSA Code, 2010 Edition, (2010), Revised recommendation on testing of live-saving appliances, pages 79-254 (“IMO Revised recommendation on testing”), IBR approved for §§ 160.170-7, 160.170-13, 160.170-15, and 160.170-17.

(4) MSC/Circular 980, Standardized Life-saving Appliance Evaluation and Test Report Forms, (February 13, 2001), IBR approved for § 160.170-13 (“IMO MSC Circ. 980”).

(5) MSC.1/Circular 1205, Guidelines for Developing Operation and Maintenance Manuals for Lifeboat Systems, (May 26, 2006), IBR approved for §160.170-21 (“IMO MSC.1 Circ. 1205”).

[USCG-2010-0048, 76 FR 63007, Oct. 11, 2011, as amended by USCG-2013-0671, 78 FR 60159, Sept. 30, 2013]

§ 160.170-7 Design, construction, and performance of automatic release mechanisms.

(a) To seek Coast Guard approval of a release mechanism, a manufacturer must comply with, and each release mechanism must meet, the requirements of the following—

(1) IMO LSA Code, Chapter VI/6.1.5 (incorporated by reference, see §160.170-5 of this subpart);

(2) IMO Revised recommendation on testing Part 1/8.2 (incorporated by reference, see §160.170-5 of this subpart).

(3) 46 CFR part 159; and

(4) This subpart.

(b) Each release mechanism must meet the following requirements—

(1) *Design.* All functions of the release mechanism, including removal of interlocks, operation of the release handle, resetting the hooks, and reattaching the falls to the hooks, must be designed to be operable by persons wearing immersion suits;

(2) Each release mechanism should be designed following standard human engineering practices described in ASTM F 1166 (incorporated by reference, see §160.170-5 of this subpart). Design limits should be based on a range from the fifth percentile female to the ninety-fifth percentile male values for critical body dimensions and functional capabilities as described in ASTM F 1166. The dimensions for a person wearing an immersion suit correspond to the arctic-clothed dimensions of ASTM F 1166;

(3) *Steel.* Each major structural component of each release mechanism must be constructed of steel. Other materials may be used if accepted by the Commandant as equivalent or superior. Sheet steel and plate must be low-carbon, commercial quality, either corrosion resistant or galvanized as per ASTM A 653 (incorporated by reference, see §160.170-5 of this subpart), coating designation G115. Structural steel plates and shapes must be carbon steel

as per ASTM A 36 (incorporated by reference, see §160.170-5 of this subpart). All steel products, except corrosion resistant steel, must be galvanized to provide high-quality zinc coatings suitable for the intended service life in a marine environment. Each fabricated part must be galvanized after fabrication. Corrosion resistant steel must be a type 302 stainless steel per ASTM A 276, ASTM A 313 or ASTM A 314 (incorporated by reference, see §160.170-5 of this subpart) or another corrosion resistant stainless steel of equal or superior corrosion resistant characteristics;

(4) *Welding.* Welding must be performed by welders certified by the Commandant, a classification society recognized by the Commandant in accordance with 46 CFR 8.220, the U.S. Navy, or the national body where the release mechanism is constructed or the national body’s designated recognized organization. Only electrodes intended for use with the material being welded may be used. All welds must be checked using appropriate non-destructive tests;

(5) Metals in contact with each other must be either galvanically compatible or insulated with suitable non-porous materials. Provisions must also be made to prevent loosening or tightening resulting from differences of thermal expansion, freezing, buckling of parts, galvanic corrosion, or other incompatibilities;

(6) Screws, nuts, bolts, pins, keys, and other similar hardware, securing moving parts must be fitted with suitable lock washers, cotter pins, or locks to prevent them from coming adrift;

(7) The on-load operation of the release mechanism must require two separate, deliberate actions by the operator;

(8) To prevent an accidental release during recovery of the boat, the release hooks must not be able to carry any weight until the release mechanism is properly reset;

(9) The release and recovery procedures must be included as an illustrated operation instruction plate or placard. The plate or placard must be corrosion resistant and weatherproof and must be marked with the word