

be painted bright red and shall have thereon in raised letters the words "DANGER—LEVER DROPS BOAT". The control shall be readily accessible, secured to a permanent part of the lifeboat structure, and so installed as not to interfere with the inspection of any removable parts of the lifeboat or its equipment.

(c) If closed type hooks are used, arrangements shall be made to effect the release of the falls in the event that the gear is inoperable.

(d) Positive means of lubrication shall be provided for all bearings.

(e) Welding, when employed, shall be performed by welders certified by the U. S. Coast Guard, American Bureau of Shipping, or U. S. Navy Department, and the electrodes used shall be of an approved type.

(f) The manufacturer shall furnish mill or foundry affidavits relative to the physical and chemical properties of the materials used.

[CGFR 49-18, 14 FR 5113, Aug. 17, 1949, as amended by CGFR 52-10, 17 FR 2365, Mar. 19, 1952; CGFR 57-27, 22 FR 4021, June 7, 1957]

#### § 160.033-4 Inspection and testing of mechanical disengaging apparatus.

(a) *Inspection.* Mechanical disengaging apparatus shall be inspected during the course of construction to determine that the arrangement and materials entering into the construction are in accordance with the approved plans.

(b) *Factory tests for initial approval.* (1) Mechanical disengaging apparatus shall be tested to destruction in a jig built in accordance with the drawing required in § 160.033-5(a). This test shall be conducted in the presence of an inspector.

(2) Universal connections used to transmit the release power from the throw lever to the hook release shall be set up in a jig with the angles of leads set at 0.30, and 60 degrees, respectively. A load of 200 pounds shall be applied at the end of a lever arm 24 inches long. This load shall be applied with the connecting rod secured beyond the universal and with the lever arm in the horizontal position. This test shall demonstrate that the universals have strength adequate for the purpose intended. There shall be no permanent

set, or undue stress as a result of this test. Consideration will be given to arrangements other than universals submitted for this transmission of power.

(c) *Installation test prior to passing first unit installed.* (1) Each new type or arrangement of mechanical disengaging apparatus shall be tested by suspending a lifeboat loaded with deadweight equivalent to the number of persons allowed in the lifeboat (165 pounds per person) together with the weight of the equipment, plus 10 percent of the total load. The release lever shall then be thrown over with this load suspended until the lifeboat is released. This test shall demonstrate the efficiency of the installation in an actual lifeboat. (This test may be conducted ashore by suspending the lifeboat just clear of the ground.)

(d) *Factory testing after approval.* (1) In general, no factory tests after approval are required. However, each lifeboat in which mechanical disengaging apparatus is fitted shall be tested in accordance with § 160.035-13(a) of subpart 160.035.

(e) *Name plate.* A corrosion resistant name plate shall be attached to each hook assembly giving the manufacturer's name, approval number, and approved working load (as installed).

[CGFR 49-18, 14 FR 5113, Aug. 17, 1949, as amended by CGFR 52-10, 17 FR 2365, Mar. 19, 1952; CGFR 65-9, 30 FR 11467, Sept. 8, 1965]

#### § 160.033-5 Procedure for approval of mechanical disengaging apparatus.

(a) Before action is taken on any design of mechanical disengaging apparatus, detailed plans covering fully the arrangement and construction of the apparatus, together with stress diagrams and calculations relative to the strength, proposed test jig to be used in the test prescribed in § 160.033-4(b)(1), and a complete bill of material setting forth the physical and chemical properties of all the materials used shall be submitted to the Commandant through the Commander of the Coast Guard District having jurisdiction over the construction of the mechanical disengaging apparatus.

(b) If the drawings required in paragraph (a) of this section are satisfactory, the Commander of the Coast

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Guard District in which the mechanical disengaging apparatus is to be built, shall be notified in writing when fabrication is to commence. An inspector will be assigned to supervise the construction in accordance with the plans and upon completion, conduct the tests required by § 160.033-4.

(c) At the time that the tests are successfully completed, the manufacturer shall present to the 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 report, 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 mechanical disengaging apparatus is built.

[CGFR 49-18, 14 FR 5113, Aug. 17, 1949]

### Subpart 160.035—Lifeboats for Merchant Vessels

SOURCE: CGFR 65-9, 30 FR 11467, Sept. 8, 1965, unless otherwise noted.

#### § 160.035-1 Applicable specifications.

(a) *Specifications.* The following specifications, of the issue in effect on the date lifeboats are manufactured form a part of this subpart.

(1) Standards of ASTM:

ASTM A 36/A 36M-97a, Standard Specification for Carbon Structural Steel—160.035-3  
ASTM A 653/A 653M-98, Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process—160.035-3

(2) Military specifications:

MIL-P-18066—Plywood, Ship and Boat Construction.  
MIL-Y-1140—Yarn, Cord, Sleeving, Cloth and Tape—Glass.  
MIL-M-15617—Mats, Fibrous Glass, For Reinforcing Plastics.

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MIL-R-7575—Resin, Polyester, Low-Pressure Laminating.

MIL-P-40619—Plastic Material, Cellular Polystyrene.

MIL-P-17549—Plastic Laminates, Fibrous Glass Reinforced, Marine Structural.

MIL-P-19644—Plastic Foam, Molded Polystyrene (Expanded Bead Type).

MIL-C-19663—Cloth, Glass, Woven Roving For Plastic Laminate.

MIL-R-21607—Resins, Polyester, Low Pressure Laminating, Fire Retardant.

MIL-P-21929—Plastic Material, Cellular Polyurethane, Rigid, Foam-In-Place, Low Density.

(3) Federal specifications:

TT-P-59—Paint, Ready-Mixed, International Orange.

(4) Federal test method standard:

406—Plastics: Method of Testing.

(5) Federal Communications Commission:

47 CFR part 83, Rules Governing Stations on Shipboard in the Maritime Service.

(6) Coast Guard specifications:

160.033—Mechanical Disengaging Apparatus (For Lifeboats).

160.034—Hand Propelling Gear (For Lifeboats).

161.006—Searchlights, Motor Lifeboat.

(b) *Copies on file.* Copies of the specifications and rules referred to in this section shall be kept on file by the manufacturer, together with the approved plans and certificate of approval. The Coast Guard Specifications may be obtained upon request from the Commandant, United States Coast Guard Headquarters, Washington, DC 20226. You may purchase the standards of ASTM from the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959. The Military Specifications may be obtained from the Commanding Officer, Naval Supply Depot, 5801 Tabor Avenue, Philadelphia, Pa. 19120. The Federal Communications Commission's Rules and Regulations may be obtained from the Federal Communications Commission, Washington, DC 20554. Federal Specifications and Standards may be obtained from the General