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