

corrosion resistant and weatherproof and must be marked with the word "Danger". The illustrations must correspond exactly to those used in the instruction and maintenance manual provided by the manufacturer;

(10) The release lever or control must be red in color, and the area immediately surrounding the control must be a sharply contrasting light color;

(11) Each load carrying part of the release mechanism, including its connection to the boat, must be designed with a safety factor of six based on the ultimate strength of the materials used;

(12) The release lever and its connection to the release mechanism must be of sufficient strength so that there is no deformation of the release lever or the release control assembly during on-load release;

(13) Positive means of lubrication must be provided for each bearing which is not permanently lubricated. Points of lubrication must be so located that they are clearly visible and accessible in the installed position in the boat; and

(14) A hydraulic system, if used to activate the release mechanism, must be in accordance with 46 CFR part 58, subpart 58.30, with hose and fittings in accordance with 46 CFR part 56, subpart 56.60, except that—

(i) Push-on type fittings such as Aeroquip 1525-X, 25156-X, and FC332-X are not permitted;

(ii) The length of nonmetallic flexible hose is limited to 760 mm (30 in); and

(iii) If a hand pump is provided, adequate space must be provided for the hand pump or hand operation.

(c) Determinations of equivalence of design, construction, and materials will be made by the Commandant only.

§ 160.170-9 Preapproval review.

(a) Except as provided in paragraph (c) of this section, the Commandant must conduct the preapproval review, required by this section, in accordance with 46 CFR 159.005-5.

(b) *Manufacturer requirements.* To seek Coast Guard approval of a release mechanism, the manufacturer must submit an application to the Commandant meeting the requirements of 46 CFR 159.005-5 for preapproval review. To meet the requirements of 46 CFR

159.005-5(a)(2), the manufacturer must submit in triplicate—

(1) A list of drawings, specifications, manuals, and any other documentation submitted, with each document identified by number, title, revision issue, and date;

(2) General arrangement and assembly drawings, including principal dimensions;

(3) Stress calculations for all load carrying parts, including the release hooks, release mechanisms, and connections;

(4) Hydraulic systems drawings and specifications, if installed;

(5) Drawings of all signs and placards showing actual inscription, format, color, and size;

(6) An operation, maintenance, and training manual as described in §§160.170-19 and 160.170-21 of this subpart;

(7) A description of the quality control procedures and recordkeeping that will apply to the production of the release mechanism, which must include but is not limited to—

(i) The system for checking material certifications received from suppliers;

(ii) The method for controlling the inventory of materials;

(iii) The method for checking quality of fabrication and joints, including welding inspection procedures; and

(iv) The inspection checklists used during various stages of fabrication to assure that the approved release mechanism complies with the approved plans and the requirements of this subpart;

(8) Full details of any other unique capability;

(9) Any other drawing(s) necessary to show that the release mechanism complies with the requirements of this subpart;

(10) The location or address of all manufacturing sites, including the name and address of any subcontractors, where the release mechanism will be constructed; and

(11) The name of the independent laboratory that will perform the duties prescribed in §160.170-15 of this subpart.

(c) At the request of the manufacturer and discretion of the Commandant, an independent laboratory

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may conduct preapproval review required by this section, so long as the preapproval review is conducted in accordance with the procedures agreed upon between the independent laboratory and Commandant under 46 CFR part 159, subpart 159.010.

(d) *Plan quality.* The plans and specifications submitted to the Commandant under this section must—

(1) Be provided in English, including all notes, inscriptions, and designations for configuration control;

(2) Address each of the applicable items in paragraph (b) of this section in sufficient detail to show that the release mechanism meets the construction requirements of this subpart;

(3) Accurately depict the proposed automatic release hook;

(4) Be internally consistent;

(5) Be legible; and

(6) If reviewed by an independent laboratory under paragraph (c) of this section, include the independent laboratory's attestation that the plans meet the quality requirements of this section.

(e) *Alternatives.* Alternatives in materials, parts, or construction, and each item replaced by an alternative, must be clearly indicated as such in the plans and specifications submitted to the Commandant under this section.

(f) *Coast Guard review.* If the plans or specifications do not comply with the requirements of this section, Coast Guard review may be suspended, and the applicant notified accordingly.

§ 160.170-11 [Reserved]

§ 160.170-13 Approval inspections and tests for prototype automatic release mechanisms.

(a) If the manufacturer is notified that the information submitted in accordance with § 160.170-9 of this subpart is satisfactory to the Commandant, the manufacturer may proceed with fabrication of the prototype release mechanism, and the approval inspections and tests required under this section.

(b) Except as provided in paragraph (f) of this section, the Coast Guard must conduct the approval inspections and witness the approval tests required under this section.

(c) *Manufacturer's requirements.* To proceed with approval inspections and

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tests required by this section, the manufacturer must—

(1) Notify the Commandant and cognizant Officer in Charge, Marine Inspection (OCMI) of where the approval inspections and tests required under this section will take place, and such notification must be in sufficient time to allow making travel arrangements;

(2) Arrange a testing schedule that allows for a Coast Guard inspector to travel to the site where the testing is to be performed;

(3) Admit the Coast Guard inspector to any place where work or testing is performed on release mechanisms or their component parts and materials for the purpose of—

(i) Conducting inspections as necessary to determine that the prototype—

(A) Conforms with the plans reviewed under § 160.170-9 of this subpart;

(B) Is constructed by the methods and with the materials specified in the plans reviewed under § 160.170-9 of this subpart; and

(C) When welding is part of the construction process, is constructed by the welding procedure and materials as per the plans reviewed under § 160.170-9 of this subpart, and the welders are appropriately qualified;

(ii) Assuring that the quality-assurance program of the manufacturer is satisfactory;

(iii) Witnessing tests; and

(iv) Taking samples of parts or materials for additional inspections or tests; and

(4) Make available to the Coast Guard inspector the affidavits or invoices from the suppliers of all essential materials used in the production of release mechanisms, together with records identifying the lot or serial numbers of the release mechanisms in which such materials were used.

(d) *Tests.* (1) *Prototype release mechanism readiness.* All tests must be conducted on a complete release mechanism.

(2) *IMO Revised recommendation on testing.* Each prototype release mechanism of each design must pass each of the tests described in IMO Revised recommendation on testing, Part 1, paragraph 8.2 (incorporated by reference, see § 160.170-5 of this subpart). Tests