

approval before those materials are incorporated in the finished product.

(b) *Unicellular polyethylene foam.* The unicellular polyethylene foam shall be all new material complying with specification subpart 164.013 of this subchapter.

(c) *Envelope.* The buoyant vest envelope, or cover, shall be made from 39", 2.85 cotton jeans cloth, with a thread count of approximately 96 × 64. The finished goods shall weigh not less than 4.2 ounces per square yard, shall have thread count of not less than 94 × 60, and shall have a breaking strength of not less than 85 pounds in the warp and 50 pounds in the filling. Other cotton fabrics having a weight and breaking strength not less than the above will be acceptable. There are no restrictions as to color, but the fastness of the color to laundering, water, crocking, and light shall be rated "good" when tested in accordance with Federal Test Method Standard No. 191, Methods 5610, 5630, 5650, and 5660.

(d) *Tie tapes and body strap loops.* The tie tapes and body strap loops for both adult and child sizes must be ¾-inch cotton webbing meeting the requirements of military specification MIL-T-43566 (Class I) for Type I webbing.

(d-1) *Body straps.* The complete body strap assembly including hardware, must have a minimum breaking strength of 150 pounds for an adult size and 115 pounds for a child size. The specifications for the webbing are as follows:

(1) For an adult size vest, the webbing must be 1 inch.

(2) For a child size vest, the webbing must be three-quarter inch and meet military specification MIL-W-530 for Type IIa webbing.

(e) [Reserved]

(f) *Thread.* Each thread must meet the requirements of subpart 164.023 of this chapter. Only one kind of thread may be used in each seam.

[CGFR 65-37, 30 FR 11590, Sept. 10, 1965, as amended by CGD 72-90R, 37 FR 10839, May 31, 1972; CGD 72-163R, 38 FR 8122, Mar. 28, 1973; CGD 73-130R, 39 FR 20684, June 13, 1974; CGD 78-012, 43 FR 27154, June 22, 1978; CGD 82-063b, 48 FR 4782, Feb. 3, 1983; CGD 88-070, 53 FR 34536, Sept. 7, 1988; CGD 84-068, 58 FR 29494, May 20, 1993]

**§ 160.060-3a Materials—Dee ring and snap hook assemblies and other instruments of closure for buoyant vests.**

(a) *Specifications.* Dee ring and snap hook assemblies and other instruments of closure for buoyant vests may have decorative platings in any thickness and must meet the following specifications:

(1) The device must be constructed of inherently corrosion resistant materials. As used in this section the term *inherently corrosion resistant materials* includes, but is not limited to, brass, bronze, and stainless steel.

(2) The size of the opening of the device must be consistent with the webbing which will pass through the opening.

(b) *Testing requirements.* Dee ring and snap hook assemblies and other instruments of closure for buoyant vests must—

(1) Be tested for weathering. The Coast Guard will determine which one or more of the following tests will be used:

(i) Application of a 20 percent sodium-chloride solution spray at a temperature of 95 °F (35 °C) for a period of 240 hours in accordance with the procedures contained in method 811 of the Federal Test Method Standard No. 151.

(ii) Exposure to a carbon-arc weatherometer for a period of 100 hours.

(iii) Submergence for a period of 100 hours in each of the following:

(a) Leaded gasoline.

(b) Gum turpentine.

(iv) Exposure to a temperature of 0° ±5 °F (17.6 ±2.775 °C) for 24 hours; and

(2) Within 5 minutes of completion of the weathering test required by paragraph (b)(1) of this section, the assembly must be attached to a support and bear 150 pounds for an adult size and 115 pounds for a child size for 10 minutes at ambient temperatures without breaking or distorting.

[CGD 73-130R, 39 FR 20684, June 13, 1974]

**§ 160.060-4 Materials—nonstandard vests.**

(a) *General.* All materials used in nonstandard buoyant vests must be equivalent to those specified in

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§ 160.060-3 and be obtained from a supplier who furnishes an affidavit in accordance with the requirements in § 160.060-3(a).

(b) *Reinforcing tape.* When used, the reinforcing tape around the neck shall be  $\frac{3}{4}$ " cotton tape weighing not less than 0.18 ounce per linear yard having a minimum breaking strength of not less than 120 pounds.

[CGFR 65-37, 30 FR 11590, Sept. 10, 1965, as amended by CGD 72-163R, 38 FR 8122, Mar. 28, 1973]

### § 160.060-5 Construction—standard vests.

(a) *General.* This specification covers buoyant vests which essentially consist of a fabric envelope in which are enclosed inserts of buoyant material arranged and distributed so as to provide the flotation characteristics and buoyancy required to hold the wearer in an upright or slightly backward position with head and face out of water. The buoyant vests are also fitted with straps and hardware to provide for proper adjustment and close and comfortable fit to the bodies of various size wearers.

(b) *Envelope.* The envelope or cover shall be made of three pieces. Two pieces of fabric shall be cut to the pattern shown on Dwg. No. 160.060-1, Sheet 1 for the adult size, and Sheets 2 and 3 for child sizes, and joined together with a third piece which forms a  $\frac{1}{4}$ " finished gusset strip all around. Reinforcing strips of the same material as the envelope shall be stitched to the inside of the front piece of the envelope in way of the strap attachments as shown by the drawings.

(c) *Buoyant inserts.* The unicellular plastic foam buoyant inserts shall be cut and formed as shown on Dwg. No. 160.060-1, Sheets 4, 5, and 6 for the adult, child medium, and child small sizes, respectively.

(d) *Tie tapes, body straps, and hardware.* The tie tapes, body straps, and hardware shall be arranged as shown on the drawings and attached to the envelope with the seams and stitching indicated.

(e) *Stitching.* All stitching shall be short lock stitch conforming to Stitch Type 301 of Federal Standard No. 751,

and there shall be not less than 7 nor more than 9 stitches to the inch.

(f) *Workmanship.* Buoyant vests shall be of first-class workmanship and shall be free from any defects materially affecting their appearance or serviceability.

[CGFR 65-37, 30 FR 11590, Sept. 10, 1965, as amended by CGD 72-163R, 38 FR 8122, Mar. 28, 1973]

### § 160.060-6 Construction—nonstandard vests.

(a) *General.* The construction methods used for a nonstandard buoyant vest must be equivalent to the requirements in § 160.060-5 for standard vests and also meet the requirements specified in this section.

(b) *Sizes.* Each nonstandard vest must contain the following volume of unicellular polyethylene foam buoyant material, determined by the displacement method:

(1) Five hundred cubic inches or more for the adult size, for persons weighing over 90 pounds.

(2) Three hundred and fifty cubic inches or more for a child medium size, for children weighing from 50 to 90 pounds.

(3) Two hundred and twenty-five cubic inches or more for children weighing less than 50 pounds.

(c) *Arrangement of buoyant material.* The buoyant material in a nonstandard vest must:

(1) Be arranged to hold the wearer in an upright or backward position with head and face out of water;

(2) Have no tendency to turn the wearer face downward in the water; and

(3) Be arranged so that 70 to 75 percent of the total is located in the front of the vest.

(d) *Neck opening.* Each cloth covered nonstandard vest must have at the neck opening:

(1) A gusset; or

(2) Reinforcing tape.

(e) *Adjustment, fit, and donning.* Each nonstandard vest must be made with adjustments to:

(1) Fit a range of wearers for the type designed; and

(2) Facilitate donning time for an uninitiated person.

[CGD 72-163R, 38 FR 8122, Mar. 28, 1973]