

(d) If, after reviewing the application, the Coast Guard determines that the organization is qualified to measure and certify U.S. vessels on behalf of the Coast Guard, the organization must enter into a written agreement with the Coast Guard which—

(1) Defines the procedures for administering and implementing the tonnage measurement and certification processes, including the roles and responsibilities of each party;

(2) Outlines the Coast Guard's oversight role;

(3) Prohibits the organization from using an employee or contractor of the organization to measure and certify the tonnage of a vessel if that employee or contractor is acting or has acted as a tonnage consultant for that same vessel; and

(4) Requires the organization to—

(i) Accept all requests to perform delegated services without discrimination and without regard to the vessel's location, unless prohibited from doing so under the laws of the United States or under the laws of the jurisdiction in which the vessel is located;

(ii) Physically inspect each vessel before issuing a tonnage certificate;

(iii) Provide the Coast Guard with current schedules of measurement fees and related charges;

(iv) Maintain a tonnage measurement file for each U.S. vessel that the organization measures and permit access to the file by any person authorized by the Commandant;

(v) Permit observer status representation by the Coast Guard at all formal discussions that may take place between the organization and other vessel tonnage measurement organizations pertaining to tonnage measurement of U.S. vessels or to the systems under which U.S. vessels are measured;

(vi) Comply with and apply all laws and regulations relating to tonnage measurement of U.S. vessels within the scope of authority delegated; and

(vii) Comply with all other provisions, if any, of the written agreement.

[CGD 87-015b, 54 FR 37657, Sept. 12, 1989, as amended by CGD 97-057, 62 FR 51045, Sept. 30, 1997; CGD 95-010, 62 FR 67536, Dec. 24, 1997]

**§ 69.29 OMB control numbers assigned under the Paperwork Reduction Act.**

(a) *Purpose.* This section collects and displays the control numbers assigned to information collection and record keeping requirements in this part by the Office of Management and Budget (OMB) pursuant to the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 *et seq.*). The Coast Guard intends that this part comply with 44 U.S.C. 3507(f), which requires that agencies display the current control number assigned by the Director of OMB for each approved agency information collection requirement.

(b) *Display—*

Section of 46 CFR part 69	Currently assigned OMB control No.
69.17 .....	1625-0022
69.19 .....	1625-0022
69.21 .....	1625-0022
69.27 .....	1625-0022
69.55 .....	1625-0022
69.105 .....	1625-0022
69.121(d) .....	1625-0022
69.159 .....	1625-0022
69.179 .....	1625-0022
69.205 .....	1625-0022

[CGD 87-015b, 54 FR 37657, Sept. 12, 1989, as amended by USCG-2004-18884, 69 FR 58346, Sept. 30, 2004]

**Subpart B—Convention Measurement System**

**§ 69.51 Purpose.**

This subpart prescribes the requirements for measuring a vessel in order to comply with the International Convention on Tonnage Measurement of Ships, 1969 (Convention), and 46 U.S.C. chapter 143.

**§ 69.53 Definitions.**

As used in this subpart—

*Amidships* means the midpoint of the registered length, as “registered length” is defined in this section.

*Cargo space* means an enclosed space appropriated for the transport of cargo which is to be discharged from the vessel. The term does not include a space which qualifies as an excluded space under § 69.61.

*Enclosed space* is defined in § 69.59.

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*Excluded space* is defined in § 69.61.

*Gross tonnage* or *GT* means the tonnage determined under § 69.57.

*Line of the upper deck* means a longitudinal line at the underside of the upper deck or, if that deck is stepped, the longitudinal line of the underside of the lowest portion of that deck parallel with the upper portions of that deck.

*Molded depth* means the vertical distance amidships between the following points:

(a) From the line of the upper deck at the vessel's side or, if the vessel has rounded gunwales, from the intersection of the line of the upper deck extended to the molded line of the shell plating as though the gunwales were of angular design.

(b) To the top of the flat keel, to the lower edge of the keel rabbet if the vessel is of wood or composite structure, or to the point where the line of the flat of the bottom extended inward cuts the side of the keel if the vessel's lower part is hollow or has thick garboards.

*Molded draft* means—

(a) For vessels assigned a load line under parts 42, 44, 45, or 47 of this chapter, the draft corresponding to the Summer Load Line (other than a timber load line);

(b) For passenger vessels assigned a load line under part 46 of this chapter, the draft corresponding to the deepest subdivision load line assigned;

(c) For vessels to which parts 42, 44, 45, 46, or 47 of this chapter do not apply but which otherwise have been assigned a load line, the draft corresponding to the Summer Load Line so assigned;

(d) For vessels to which no load line has been assigned but the draft of which is restricted under any Coast Guard requirement, the maximum draft permitted under the restriction; and

(e) For other vessels, 75 per cent of the molded depth.

*Net tonnage* or *NT* means tonnage determined under § 69.63.

*Passenger* means a person on board a vessel other than—

(a) The master, a member of the crew, or other person employed or en-

gaged in any capacity in the business of the vessel; and

(b) A child under one year of age.

*Registered breadth* means the maximum breadth of a vessel measured amidships to the molded line of the frame in a vessel with a metal shell and to the outer surface of the hull in all other vessels.

*Registered length* means either 96 percent of the length on a waterline at 85 percent of the least molded depth measured from the top of the flat keel or the length from the fore side of the stem to the axis of the rudder stock on that waterline, whichever is greater. In vessels designed with a rake of keel, this length is measured on a waterline parallel to the design waterline.

*Upper deck* means the uppermost complete deck exposed to weather and sea, which has permanent means of weathertight closing of all openings in the weather part of the deck, and below which all openings in the sides of the vessel are fitted with permanent means of watertight closing.

*Weathertight* means secure against penetration of water into the vessel in any sea condition.

**§ 69.55 Application for measurement services.**

Applications for measurement under this subpart must include the following information and plans:

(a) Type of vessel.

(b) Vessel's name and official number (if assigned).

(c) Builder's name and the vessel hull number assigned by builder.

(d) Place and year built.

(e) Date keel was laid.

(f) Overall length, breadth, and depth of vessel.

(g) Lines plan.

(h) Booklet of offsets at stations.

(i) Capacity plans for tanks and cargo compartments.

(j) Hydrostatic curves.

(k) Construction plans showing measurements and scantlings of deck structures, hatches, appendages, recesses, and other enclosed spaces.

(l) Arrangement plans.

[GCD 89-007; GCD 89-007a, 58 FR 60266, Nov. 15, 1993, 58 FR 65131, Dec. 13, 1993, as amended by CGD 95-014, 60 FR 31606, June 15, 1995]

**§ 69.57 Gross tonnage.**

Gross tonnage (GT) is determined by the following formula  $GT=K_1 V$ , in which  $V$ =total volume of all enclosed spaces in cubic meters and  $K_1=0.2+0.02 \log_{10} V$ .

**§ 69.59 Enclosed spaces.**

*Enclosed space* means a space which is bounded by the vessel's hull, by fixed or portable partitions or bulkheads, or by decks or coverings other than permanent or movable awnings. No break in a deck, nor any opening in the vessel's hull, in a deck or in a covering of a space, or in the partitions or bulkheads of a space, nor the absence of a partition or bulkhead precludes the space from being included in the enclosed space.

**§ 69.61 Excluded spaces.**

(a) *Excluded space* means an enclosed space which is excluded from volume ( $V$ ) in calculating gross tonnage. Except as under paragraph (g) of this section, this section lists the excluded spaces.

(b) A space that is within a structure and that is opposite an end opening extending from deck to deck (except for a curtain plate of a height not exceeding by more than one inch the depth of the adjoining deck beams) and having a breadth equal to or greater than 90 percent of the breadth of the deck at the line of the opening is an excluded space, subject to the following:

(1) Only the space between the actual end opening and a line drawn parallel to the line or face of the opening at a distance from the opening equal to one-half of the breadth of the deck at the line of the opening is excluded. (See § 69.75, figure 1.)

(2) If, because of any arrangement (except convergence of the outside plating as shown in § 69.75, figure 3), the breadth of the space is less than 90 percent of the breadth of the deck, only the space between the line of the opening and a parallel line drawn through the point where the athwartship breadth of the space is equal to 90 percent or less of the breadth of the deck is excluded. (See § 69.75, figures 2 and 4.)

(3) When any two spaces, either of which is excluded under paragraphs (b)(1) or (b)(2) of this section, are sepa-

rated by an area that is completely open except for bulwarks or open rails, these two spaces must not be excluded if the separation between the two spaces is less than the least half breadth of the deck in way of the separation. (See § 69.75, figures 5 and 6.)

(4) When the deck at the line of an opening has rounded gunwales, the breadth of the deck is the distance between the tangent points indicated in § 69.75, figure 11.

(c) A space that is open to the weather and that is under an overhead deck covering with no connection on the space's exposed sides between the covering and the deck other than the stanchions necessary for the covering's support is an excluded space. An open rail or bulwark fitted at the vessel's side does not disqualify the space from being an excluded space if the height between the top of the rail or bulwark and the overhead structure or curtain plate (if fitted) is not less than 2.5 feet or one-third of the height of the space, whichever is greater. (See § 69.75, figure 7.)

(d) A space in a side-to-side structure directly in way of opposite side openings not less than 2.5 feet in height or one-third of the height of the structure, whichever is greater, is an excluded space. If the opening is only on one side of the structure, the space to be excluded is limited inboard from the opening to a maximum of one-half of the breadth of the deck in way of the opening. (See § 69.75, figure 8.)

(e) A space in a structure immediately below an uncovered opening in the deck overhead is an excluded space, if the opening is exposed to the weather and the space to be excluded is limited to the area of the opening. (See § 69.75, figure 9.)

(f) A recess in the boundary bulkhead of a structure which is exposed to the weather and which has an opening that extends from deck to deck without a means of closing is an excluded space, if the interior width of the space is not greater than the width of the opening and extension of the space into the structure is not greater than twice the width of the opening. (See § 69.75, figure 10.)

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(g) Any space described in paragraphs (b) through (f) of this section which fulfills at least one of the following conditions is not an excluded space:

(1) The space is fitted with shelves or other means designed for securing cargo or stores.

(2) The opening that would otherwise permit the space to be excluded space is fitted with a means of closure.

(3) Other features of the space make it possible for the space to be closed.

**§ 69.63 Net tonnage.**

Net tonnage (NT) is determined by the formula:

$$NT = K_2 V_c \left( \frac{4d}{3D} \right)^2 + K_3 \left( N_1 + \frac{N_2}{10} \right),$$

in which:

$V_c$  = total volume of cargo spaces in cubic meters.

$K_2 = 0.2 + 0.02 \log_{10} V_c$ .

$$K_3 = 1.25 \left( \frac{GT + 10,000}{10,000} \right)$$

$D$  = molded depth amidships in meters, as "molded depth" is defined in § 69.53.

$d$  = molded draft amidships in meters, as "molded draft" is defined in § 69.53.

$N_1$  = number of passengers in cabins with not more than eight berths, as "passenger" is defined in § 69.53.

$N_2$  = number of other passengers, as "passenger" is defined in § 69.53.

$GT$  = gross tonnage as determined under § 69.57.

$N_1$  plus  $N_2$  must equal the total number of passengers the vessel is permitted to carry as indicated on the ship's Passenger Certificate. If  $N_1$  plus  $N_2$  is less than 13, both  $N_1$  and  $N_2$  are zero.

$\left( \frac{4d}{3D} \right)^2$  must not be greater than unity.

$K_2 V_c \left( \frac{4d}{3D} \right)^2$  must not be less than 0.25 GT.

NT must not be less than 0.30 GT.

[CGD 97-057, 62 FR 51045, Sept. 30, 1997]

**§ 69.65 Calculation of volumes.**

(a) Volumes  $V$  and  $V_c$  used in calculating gross and net tonnages, respectively, must be measured and calculated according to accepted naval ar-

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chitectural practices for the spaces concerned.

(b) The volume of the hull below the upper deck is determined as follows:

(1) If the number and location of sections originally used in making other calculations which relate to the form of the vessel (such as displacement volumes and center of buoyancy) are reasonably available, Simpson's first rule may be applied using those sections.

(2) If the number and location of stations originally used are not reasonably available or do not exist and the hull is of conventional design with faired lines, Simpson's first rule may be applied using a number and location of stations not less than those indicated in § 69.109(g)(1).

(3) If the hull is of standard geometric shape, a simple geometric formula that yields a more accurate volume may be used.

(4) If the lines of the hull are not fair, the volume may be measured by using a combination of methods under this section.

(c) The volume of structures above the upper deck may be measured by applying the superstructure provisions in § 69.113 or by any accepted method or combinations of methods.

(d) Measurements must be taken, regardless of the fitting of insulation or the like—

(1) To the inner side of the shell or structural boundary plating, in vessels constructed of metal; and

(2) To the outer surface of the shell or to the inner side of structural boundary surfaces, in all other vessels.

(e) When determining the volume of a cargo space, measurements must be taken without consideration for insulation, sparring, or ceiling fitted within the space.

(f) Measurements must be to the nearest one-twentieth of a foot.

(g) Calculations must be made on a worksheet and must be sufficiently detailed to permit easy review. The measurement procedures used must be identified on the worksheet.

**§ 69.67 Marking of cargo spaces.**

Cargo spaces used in determining volume ( $V_c$ ) for calculating net tonnage must be permanently marked with the letters "CC" (cargo compartment)

which are at least four inches in height and positioned so as to be visible at all times.

**§ 69.69 Issuance of an International Tonnage Certificate (1969).**

On request of the vessel owner, an International Tonnage Certificate (1969) is issued for a vessel measured under this subpart that is 79 feet or more in registered length and that will engage on a foreign voyage. The Certificate is issued to the vessel owner or master and must be maintained on board the vessel when it is engaged on a foreign voyage.

**§ 69.71 Change of net tonnage.**

(a) When a vessel is altered so that the net tonnage is increased, the new net tonnage must be applied immediately.

(b) A vessel concurrently assigned load lines under both the International Convention on Load Lines and either the International Convention for the Safety of Life at Sea (SOLAS) or other international agreement must be assigned only one net tonnage. The net tonnage assigned must be the net tonnage applicable to the load line assigned under the International Convention on Load Lines, SOLAS or other international agreement for the trade in which the vessel is engaged.

(c) When a vessel is altered so that the net tonnage is decreased or the vessel's trade is changed so that the load line assigned for that trade under paragraph (b) of this section is no longer appropriate and results in a decrease in its net tonnage, a new International

Tonnage Certificate (1969) incorporating that net tonnage may not be issued until twelve months after the date on which the current Certificate was issued. However, if one of the following apply, a new Certificate may be issued immediately:

(1) The vessel is transferred to the flag of another nation.

(2) The vessel undergoes alterations or modifications which the Coast Guard deems to be of a major character, such as the removal of a superstructure which requires an alteration of the assigned load line.

[CGD 87-015b, 54 FR 37657, Sept. 12, 1989, as amended by USCG-1999-6216, 64 FR 53225, Oct. 1, 1999]

**§ 69.73 Variance from the prescribed method of measurement.**

(a) When application of this subpart to a novel type vessel produces unreasonable or impractical results, the Commandant may determine a more suitable method of measurement.

(b) Requests for a determination must be submitted to the Commandant, explaining the problem, and including plans and sketches of the spaces in question.

[CGD 87-015b, 54 FR 37657, Sept. 12, 1989, as amended by CGD 97-057, 62 FR 51045, Sept. 30, 1997; USCG-1999-6216, 64 FR 53225, Oct. 1, 1999]

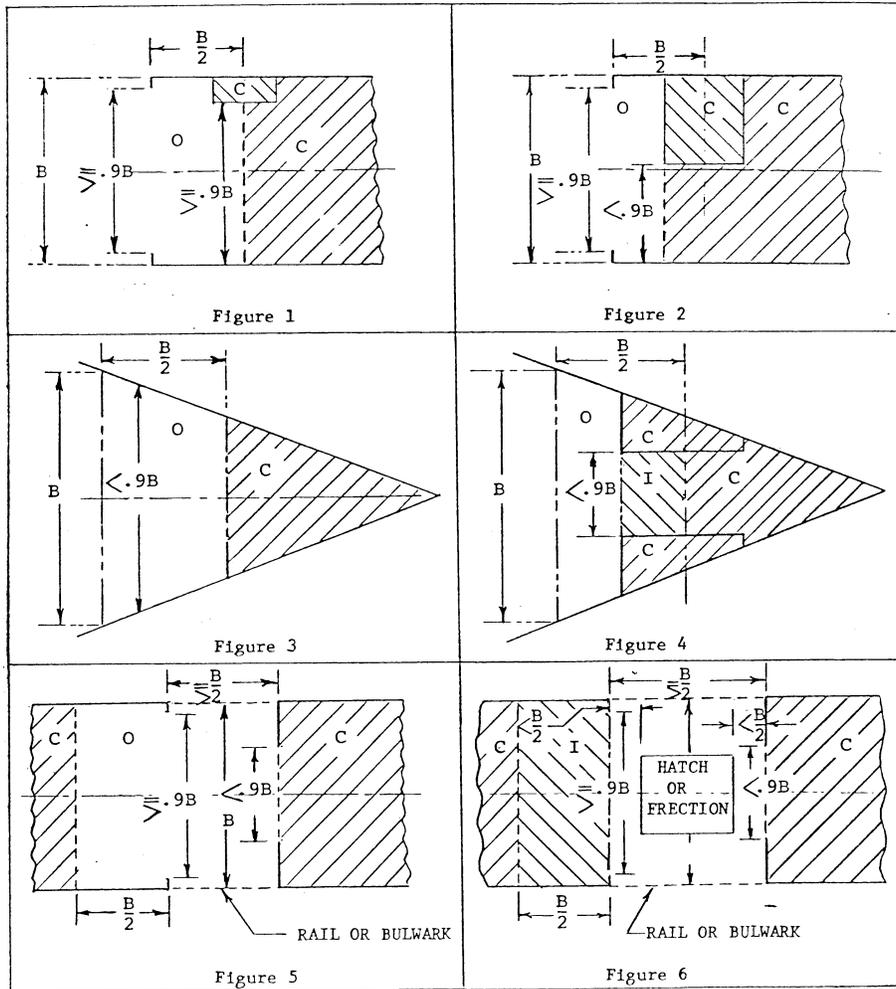
**§ 69.75 Figures.**

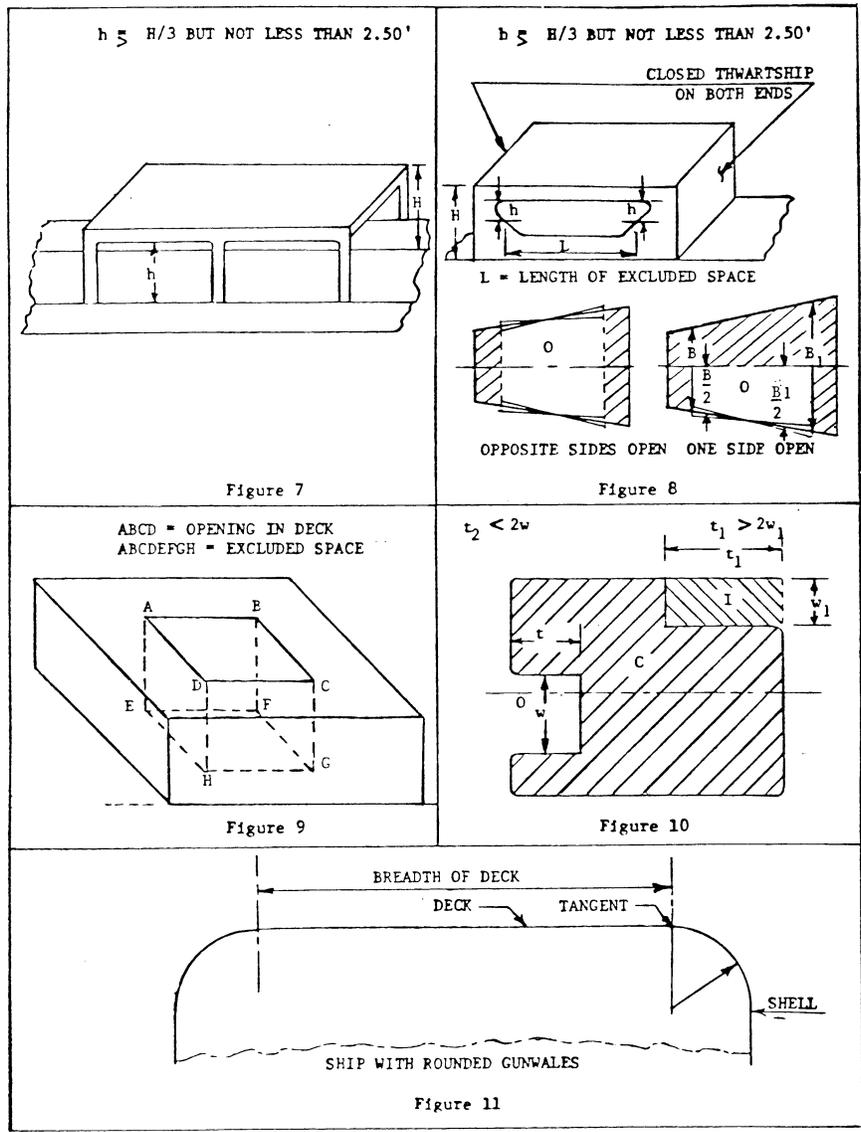
O=excluded space.

C=enclosed space.

I=space to be considered as an enclosed space.

B=breadth of deck in way of the opening.





**Subpart C—Standard Measurement System**

**§ 69.101 Purpose.**

This subpart prescribes the procedures for measuring a vessel under the

Standard Measurement System described in 46 U.S.C. 14512.

**§ 69.103 Definitions.**

As used in this subpart—