(b) The maximum persons capacity in whole numbers of persons marked on a boat that is designed or intended to use one or more inboard engines or inboard-outboard units must not exceed the value obtained by adding 32 pounds to the value determined in paragraph (a)(2)(iii), dividing the sum by 141 and rounding off the result to the nearest whole number. If the fraction is less than one-half, round down to the next whole integer and if the fraction is equal to or greater than one-half, round up to the next higher whole integer.

[CGD 78–034, 45 FR 2030, Jan. 10, 1980, as amended by CGD 83–012, 49 FR 39328, Oct. 5, 1984; 50 FR 18636, May 2, 1985]

§ 183.41 Persons capacity: Outboard boats.

(a) The persons capacity in pounds marked on a boat that is designed to use one or more outboard motors for propulsion must not exceed the lesser of:

(1) The maximum weight capacity determined under § 183.35 for the boat minus the motor and control weight, battery weight (dry), and full portable fuel tank weight from Table 4 of Subpart H of this part; or

(2) For boats with a maximum persons capacity less than 550 pounds, the maximum persons capacity determined in the following manner:

(i) Float the boat with all its permanent appurtenances.

(ii) Add, in normal operating positions, the dry motor and control weight, battery weight, and full portable fuel tank weight, if any, shown in Table 4 of Subpart H of this part for the maximum horsepower capacity marked on the boat. Permanently installed fuel tanks shall be full of fuel.

(iii) Gradually add weights along one outboard extremity of each passenger carrying area, at the height of the seat nearest the center of that area, but no higher than the height of the gunwale, and distributed equally forward and aft of that center in a plane parallel to the floorboards until the boat assumes the maximum list or trim, or both without water coming aboard.

(iv) Compute the persons capacity in pounds using the following formula: Persons capacity=A/0.6 where A is the total of the weights added in paragraph (a)(2)(iii) of this section.

(b) The maximum persons capacity in whole numbers of persons marked on a boat designed or intended to use one or more outboard motors for propulsion must not exceed the value obtained by adding 32 pounds to the lesser of the values determined in paragraph (a)(1) or (a)(2)(iv), dividing the sum by 141, and rounding off the result to the nearest whole number. If the fraction is less than one-half, round down to the next lower whole integer and if the fraction is equal to or greater than one-half, round up to the next higher whole integer.

[CGD 78–034, 45 FR 2030, Jan. 10, 1980, as amended by CGD 83–012, 49 FR 39328, Oct. 5, 1984; 50 FR 18636, May 2, 1985]

§ 183.43 Persons capacity: Boats rated for manual propulsion and boats rated for outboard motors of 2 horsepower or less.

(a) The persons capacity in pounds marked on a boat that is rated for manual propulsion or for motors of 2 horsepower or less must not exceed:

(1) For boats rated for manual propulsion, 90 percent of the maximum weight capacity in pounds; and

(2) For boats rated for motors of 2 horsepower or less, 90 percent of the maximum weight capacity in pounds, less 25 pounds.

(b) The maximum persons capacity, in whole numbers of persons marked on a boat that is rated for manual propulsion must not exceed the value obtained by adding 32 pounds to the value determined in paragraph (a)(1), dividing the sum by 141, and rounding off the result to the nearest whole number. If the fraction is less than one-half, round down to the next lower integer and if the fraction is equal to or greater than one-half, round up to the next higher whole integer.

(c) The maximum persons capacity in whole numbers of persons marked on a boat rated for motors of 2 horsepower or less must not exceed the value obtained by adding 32 pounds to the value determined in paragraph (a)(2), dividing the sum by 141, and rounding off the result to the nearest whole number. If the fraction is less than one-half, round down to the next lower

whole integer and if the fraction is equal to or greater than one-half, round up to the next higher whole integer.

[CGD 78–034, 45 FR 2031, Jan. 10, 1980]

Subpart D—Safe Powering

§ 183.51 Applicability.

This subpart applies to monohull boats less than 20 feet in length, except sailboats, canoes, kayaks, and inflatable boats, that are designed or intended to use one or more outboard motors for propulsion.

§ 183.53 Horsepower capacity.

The maximum horsepower capacity marked on a boat must not exceed the horsepower capacity determined by the computation method discussed in paragraph (a) of this section, or for certain qualifying boats, the performance test method discussed in paragraph (b) of this section.

(a) The maximum horsepower capacity must be computed as follows:

(1) Compute a factor by multiplying the boat length in feet by the maximum transom width in feet excluding handles and other similar fittings, attachments, and extensions. If the boat does not have a full transom, the transom width is the broadest beam in the aftermost quarter length of the boat.

(2) Locate horsepower capacity corresponding to the factor in Table 183.53.

(3) For a boat with a factor over 52.5, if the horsepower capacity calculated in Table 183.53 is not an exact multiple of 5, it may be raised to the next exact multiple of 5.

(4) For flat bottom hard chine boats with a factor of 52 or less, the horsepower capacity must be reduced by one horsepower capacity increment in Table 183.53.

TABLE 183.53—OUTBOARD BOAT HORSEPOWER CAPACITY

[Compute: Factor=Boat Length X Transom Width]

If factor (nearest integer) is	0–35	36–39	40–42	43–45	46–52
Horsepower Capacity is	3	5	7.5	10	15

[Note: For flat bottom hard chine boats, with factor of 52 or less, reduce one capacity limit (e.g. 5 to 3)]

If factor is over 52.5 and the boat has	Remote steering and at least 20″ transom height	No remote steering, or less than 20″ transom height	
		For flat bottom hard chine boats	For other boats
Horsepower capacity is (raise to nearest multiple of 5).	(2 X Factor) −90	(0.5 X Factor) −15	(0.8 X Factor) −25

(b) For boats qualifying under this paragraph, the performance test method described in this paragraph may be used to determine the horsepower capacity.

(1) *Qualifying criteria.*

(i) Thirteen feet or less in length;

(ii) Remote wheel steering;

(iii) Transom height

(A) Minimum 19 inch transom height; or,

(B) For boats with at least a 19 inch motorwell height, a minimum 15 inch transom height;

(iv) Maximum persons capacity not over two persons;

(2) *Boat preparation.*

(i) The boat must be rigged with equipment recommended or provided by the boat and motor manufacturer and tested with the highest horsepower production powerplant for which the boat is to be rated, not to exceed 40 horsepower.

(ii) Standard equipment must be installed in accordance with manufacturers' instructions.

(iii) The lowest ratio (quickest) steering system offered on the boat model being tested must be installed.

(iv) The outboard motor must be fitted with the manufacturer's recommended propeller providing maximum speed.

(v) Standard permanently installed fuel tanks must be no more than one-half full. Boats without permanent tanks must be tested with one full portable tank.