

Chapter NR 5

**BOAT REGULATIONS AND REGISTRATION**

NR 5.01	Application for boat certificate of number	NR 5.08	Accident report
NR 5.02	Application for transfer	NR 5.09	Uniform aids to navigation
NR 5.03	Application for duplicate	NR 5.10	Carburetor flame arrestors
NR 5.04	Certificate of number	NR 5.11	Fire extinguishers
NR 5.05	Numbering pattern to be used	NR 5.12	Specifications for determination of weight capacity and recommended number of persons
NR 5.06	Display of number on boat		
NR 5.07	Transfer of ownership of numbered boat		

NR 5.01 Application for boat certificate of number. (1) The application for a boat certificate of number shall include the following:

- (a) Name and address of boat owner.
- (b) Boat type—motorboat, sailboat, other.
- (c) Boat description—make, length, year, serial number (if any).
- (d) Type of use—pleasure, livery, dealer, manufacturer, commercial, other.
- (e) Type of propulsion—inboard, outboard, other.
- (f) Type of fuel—gasoline, diesel, other.
- (g) Hull material—wood, aluminum, steel, plastic, other.
- (h) Mooring address—city, village, township, county.
- (i) Coast guard registration number (if any).
- (j) A statement of ownership by applicant.
- (k) Signature of owner.

**History:** Cr. Register, March, 1960, No. 51, eff. 4-1-60; renum. from WCD 5.01 to be NR 5.01, Register, March, 1971, No. 183, eff. 4-1-71.

NR 5.02 Application for transfer. An application for a transfer certificate of number in addition to furnishing the information required by NR 5.01 shall include a statement by the applicant listing the name and address of the previous owner, his certificate number, and the date on which the boat was acquired by the applicant. The applicant shall also sign the statement.

**History:** Cr. Register, March, 1960, No. 51, eff. 4-1-60; renum. from WCD 5.02 to be NR 5.02, and am., Register, March, 1971, No. 183, eff. 4-1-71.

NR 5.03 Application for duplicate. An applicant for a duplicate certificate of number in addition to furnishing the information required by section NR 5.01 shall complete and sign a statement that the original certificate has been either destroyed or lost and that the application being made is for a duplicate.

**History:** Cr. Register, March, 1960, No. 51, eff. 4-1-60; renum. from WCD 5.03 to be NR 5.03, and am., Register, March, 1971, No. 183, eff. 4-1-71.

NR 5.04 Certificate of number. (1) The boat certificate of number issued in accordance with section 30.52, Wis. Stats., shall include the following:

- (a) Name and address of boat owner.
- (b) Number issued.
- (c) Expiration date.

- (d) Make and length of boat.  
 (e) Hull material.  
 (f) Type.

(2) The certificate of number shall be available at all times for inspection on the boat when in use. The federal boating act does not authorize any exemption from this requirement.

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**History:** Cr. Register, March, 1960, No. 51, eff. 4-1-60; renum. from WCD 5.04 to be NR 5.04, Register, March, 1971, No. 183, eff. 4-1-71.

NR 5.05 Numbering pattern to be used. The boat certificate of number issued pursuant to section 30.52, Wis. Stats., shall be in accordance with the pattern described as follows:

(1) The number shall be divided into parts. The first part of the number shall be an abbreviation in capital letters of the state of Wisconsin. This abbreviation shall be WS. The remainder of the number shall consist of not more nor less than 4 arabic numerals and 2 capital letters.

(2) The group of numerals appearing between the abbreviation and the 2 letters shall be separated therefrom by hyphens or equivalent spaces as indicated by the following samples: WS-9999-AB, WS 9999 AB.

(3) Since the letters "I", "O", and "Q" may be mistaken for arabic numerals, all letter sequences using "I", "O", and "Q" shall be omitted.

**History:** Cr. Register, March, 1960, No. 51, eff. 4-1-60; am. (2), Register, March, 1966, No. 123, eff. 4-1-66; renum. from WCD 5.05 to be NR 5.05, Register, March, 1971, No. 183, eff. 4-1-71.

NR 5.06 Display of number on boat. (1) The assigned number shall be painted on, or attached, to each side of the bow of the boat for which it was issued. The numbers shall be placed in such position as to provide clear legibility for identification. The numbers shall read from left to right and shall be in block characters of good proportion not less than 3 inches in height and shall be spaced as provided in section NR 5.05 (2). The numbers shall be of a color which will contrast with the color of the background and so maintained as to be clearly visible and legible; i.e., dark numbers on a light background, or light numbers on a dark background.

(2) The assigned number for sailboats shall be painted on, or attached to that portion of the stern which rides above the water line.

(3) It shall be unlawful for any person to display on either side of the bow of any boat or on the stern of any sailboat any number other than the registration number issued covering such boat.

**History:** Cr. Register, March, 1960, No. 51, eff. 4-1-60; renum. from WCD 5.06 to be NR 5.06, and am. (1), Register, March, 1971, No. 183, eff. 4-1-71.

NR 5.07 Transfer of ownership of numbered boat. Whenever the owner of a boat covered by a valid or expired certificate of number issued by this state transfers all or any part of his interest in such boat, other than by the creation of a security interest, he shall notify the department of such transfer within 15 days.

**History:** Cr. Register, March, 1960, No. 51, eff. 4-1-60; renum. from WCD 5.07 to be NR 5.07 and am., Register, March, 1971, No. 183, eff. 4-1-71.

NR 5.08 Accident report. Written reports of boating accidents required by section 30.67, Wis. Stats., shall be addressed to Department of Transportation, Register, June, 1971, No. 186

ment of Natural Resources, Box 450, Madison, Wisconsin 53701, and shall supply the following information:

- (1) The registration numbers and names of the boats involved.
- (2) The date and time of the accident.
- (3) The location of the accident.
- (4) The name, address, age, and experience of the operator of the reporting boat.
- (5) The type of boat, length, hull construction, propulsion power, and type of fuel of the reporting boat.
- (6) The weather and sea conditions.
- (7) The type, nature, and opinion as to the cause of the accident.
- (8) A description of the damage to any property, including boats, and estimated cost of repairs.
- (9) The names and addresses of the operators of the other boats involved.
- (10) The names and addresses of the owners of boats or other property involved.
- (11) The names and addresses of all persons killed or injured.
- (12) The nature and extent of injury to any person.
- (13) Names and addresses of all known witnesses.
- (14) The names of the law enforcement, fire, or rescue squad that furnished assistance.
- (15) The physical condition, swimming ability, dress, and contributing cause of drowning of each victim.
- (16) The type of activity of victim.
- (17) The kind and type of life saving or fire fighting equipment employed in connection with the accident.

**History:** Cr. Register, March, 1960, No. 51, eff. 4-1-60; renum. from WCD 5.08 to be NR 5.08, and am. intro. par., Register, March, 1971, No. 183, eff. 4-1-71.

**NR 5.09 Uniform aids to navigation.** (1) **DEFINITIONS.** (a) "Waterway marker" is any device designed to be placed in, on or near the water to convey an official message to a boat operator on matters which may affect health, safety, or well being, except that such devices of the United States or an agency of the United States are excluded from the meaning of this definition.

(b) "Regulatory marker" is a waterway marker which has no equivalent in the U. S. Coast Guard aid to navigation.

(c) "State aid to navigation" is a waterway marker which is the equivalent of a U. S. Coast Guard aid to navigation.

(d) "Buoy" is any device designed to float which is anchored in the water and which is used to convey a message.

(e) "Sign" is any device for carrying a message which is attached to another object such as a piling, buoy, structure or the land itself.

(f) "Display area" is the area on a sign or buoy needed for display of a waterway marker symbol.

(g) "Symbols" are geometric figures such as diamond, circle, rectangle, used to convey a basic message.

(2) **WATERWAY MARKERS USED ON THE WATERS OF THIS STATE.** (a) *State aids to navigation.*

1. A red buoy or sign shall indicate that side of a channel to be kept to the right of a vessel when entering the channel from the main water body or when proceeding upstream.

2. A black buoy or sign shall indicate that side of a channel to be

kept to the left of a vessel when entering the channel from the main water body or when proceeding upstream.

3. Buoys or signs in 1 and 2 above shall normally be used in pairs and only for the purpose of marking a clearly defined channel.

4. A black and white vertically striped buoy or sign shall indicate the center of a navigable waterway.

5. Aids to navigation shall be numbered or lettered for identification. Red buoys and signs marking channels shall be identified with even numbers, and black buoys and signs marking channels shall be identified with odd numbers, the numbers increasing from the main body or proceeding upstream. Buoys and signs indicating the center of a waterway will be identified by letters of the alphabet. All numbers and letters used to identify state aids to navigation shall be preceded by the letters "WS", as indicated by the following samples: WS-1, WS-A.

6. Letters and numerals used with aids to navigation shall be white, in block characters of good proportion and spaced in a manner which will provide maximum legibility. Such letters and numerals shall be at least 3 inches in height.

7. The shapes of aids to navigation shall be compatible with the shapes established by coast guard regulations for the equivalent coast guard aids to navigation.

8. Where reflectorized materials are used, a red reflector will be used on a red buoy, and a green reflector on a black buoy.

(b) *Regulatory markers.* 1. A diamond shape of international orange with white center shall indicate danger. The nature of the danger may be indicated by words or well-known abbreviations in black letters inside the diamond shape, or above and/or below it on white background.

2. A diamond shape of international orange with a cross of the same color within it against a white center without qualifying explanation shall indicate a zone from which all vessels are excluded.

3. A circle of international orange with white center will indicate a control or restriction. The nature of the control or restriction shall be indicated by words, numerals, and/or well-known abbreviations in black letters inside the circle. Additional explanations may be given above and/or below it in black letters on white background.

4. A rectangular shape of international orange with white center will indicate information, other than a danger, control or restriction, which may contribute to health, safety or well-being. The message will be presented within the rectangle in black letters.

5. Letters or numerals used with regulatory markers shall be black, in block characters of good proportion, spaced in a manner which will provide maximum legibility, and of a size which will provide the necessary degree of visibility.

(3) **AUTHORITY TO PLACE MARKERS.** (a) No waterway marker shall be placed on, in, or near the waters of the state unless such placement is authorized by an agency or political subdivision of the state having power to give such authorization, except that the provisions of this section shall not apply to private aids to navigation under the jurisdiction of the U. S. Coast Guard.

(b) Such agency or political subdivision of the state will, prior to authorizing placement, obtain the necessary clearances of any federal and state agencies concerned.

(c) The agency or political subdivision of the state authorizing the placement of a waterway marker will inform the department of the following:

1. Exact location of the marker, expressed in latitude and longitude, or in distance and direction from one or more fixed objects whose precise location is known.

2. The description and purpose of the marker, including its identifying number, if any, as required by subsection (2) (a) 5. above.

(4) MAINTENANCE OF WATERWAY MARKERS. Waterway markers shall be maintained in proper condition, or be replaced or removed.

(5) DISPLAY OF WATERWAY MARKERS. (a) A waterway marker may be displayed as a sign on a fixed support, as a buoy bearing a symbol on its surface, or as a sign mounted on a buoy.

(b) When a buoy is used to carry a symbol on its surface, it will be white, with a band of international orange at the top and a band of international orange above the waterline at the bottom.

(c) A buoy whose sole purpose is to carry a sign above it will be marked with three bands of international orange alternating with two bands of white, each band occupying approximately one-fifth of the total area of the buoy above the waterline, except where the sign itself carries orange bands; however nothing in these regulations will be construed to prohibit the mounting of a sign on a buoy which has been placed for a purpose other than that of carrying a sign.

(d) When symbols are placed on signs, a suitable white background may be used outside the symbol.

(6) SPECIFICATIONS FOR WATERWAY MARKERS. (a) The minimum size of buoys shall be 36 inches riding above the waterline with a 7-inch diameter. The size of the display area shall be as required by circumstances, except that no display area shall be smaller than one foot in height. Display symbol markers shall be shown on 2 sides of buoys.

(b) The thickness of the symbol outline shall be not less than 2 inches in width.

(c) The outside width of the diamond, the inner diameter of the circle, and the average of the inside and outside widths of a square shall be two-thirds of the display area height.

(d) The sides of the diamond shall slope at a 35° angle from the vertical on a plane surface. Appropriate adjustments for curvature may be made when applied to a cylindrical surface.

(e) Waterway markers shall be made of materials which will retain, despite weather and other exposures, the characteristics essential to their basic significance, such as color, shape, legibility and position. Reflectorized materials may be used.

(f) All unlighted aids to navigation shall be equipped with a reflector material of at least 2 inches all around the uppermost part.

(7) OTHER WATERWAY MARKING DEVICES. (a) *Mooring buoys.* In order that mooring buoys shall not be mistaken for aids to navigation or regulatory markers, they shall extend 18 inches above the waterline, be white in color with a blue band clearly visible above the waterline, and they should be spherical or ovate in shape.

(b) *Placement.* Placement of markers such as mooring buoys and permanent race course markers will be processed in the same manner as waterway markers.

(c) *Color, shape etc.* Such markers shall not be of a color, shape, configuration or marking which would result in their confusion with any federal or state aid to navigation or any state regulatory marker, and shall not be placed where they will obstruct navigation, cause confusion, or constitute a hazard.

(d) *Exemptions.* Exemptions as to size, shape and color may be made by local authorities, pursuant to section 30.77, Wis. Stats., for the temporary (not to exceed 14 days) placement of mooring buoys, race course markers, water ski course markers for special events.

**History:** Cr. Register, March, 1960, No. 51, eff. 4-1-60; r. and recr. Register, March, 1966, No. 123, eff. 4-1-66; renum. from WCD 5.09 to be NR 5.09, and am. (3) (c), intro. par., Register, March, 1971, No. 183, eff. 4-1-71.

**NR 5.10 Carburetor flame arrestors.** Every motorboat equipped with an inboard motor using gasoline as a fuel shall have the carburetors of every such motor fitted with an efficient device for arresting backfire of a type approved by the U. S. Coast Guard.

**History:** Cr. Register, March, 1960, No. 51, eff. 4-1-60; renum. from WCD 5.10 to be NR 5.10, Register, March, 1971, No. 183, eff. 4-1-71.

**NR 5.11 Fire extinguishers.** (1) Fire extinguishers required by s. 30.62 (4), Wis. Stats., shall comply with the following minimum specifications:

(a) *Type*—Capable of promptly and effectively extinguishing burning gasoline (carbon tetrachloride not approved).

(b) *Size*—A. Foam (minimum gallons 1¼) or carbon dioxide (minimum pounds 4) or dry chemical (minimum pounds 2).

B. Foam (minimum gallons 2½) or carbon dioxide (minimum pounds 15) or dry chemical (minimum pounds 10).

(2) The fire extinguishers required on each class of motorboat shall be as follows:

<i>Class of Motorboat</i>	<i>Size and Number of Extinguishers Required</i>
(a) Class A (less than 16 feet) -----	1 size A
(b) Class 1 (16 feet to 26 feet) -----	1 size A
(c) Class 2 (26 feet to 40 feet) -----	2 size A or 1 size B
(d) Class 3 (40 feet or over) -----	3 size A or 1 size B and 1 size A

(e) When the engine compartment of the motorboat is equipped with a fixed (built-in) extinguishing system of an approved Coast Guard type, the number of Size A extinguishers required may be reduced by one.

**History:** Cr. Register, March, 1960, No. 51, eff. 4-1-60; renum. from WCD 5.11 to be NR 5.11, Register, March, 1971, No. 183, eff. 4-1-71.

**NR 5.12 Specifications for determination of weight capacity and recommended number of persons.** (1) DETERMINATION OF WEIGHT CAPACITY OF THOSE VESSELS COVERED BY SECTION 30.501, WIS. STATS., DESIGNED FOR OR REPRESENTED BY THE MANUFACTURER AS BEING SUITABLE FOR USE WITH OUTBOARD MOTOR OR DESIGNED TO BE PROPELLED BY OARS, EXCEPT THOSE VESSELS DEPENDENT SOLELY UPON THE BUOYANCY OF PONTOONS OR SIMILAR FLOTATION DEVICES.

(a) *Step 1:* The cubic volume of the hull shall be determined up to a reference plane (static float line) which passes through the lowest

point of major leakage, such as the low point of the gunwale, transom cut-out or top of motor well, and is parallel with a line connecting the intersections of the sheer with the forward face of the stem and the sheer with the after-face of the transom. "Sheer" is defined as the intersection of the hull with deck, gunwale or super-structure.

(b) *Step 2*: The weight capacity shall be determined by converting the hull cubic volume (Step 1) to the weight of water displaced by this volume as follows: multiply the product of Step 1 by 62.5, then subtract the weight of the vessel, and divide the remainder by a safety factor of five.

(c) *Work sheet*. The following work sheet (Table I) can be used in determining the weight capacity of the hull. The figures to be inserted are taken from the boat dimension drawings (Table II) to which the letters under the blank spaces refer. All dimensions should be converted to decimal numbers before insertion in the formula. Table III converts inches and eighths of inches to the decimal equivalents in feet.

(2) DETERMINATION OF WEIGHT CAPACITY OF THOSE VESSELS COVERED BY SECTION 30.501, WIS. STATS., WHICH HAVE PERMANENTLY INSTALLED ENGINES, EXCEPT THOSE VESSELS DEPENDENT SOLELY UPON THE BUOYANCY OF PONTOONS OR SIMILAR FLOTATION DEVICES.

(a) Weight capacity shall be determined in the same manner as for vessels represented as being suitable for use with outboard motor except that the weight of all machinery and associated operating gear including battery, fuel and fuel system shall be subtracted.

(3) DETERMINATION OF WEIGHT CAPACITY OF THOSE VESSELS COVERED BY SECTION 30.501, WIS. STATS., WHICH ARE DEPENDENT SOLELY UPON THE BUOYANCY OF PONTOONS OR SIMILAR FLOTATION DEVICES.

(a) Weight capacity shall be determined by the following tests or by the substitute method provided if the conditions stated therein are met. The tests shall be conducted with the maximum horsepower motor for which the boat is recommended and with full fuel tanks and operating equipment in normal position.

1. The transverse stability shall be tested by adding weight on the lower deck in the extreme outboard position which the arrangement permits (i.e., within one foot of the edge) until the top of the pontoon on the loaded side becomes awash.

2. The longitudinal stability shall be tested by adding weight on the lower deck evenly about a point  $\frac{1}{4}$  of the length of the deck from forward until the edge of the lower deck becomes immersed. This test shall be repeated at the after end of the craft by adding weight evenly about a point  $\frac{1}{4}$  of the length of the deck from aft until the edge of the lower deck or the top of the motor mounting bracket becomes immersed, whichever occurs first.

3. In a design having more than one deck intended to support passengers (i.e., having railings and means of access), the tests in pars. 1 and 2 shall also be conducted by adding weight in the specified locations on the upper deck until the conditions specified in 1 and 2 above respectively are attained.

4. Ninety percent (90%) of the least of the weights attained by the tests in paragraphs 1 and 2 shall be the weight for passengers.

TABLE I CAPACITY FORMULA WORK SHEET

Step 1.

Compute Areas of Sections

Formula: Area =  $\frac{H}{12} (a + 4b + 2c + 4d + e)$

Note: For maximum allowable height (H) in any section, check inside this form.

Area A - Section Quarter Length Forward:

A =  $\frac{\quad}{12} [ \frac{\quad}{a} + 4(\frac{\quad}{b}) + 2(\frac{\quad}{c}) + 4(\frac{\quad}{d}) + \frac{\quad}{e} ]$   
 A = \_\_\_\_\_ square feet (two decimal places)

Area B - Section Amidships:

B =  $\frac{\quad}{12} [ \frac{\quad}{a} + 4(\frac{\quad}{b}) + 2(\frac{\quad}{c}) + 4(\frac{\quad}{d}) + \frac{\quad}{e} ]$   
 B = \_\_\_\_\_ square feet (two decimal places)

Area C - Section Quarter Length Aft:

C =  $\frac{\quad}{12} [ \frac{\quad}{a} + 4(\frac{\quad}{b}) + 2(\frac{\quad}{c}) + 4(\frac{\quad}{d}) + \frac{\quad}{e} ]$   
 C = \_\_\_\_\_ square feet (two decimal places)

Area D - Section Aft:

D =  $\frac{\quad}{12} [ \frac{\quad}{a} + 4(\frac{\quad}{b}) + 2(\frac{\quad}{c}) + 4(\frac{\quad}{d}) + \frac{\quad}{e} ]$   
 D = \_\_\_\_\_ square feet (two decimal places)

TABLE III Inches To Decimal Feet	
Inches	Decimals
1/8"	.010'
1/4"	.021'
3/8"	.031'
1/2"	.042'
5/8"	.052'
3/4"	.062'
7/8"	.073'
1"	.083'
2"	.167'
3"	.250'
4"	.333'
5"	.417'
6"	.500'
7"	.583'
8"	.667'
9"	.750'
10"	.833'
11"	.917'

Compute Cubic Capacity

Formula: Cubic Capacity of Hull =  $\frac{L}{12} (4A + 2B + 4C + D) + \text{Note 1.}$

Cubic Capacity =  $\frac{\quad}{12} [ 4(\frac{\quad}{A}) + 2(\frac{\quad}{B}) + 4(\frac{\quad}{C}) + \frac{\quad}{D} ] + \quad$   
 Cubic Capacity = \_\_\_\_\_ cubic feet (one decimal place)

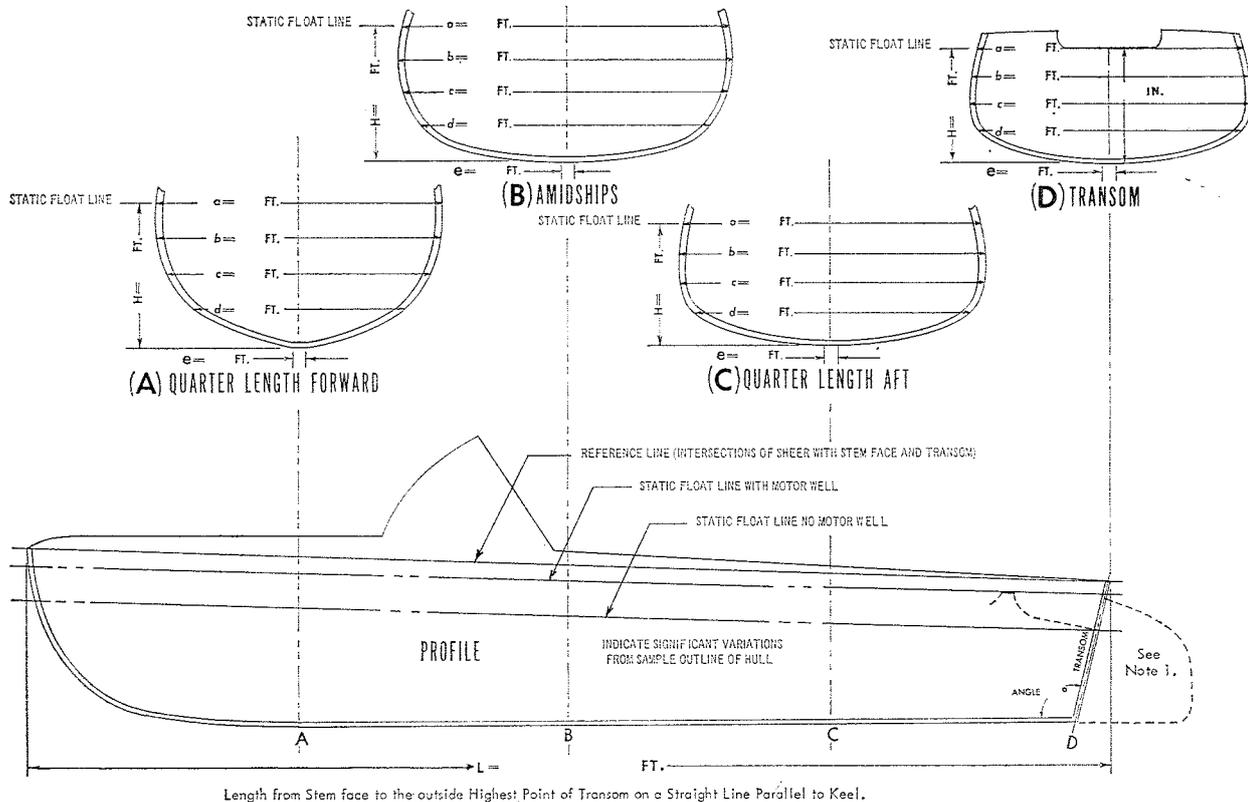
Step 2.

Compute Maximum Weight Capacity

Formula: Capacity =  $\left[ (\text{Cubic Capacity} \times 62.5) - \text{Boat Weight} \right] \div 5$   
 Capacity =  $\left[ (\frac{\quad}{\quad} \times 62.5) - \frac{\quad}{\quad} \right] \div 5$   
 Capacity = \_\_\_\_\_ pounds (nearest whole number)

Note 1: The volume of integral structure aft of the transom below the static float line may be added to the calculated cubic capacity.

Table II BOAT DIMENSIONS



STATIC FLOAT LINE passes through the point of major leakage and is parallel with a line connecting the intersections of the sheer with the forward face of the stem and the sheer with the afterface of the transom.

TRANSVERSE SECTIONS (A, B and C) are taken at three points obtained by dividing length (L) into four equal parts.

HORIZONTAL BREADTHS (a, b, c, d, and e) are secured by measuring at upper and lower points of the height (H) and at three points selected by dividing (H) into four equal parts below the static float line.

MEASUREMENTS are taken outside planking or plating and recorded in feet with decimal equivalents for inches and eighths.

5. The weight capacity for the craft shall then be the sum of the weight for passengers plus the weight for the maximum horsepower motor for which the boat is recommended, full fuel tanks and operating equipment.

(b) A substitute method for determining the weight capacity of pontoon boats may be applied to pontoon boats having only one deck. The deck must be within the width of the pontoons, must be no more than 6 inches above the pontoons, its length within the railings must be no more than 80% of the pontoon length, must not overhang the pontoon, and must be capable of draining overboard freely. If the boat complies with these conditions, the weight capacity shall not exceed one half of the reserve buoyancy of the boat which shall be determined by subtracting the weight of the vessel including the weight of the maximum horsepower motor for which the boat is recommended, full fuel tanks and normal operating equipment from the buoyant force of the boat's pontoons or similar flotation devices.

(4) PASSENGER CAPACITY. The recommended passenger capacity of those vessels covered by section 30.501, Wis. Stats., shall be determined by the following equations, using whichever is less:

$$(a) \quad P = WC - \frac{(M + G)}{w}$$

(a) P = passengers

WC = weight carrying capacity

M = maximum motor weight (not applicable to boats which have permanently installed engines)

G = gear weight (not applicable to boats which have permanently installed engines)

w = average weight of one passenger, but not less than 150 pounds

$$(b) \quad P = \frac{L \times B}{15}$$

P = passengers

L = boat length

B = maximum boat beam

(5) LINEAR MEASUREMENTS. In the preceding paragraphs of this section all linear measurements are taken outside planking or plating and recorded in feet with decimal equivalents for inches and eighths, all volume measurements in cubic feet and all weight measurements are in pounds.

**History:** Cr. Register, March, 1966, No. 123, eff. 4-1-66; renum. from WCD 5.12 to be NR 5.12, Register, March, 1971, No. 183, eff. 4-1-71.