

Chapter NR 5

BOAT REGULATIONS AND REGISTRATION

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NR 5.01 Application for boat certificate of number or registration. (1) An application for a certificate of number must contain the following information:

- (a) Name of the owner
- (b) Address of the owner, including ZIP code
- (c) Date of birth of the owner
- (d) Citizenship of the owner
- (e) State in which boat is or will be principally used
- (f) The number previously issued by an issuing authority for the boat, if any
- (g) Whether the application is for a new number, renewal of a number, or transfer of ownership
- (h) Whether the boat is used for pleasure, rent or lease, dealer or manufacturer demonstration, commercial passenger carrying, commercial fishing, or other commercial use
- (i) Make of boat
- (j) Year boat was manufactured or model year
- (k) Manufacturer's hull identification number, if any
- (l) Overall length of boat
- (m) Type of boat (open, cabin, house, or other)
- (n) Whether the hull is wood, steel, aluminum, fiberglass, plastic, or other

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(o) Whether the propulsion is inboard, outboard, inboard-outdrive, or sail and name of engine manufacturer if available

(p) Whether the fuel is gasoline, diesel, or other

(q) A statement of ownership by applicant

(r) The signature of the owner

(2) An application made by a manufacturer or dealer for a number that is to be temporarily affixed to a boat for demonstration or test purposes may omit items sub. (1) (i) to (p).

(3) An application made by a person who intends to lease or rent the boat without propulsion machinery may omit items sub. (1) (o) and (p).

(4) An application for registration of a federally documented vessel shall contain the assigned federal documentation number, the name of the vessel and the hailing port as described in the documentation papers for that vessel in addition to the information required in sub. (1).

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; am., Register, June, 1974, No. 222, eff. 7-1-74; cr. (4), Register, April, 1985, No. 352, eff. 5-1-85.

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

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; am., Register, April, 1985, No. 352, eff. 5-1-85.

NR 5.03 Application for duplicate. An applicant for a duplicate certificate of number in addition to furnishing the information required by s. 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 s. 30.52, Stats., except as allowed in subs. (2), (3) and (4), must contain the following information:

(a) Number issued

(b) Expiration date

(c) State of principal use

(d) Name of owner

(e) Address of owner, including ZIP code

(f) Whether the boat is used for pleasure, rent or lease, dealer or manufacturer demonstration, commercial passenger carrying, commercial fishing or other commercial use

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- (g) Manufacturer's hull identification number (if any)
 - (h) Make of boat
 - (i) Year boat was manufactured
 - (j) Overall length of boat
 - (k) Whether the boat is an open boat, cabin cruiser, houseboat, or other type
 - (l) Hull material
 - (m) Whether the propulsion is inboard, outboard, inboard-outdrive, or sail
 - (n) Whether the fuel is gasoline, diesel, or other
 - (o) A quotation of the state regulations pertaining to change of ownership or address; documentation, loss, destruction, abandonment, theft, or recovery of boat; carriage of the certificate of number on board when the boat is in use; rendering aid in a boat accident; and reporting of boat casualties and accidents.
- (2) A certificate of number issued to a boat that has a manufacturer' hull identification number assigned, may omit items sub. (1) (h) to (n) if the manufacturer's hull identification number is plainly marked on the certificate.
- (3) A certificate of number issued to a manufacturer or dealer to be used on a boat for test or demonstration purposes may omit items sub. (1) (g) to (n) if the word "manufacturer" or "dealer" is plainly marked on the certificate.
- (4) A certificate of number issued to a boat that is to be rented or leased without propulsion machinery may omit items sub. (1) (m) and (n) if the words "livery boat" are plainly marked on the certificate.

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; am., Register, June, 1974, No. 222, 7-1-74.

NR 5.05 Numbering pattern to be used. The boat certificate of number issued pursuant to s. 30.52, 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.

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NR 5.06 Display of numbers or decals on boats. (1) The assigned number shall be painted on, or attached to, each side of the forward half of the boat for which it was issued. The numbers shall be placed on the hull of the boat 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 s. 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) Upon being issued a certificate of number card and certification decals, the owner of the boat shall permanently affix and display the decals on each side of the vessel, 3 inches aft (to the rear) of and directly in line with the numbers.

(3) Upon being issued a registration card and registration decals, the owner shall permanently affix and display the registration decals on the transom (back of the boat) of the boat on each side of the federally documented name of the vessel in a manner so both decals are visible. If the federally documented name is displayed on the sides of the hull, the registration decals may be displayed 3 inches aft (to the rear) of and directly in line with the name.

(4) No person may display on either side of the forward half of any numbered boat any number other than the registration number issued for the 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; am. (1), r. and recr. (2) and (3), cr. (4), Register, April, 1985, No. 352, eff. 5-1-85.

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 reports. Written reports of boating accidents required by s. 30.67, Stats., shall be submitted to the Department of Natural Resources, Box 7921, Madison, Wisconsin 53707, on forms provided by the department, postmarked within 10 days after the date of the accident. Reportable accidents are defined as all boating accidents that result in loss of life, personal injury which required medical treatment beyond first aid, damage to the boat and other property exceeding \$200.00, or complete loss of the boat. All reports shall contain 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, date of birth, and experience of the operator of the reporting boat.

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- (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, addresses and dates of birth 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.
- (18) The name, address and signature of the person filling out the report.

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; r. and recr. (intro.), am. (4) and (11), cr. (18), Register, April, 1985, No. 352, eff. 5-1-85.

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 green 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 green 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 shall 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 shall be used on a red buoy, and a green reflector on a green 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 with 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 may be placed on, in, or near the waters of the state unless such placement is authorized by a political subdivision of the state except that the provisions of this section do not apply to private aids to navigation placed under the jurisdiction of the department of natural resources or an authorized agency of the federal government.

(b) Such political subdivision of the state shall, prior to authorizing placement, obtain the approval of the department. The political subdivision shall issue a written permit for the placement of all buoys placed within its jurisdiction, on forms provided by the department. A copy of the permit shall be on file with the department before the permit is valid and the placement of the buoy is authorized. Mooring buoys placed within the boundaries of a state or federally approved mooring area are exempt from this section when such placement is authorized by the unit of government having jurisdiction.

(c) The political subdivisions of the state authorizing the placement of a waterway marker shall 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 sub. (2) (a) 5.

(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 on 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 3 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 WATERWAYS 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 s. 30.77, 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; am. (2) (a) 2. and 5., (3) (a), (b) and (c) (intro.), Register, April, 1985, No. 352, eff. 5-1-85.

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), 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).

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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:

Class of Motorboat	Size and Number of Extinguishers Required
(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.

(3) Fire extinguishers required by s. 30.62 (4), Stats., shall be approved by the U.S. coast guard or listed by underwriters laboratories inc., as an approved marine fire extinguisher.

History: Cr. Register, March, 1960, No. 51, eff. 4-1-60; renun. from WCD 5.11 to be NR 5.11, Register, March, 1971, No. 183, eff. 4-1-71; cr. (3), Register, April, 1985, No. 352, eff. 5-1-85.

NR 5.12 Specifications for determination of horsepower and weight capacity and recommended number of persons. (1) DETERMINATION OF WEIGHT CAPACITY OF THOSE VESSELS COVERED BY S 30.501, 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 5.

(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 S 30.501, 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 S. 30.501, 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 subds. 1 and 2 shall also be conducted by adding weight in the specified locations on the upper deck until the conditions specified in subds. 1 and 2 respectively are attained.

4. Ninety percent of the least of the weights attained by the tests in subds. 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)

Inches	Decimals
1/8"	.010'
1/4"	.021'
3/8"	.031'
1/2"	.042'
5/8"	.052'
3/4"	.082'
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

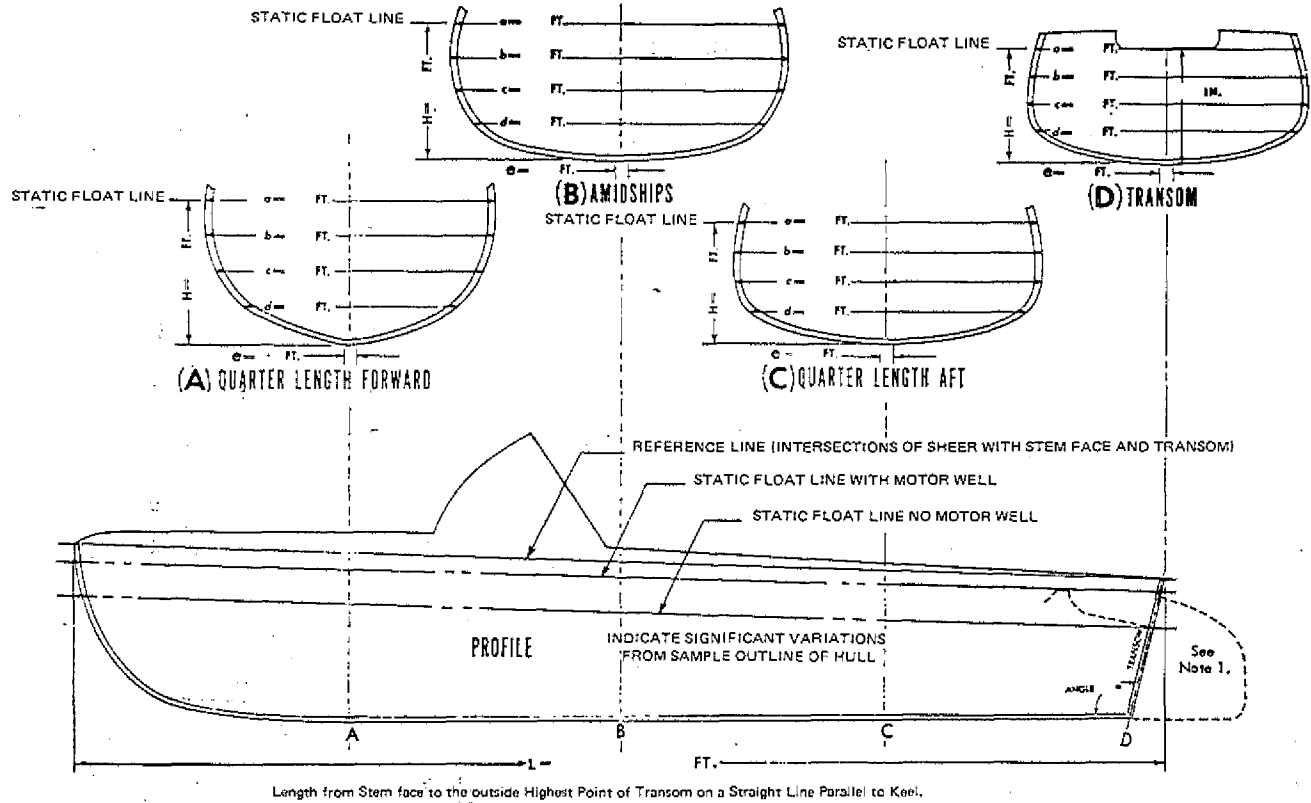
Formula: Capacity = $\frac{[(\text{Cubic Capacity} \times 62.5) - \text{Boat Weight}]}{5}$

Capacity = $\frac{[(\quad \times 62.5) - \quad]}{5}$

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 III 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 s. 30.501, Stats., shall be determined by the following equations, using whichever is less:

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

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.

(6) **MAXIMUM SAFE HORSEPOWER CAPACITY.** The determination of maximum safe horsepower capacity of outboard equipped motorboats 14 to 20 feet in length covered by s. 30.501, Stats., shall be calculated by the use of the following formulas:

(a) *Step 1.* Measure length of vessel (midline measurement) and the width of the transom (or back of the boat) (across the top), recording in feet and inches. Convert inches to hundredths of a foot (Table 1). Multiply length times width to determine FACTOR. For .5 or above round off FACTOR to the next higher whole number. If FACTOR number is between 0 and 52, use Table 2 to determine maximum safe horsepower capacity in calm water.

Table 1

<u>Inches</u>		<u>Hundredths</u>	<u>Inches</u>		<u>Hundredths</u>
1	=	0.08	7	=	0.58
2	=	0.16	8	=	0.66
3	=	0.25	9	=	0.75
4	=	0.33	10	=	0.83
5	=	0.41	11	=	0.91
6	=	0.50	12	=	1.00

Table 2

If your factor number is between 0 and 52, your safe outboard horsepower capacity is as shown below:

<u>If factor is between</u>	<u>safe horsepower capacity is:</u>
0 - 35	3
36 - 39	5
40 - 42	7.5
43 - 45	10
46 - 52	15

(b) *Step 2.* If FACTOR number is larger than 52.0, the safe outboard horsepower capacity is figured according to the type of steering and the height of the transom. Measure transom height in inches (measure from bottom of keel to lowest point of the transom). For outboards with remote steering and a transom height of at least 20 inches, multiply the FACTOR by 2, subtract 90 and raise the answer to nearest multiple of 5, using the information given in Table 3. The resulting number is the maximum safe horsepower in calm water.

Note: Following are examples of how to raise answer to nearest multiple of 5:

If the second numeral in your answer is a 5 or a 0, DO NOT CHANGE ANSWER.

If the second numeral in your answer is 1, 2, 3, or 4, change it to 5. For example, 21, 22, 23, or 24 would all be changed to 25.

If the second numeral in your answer is 6, 7, 8, or 9, change it to a 0 and raise the first numeral by 1. For example, 26, 27, 28, or 29 would all be changed to 30.

(c) *Step 3.* For outboards that do not have remote steering or the transom height is less than 20 inches, multiply FACTOR by 0.8, subtract 25 and raise the answer to nearest multiple of 5. The final answer is the maximum safe horsepower in calm water.

(d) *Step 4.* For flat-bottomed, hard chine (where the side meets the bottom) outboards that do not have remote steering or the transom height is less than 20 inches, multiply FACTOR by 0.5 and subtract 15, raise answer to the nearest multiple of 5, the final answer is the maximum safe horsepower in calm water.

Note: The above formulas and tables used to determine maximum safe horsepower capacity for outboard motorboats appear in 33 C.F.R. s. 183.53.

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; cr. (6), Register, April, 1985, No. 352, eff. 5-1-85.

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NR 5.13 Personal flotation and life saving device requirements. (1) This section applies to all boats that are propelled or controlled by machinery, sails, oars, paddles or poles or another vessel including but not limited to inflatables and sailboards, used on waters subject to the jurisdiction of this state except:

(a) Racing shells, rowing sculls, and racing kayaks that are recognized by national or international racing associations for use in competitive racing and one in which all occupants row, scull, or paddle with the exception of a coxswain, if one is provided, and is not designed to carry and does not carry any equipment not solely for competitive racing.

(b) Foreign boats temporarily using waters subject to state jurisdiction.

(c) Military or public boats of the United States, except recreational-type public vessels.

(2) **PERSONAL FLOTATION DEVICE (PFD) REQUIREMENTS.** (a) No person may operate or use a boat less than 16 feet in length or a canoe or kayak unless at least one PFD of the following types or their equivalents listed in figure 1 is on board for each person:

1. Type I PFD
2. Type II PFD
3. Type III PFD
4. Type IV PFD

(b) No person may operate or use a boat 16 feet or more in length except a canoe or kayak, unless at least one PFD of the following types or their equivalents listed in figure 1 is on board for each person:

1. Type I PFD
2. Type II PFD
3. Type III PFD

(c) No person may operate or use a boat 16 feet or more in length, except a canoe or kayak, unless at least one type IV PFD or its equivalent listed in figure 1 is on board in addition to the PFD's required in par. (b).

(d) A type V PFD may be carried in lieu of any PFD required in sub. (2), if that type V PFD is approved for the work activity in which the boat is being used.

(e) No person may operate or use a boat of any size to carry passengers for hire unless at least one type I PFD or its equivalent listed in figure 1 is on board for each person and in addition one ring life buoy as listed in figure 1 must be carried on board such boats which are 26 feet or more in length.

(3) **STOWAGE.** (a) No person may use a boat unless each type I, type II, type III or type V PFD required by sub. (2) is readily accessible.

(b) No person may operate or use a boat unless each type IV PFD required by sub. (2) is immediately available.

(4) **CONDITIONS, APPROVAL, MARKING.** No person may operate or use a boat unless each device required by this section is:

(a) In serviceable condition,

(b) Legibly marked with the approval number as listed in figure 1 for items subject to approval, and

(c) Of an appropriate size for the person for whom it is intended.

(5) **PERSONAL FLOTATION DEVICE EQUIVALENTS.** Figure 1 lists devices that are equivalent to personal flotation devices.

FIGURE 1

Devices marked	Are equivalent to
160.002 Life preserver -	Performance type I personal flotation device
160.003 Life preserver -	Performance type I personal flotation device
160.004 Life preserver -	Performance type I personal flotation device
160.005 Life preserver -	Performance type I personal flotation device
160.009 Ring life buoy -	Performance type IV personal flotation device
160.047 Buoyant vest -	Performance type II personal flotation device
160.048 Buoyant cushion -	Performance type IV personal flotation device
160.049 Buoyant cushion -	Performance type IV personal flotation device
160.050 Ring life buoy -	Performance type IV personal flotation device
160.052 Buoyant vest -	Performance type II personal flotation device
160.053 Work vest -	Performance type V personal flotation device
160.055 Life preserver -	Performance type I personal flotation device
160.060 Buoyant vest -	Performance type II personal flotation device

History: Cr. Register, June, 1974, No. 222, eff. 7-1-74; am. (1) (intro.), (2) (a), (b), (c), r. (3) (a), renum. (3) (b) and (c) to be (2) (d) and (e), (4) to (6) to be (3) to (5) and am. (4) (intro.) and (5), Register, April, 1985, No. 352, eff. 5-1-85.

NR 5.14 Jurisdiction of municipal water safety patrols. The Wisconsin department of natural resources hereby defines by rule, pursuant to s. 30.79(4), Stats., the following waters which may be patrolled by the respective water safety patrol units mentioned:

(1) The waters of Wallace lake, located in section 1, township 11 north, range 19 east and section 6, township 11 north, range 20 east in Washington county, by a water safety patrol operated by the town of Trenton.

(2) The portion of Golden Lake, described herein, located in sections 30 and 31, township 7 north, range 17 east, Waukesha county, by a water safety patrol unit operated by the town of Summit: all of Golden lake except that portion in section 25, township 7 north, range 16 east, Jefferson county, which lies to the west of the easterly boundary of section 25; said boundary marked by a north-south line drawn between two certified land corner monuments; the north concrete monument being located 1167.5 feet south from the northeast corner of section 25 and the south concrete monument being located 576.7 feet north from the southeast corner of section 25.

History: Cr. Register, August, 1975, No. 236, eff. 9-1-75; cr. (2), Register, November, 1977, No. 263, eff. 12-1-77.

NR 5.20 Modification or waiver of slow-no-wake speed restriction on certain lakes. Section 30.635, Stats., provides that the department may modify or waive the slow-no-wake speed restriction on lakes 50 acres or less in size having public access. The following procedure is established to implement that provision:

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(1) **SUBMISSION OF PETITION FOR MODIFICATION OR WAIVER BY RULE.** Pursuant to s. 227.015, Stats., any municipality, corporation or any 5 or more persons having an interest in a rule may petition for such a rule to modify or waive the slow-no-wake speed restriction on a particular lake.

(2) **CONTENTS OF PETITION.** The petition shall state clearly and concisely:

(a) The substance or nature of the rule-making which is requested; and

(b) The reasons for the request and the petitioners' interest in the request; and

(c) References to the authority of the agency to take the action which is requested.

(3) **SERVICE ON THE DEPARTMENT.** The petition shall be served on the department of natural resources either by delivery to the office of the secretary or by mailing to the secretary by certified mail at the following address: P.O. Box 7921, Madison, Wisconsin 53707.

(4) **DEPARTMENT ACTION ON PETITION.** Upon receipt of a petition for modification or waiver, the following procedures shall apply without prior authorization of the natural resources board:

(a) The department shall schedule a rule-making hearing within a reasonable period of time for the purpose of receiving the comments and views of all interested persons on the petition.

(b) Based upon information received at the hearing and the determinations made pursuant to par. (c), the department will either proceed with rule-making or deny the petition in writing. The department is not limited to the rule-making proposed by the petitioner but may modify or waive the slow-no-wake speed restriction in any manner it deems appropriate.

(c) The department shall in making the decision under par. (b) determine:

1. If the lake is in fact 50 acres or less and has public access. A petition may be received for a lake fluctuating in size where the petitioner shows that the lake has been 50 acres or less in the past.

2. Whether public safety will be impaired by modification or waiver of the slow-no-wake speed restriction.

3. Whether modification or waiver of the slow-no-wake speed restriction will cause environmental pollution as defined in s. 144.30(9), Stats.

History: Emerg. cr. eff. 7-28-75; cr. Register, June, 1976, No. 246, eff. 7-1-76; am. (3), Register, April, 1985, No. 352, eff. 5-1-85.

NR 5.21 Lakes upon which the slow-no-wake speed restriction is modified or waived. The Wisconsin department of natural resources hereby defines by rule, pursuant to s. 30.635, Stats., the following waters upon which the slow-no-wake speed restriction is modified or waived:

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(1) The slow-no-wake speed restriction is waived on the waters of Dutchman (Lad) lake, located in section 2, township 6 north, range 17 east in Waukesha county.

History: Cr. Register, May, 1977, No. 257, eff. 6-1-77.

NR 5.30 Lower St. Croix river preservation, purpose. These rules are adopted to promote full use by all of the people, now and in the future, of the water surface of the lower St. Croix river in a manner consistent with safety for persons and property and with the enjoyment of the scenic and recreational values which caused the river to be designated a national scenic riverway. These rules are promulgated to further the objectives of s. 30.27, Stats., the lower St. Croix river preservation.

History: Cr. Register, October, 1978, No. 274, eff. 11-1-78.

NR 5.31 Applicability. These rules apply to the waters of the lower St. Croix river from the dam at St. Croix Falls to its confluence with the Mississippi river.

History: Cr. Register, October, 1978, No. 274, eff. 11-1-78.

NR 5.32 Definitions. (1) "Mile" means distance in miles above the confluence of the St. Croix river with the Mississippi river.

(2) "Motorboat" as defined in s. 30.50(2), Stats.

(3) "Slow-no-wake" means operation of a motorboat at the slowest possible speed necessary to maintain steerage.

(4) "Slow-speed" means operation of a motorboat at a leisurely speed, less than planing speed, whereby the wake or wash created by the motorboat is minimal.

History: Cr. Register, October, 1978, No. 274, eff. 11-1-78.

NR 5.33 Restricted speed zones. (1) No motorboat shall be operated in excess of a slow speed from the dam at St. Croix Falls to the sandbars located at mile 31.0.

(2) No motorboat shall be operated in excess of a slow-no-wake speed in the following areas:

(a) At the narrows located approximately at mile 28.6, which is 0.4 miles downstream from the Arcola high bridge.

(b) Between the coast guard navigational buoys designating location of the navigational channel from the railroad swing bridge located at mile 17.3 to the south side of the southern-most island in the chain of islands located at mile 16.5.

(c) Between the coast guard navigational buoys designating the Kinnickinnic river delta narrows from mile 6.6 to mile 6.0.

(d) At the Prescott narrows from the north side of the U.S. highway #10 bridge located at mile 0.3 to the confluence of the St. Croix river with the Mississippi river.

(e) Within 100 feet of shore (including the shores of islands) and of swimmers, from sandbars located at mile 31.0 to the confluence of the St. Croix river with the Mississippi river.

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(f) In the bay formed by the Kinnickinnic river delta, north and east of Donut island, at mile 6.0.

(3) Any motorboat designated for law enforcement shall be exempt from subs. (1) and (2) of this regulation in circumstances involving emergencies or when engaged in law enforcement.

History: Cr. Register, October, 1978, No. 274, eff. 11-1-78; cr. (2) (f), Register, November, 1984, No. 347, eff. 12-1-84.

NR 5.34 Water skiing. (1) No motorboat towing a person on water skis, aquaplane or similar device shall be operated between sunset and sunrise on the St. Croix river from the dam at St. Croix Falls to its confluence with the Mississippi river.

(2) No motorboat towing a person on water skis, aquaplane or similar device shall be operated in any zone designated a restricted speed zone under s. NR 5.33. A motorboat launching or landing a person on water skis, aquaplane or similar device by the most direct route to open water shall be exempt from s. NR 5.33 (2) (e).

(3) From May 15 through September 15, no motorboat towing a person on water skis, aquaplane or similar device may operate after 12:00 noon on Saturdays, Sundays and legal holidays, from the sandbars located at mile 31.0 to the upper end of the federal 9-foot navigation channel at mile 24.5.

History: Cr. Register, October, 1978, No. 274, eff. 11-1-78; am. (3), Register, November, 1984, No. 347, eff. 12-1-84.

NR 5.35 Penalties. Any person violating any of the provisions of ss. NR 5.30 through 5.34 shall be fined not more than \$100 or imprisoned for not more than 30 days, or both, for the first offense and fined not more than \$200 or imprisoned for not more than 90 days, or both, upon conviction of the same offense a second or subsequent time within one year.

History: Cr. Register, October, 1978, No. 274, eff. 11-1-78.

NR 5.36 Effective date. These rules shall be effective upon the adoption of laws, rules or regulations providing for similar limitations or prohibitions on the operation and use of motorboats on the same segments of the lower St. Croix river by the state of Minnesota.

History: Cr. Register, October, 1978, No. 274, eff. 11-1-78.