Perry Centennial Regatta

Put-in-Bay, Ohio

July 20 to 27
1913

SAIL YACHT PROGRAM

UNDER THE AUSPICES OF

THE INTER-LAKE YACHTING ASSOCIATION

OFFICERS—1913

GEO. H. WORTHINGTON, C. Y. C. - -	Commodore
S. O. RICHARDSON Jr., T. Y. C. - -	Vice-Commodore
W. J. CONNERS, M. B. C. B. - -	Rear-Commodore
OTTO NEHRENST, C. Y. C. - -	Secretary-Treasurer
ALBERT TREIBER, C. Y. C. - - -	Fleet Captain
HARRY W. CARD, C. Y. C. - -	Sail Yacht Measurer
DR. C. G. JENNINGS, C. C. - - -	Fleet Surgeon

MEMBERSHIP OF THE INTER-LAKE YACHTING ASSOCIATION

Buckeye Lake Yacht Club	Columbus, O.
Buffalo Yacht Club	Buffalo, N. Y.
Cleveland Power Boat Club	Cleveland, O.
Cleveland Yacht Club	Cleveland, O.
Country Club of Detroit	Grosse Pointe Farms, Mich.
Detroit Boat Club Yachtsmen	Detroit, Mich.
Detroit Yacht Club	Detroit, Mich.
Erie Yacht Club	Erie, Pa.
Lakewood Boat Club	Lakewood, O.
Monroe Yacht Club	Monroe, Mich.
Motor Boat Club of Buffalo	Buffalo, N. Y.
Maumee River Yacht Club	Toledo, O.
Ottawa River Yacht Club	Toledo, O.
Put-in-Bay Yacht Club	Put-in-Bay, O.
Port Clinton Yacht Club	Port Clinton, O.
Riverside Boat Club	Toledo, O.
Sandusky Yacht Club	Sandusky, O.
Toledo Yacht Club	Toledo, O.
Walkerville Boat Club Yachtsmen	Walkerville, Ont.

ACTIVE SAIL REGATTA COMMITTEE

G. H. Gardner, Chairman,
Caxton Building, Cleveland, Ohio.
Wm. F. Broer, Toledo, Ohio.
Meredith Potter, Buffalo, N. Y.
Wm. F. Nash, Cleveland, Ohio.
Geo. Q. Hall, Cleveland, Ohio.

ADVISORY SAIL REGATTA COMMITTEE

W. L. Morrison, Erie, Pa.
R. S. Tucker, Sandusky, Ohio.
S. J. Matthews, Port Clinton, Ohio.
William Haas, Put-in-Bay, Ohio.
Otto Barthel, Detroit, Mich.
Franklin H. Walker, Detroit, Mich.
John L. Dexter, Detroit, Mich.
Rollin M. Starr, Toledo, Ohio.
Geo. F. Mooney, Columbus, Ohio.
Earl Shanteau, Toledo, Ohio.

JUDGES

Commodore Aemilius Jarvis, Toronto, Ontario.
Commodore C. D. Buckpitt, Buffalo, N. Y.
Commodore W. L. Baum, Chicago, Ill.
Commodore Geo. L. Craig, Toledo, Ohio.
Commodore A. R. Boswell, Toronto, Ontario.

GENERAL PROGRAM FOR SAIL YACHTS

SUNDAY, JULY 20—

Assembling of yachts.

Captains on arrival are requested to report to the Fleet Captain on board the flagship Priscilla, who will assign anchorages for the yachts in the squadron.

MONDAY, JULY 21—

Entries for all races must be filed with the Sail Yacht Regatta Clerk at headquarters not later than 6 p.m. Monday, July 21. *The official measurements of each yacht, signed by the measurer of the home club, must be filed with each entry. This rule is imperative and will be enforced.*

TUESDAY, JULY 22—

SAIL YACHT RACES—ALL CLASSES

8:00 a.m.—Warning gun from the Judges' boat.
8:15 a.m.—Preparatory gun.
8:25 a.m.—Starting gun for Class P.
8:30 a.m.—Starting gun for Class R.
8:35 a.m.—Starting gun for Class F.
8:40 a.m.—Starting gun for Class A.
8:45 a.m.—Starting gun for Class H.
8:50 a.m.—Starting gun for Class Y.
8:55 a.m.—Starting gun for Class D.
9:00 a.m.—Starting gun for Class J.
9:05 a.m.—Starting gun for Class L.
9:10 a.m.—Starting gun for Class K.
Five minutes between classes.

The starting gun of each class will be the preparatory gun for the next class.

WEDNESDAY, JULY 23—

SAIL YACHT RACES—ALL CLASSES

The guns and starting time will be the same as for Tuesday.

THURSDAY, JULY 24—

LADIES' CAT BOAT RACE

Preparatory gun, 9:30 a.m.
Starting gun, 9:45 a.m.
Announcement of the course will be posted on the bulletin board by 8:30 a.m.

OBSTACLE CAT BOAT RACE

Start 11:30 a.m.
Announcement of the course and conditions of the race will be posted on the bulletin board by 8:30 a.m.

FRIDAY, JULY 25—

SAIL YACHT RACES—ALL CLASSES

The guns and starting time will be the same as for Tuesday and Wednesday.

DIVISION OF CLASSES

The sail yachts will be divided into classes as follows:
Class A—Modern cruisers.
Class P—Class P boats.
Class D—Veteran cruisers.
Class F—21-foot restricted class.
Class H—18-foot restricted class.
Class J—16-foot restricted class.
Class L—14-foot restricted class.
Class K—Cat boats.
Class Y—Yawls.
Class R—Class R boats.

TIME LIMIT FOR RACES

Class P—6 hours.
Classes A, D, F, H and R—3 hours.
Classes J and Y—3½ hours.
Classes L and K—2¼ hours.

SAILING COURSE

The course for all races for sailing yachts in Classes A, D, F, H, J, Y and R will be triangular, starting from a line between a stake off the east end of Gibraltar and the Judges' boat off the west end of Middle Bass, to and around a stake three nautical miles N.N.W., thence to and around a stake three nautical miles S.W. ¾ S., thence three nautical miles E. ½ S., to and across starting line between Judges' boat and stake. In finishing, yachts must cross the starting line in the opposite direction from which they start. All stakes must be left to port, unless otherwise ordered by the Sail Yacht Regatta Committee.

A special course for Classes L and K, starting from the same line, will be a shorter triangle with the same compass courses, but with 1½ miles to the side, or a total of 4½ miles.

The course for Class P will be the same triangle of nine miles, but the length of race will be (18) eighteen miles or twice around the triangle. In finishing the first round yachts must round the home stake leaving it to port unless otherwise ordered by the Sail Yacht Regatta Committee, and in finishing the race, must cross the line between stake and Judges' boat in the opposite direction from which they start.

DESIGNATION OF YACHTS

Sail yachts will be designated as follows:
Class A—A1, A2, A3, etc.
Class P—P1, P2, P3, etc.
Class D—D1, D2, D3, etc.
Class F—F1, F2, F3, etc.
Class H—H1, H2, H3, etc.
Class J—J1, J2, J3, etc.
Class L—L1, L2, L3, etc.
Class K—K1, K2, K3, etc.
Class Y—Y1, Y2, Y3, etc.
Class R—R1, R2, R3, etc.

FOR DETERMINING THE WINNER OF THE SERIES THE FOLLOWING TABLE OF PERCENTAGES WILL BE USED:

NUMBER OF YACHTS IN RACE

Place	1	2	3	4	5	6	7	8	9	10
1st	100	100	100	100	100	100	100	100	100	100
2nd	....	50	66 2-3	75	80	83 1-3	85 5-7	87 1-2	88 8-9	90
3rd	....	....	33 1-3	50	60	66 2-3	71 3-7	75	77 7-9	80
4th	....	....	.....	25	40	50	57 1-7	62 1-2	66 2-3	70
5th	....	....	.....	....	20	33 1-3	42 6-7	50	55 5-9	60
6th	....	....	.....	....	....	16 2-3	28 4-7	37 1-2	44 4-9	50
7th	....	....	.....	....	....	.....	14 2-7	25	33 1-3	40
8th	....	....	.....	....	....	.....	.....	12 1-2	22 2-9	30
9th	....	....	.....	....	....	.....	.....	.....	11 1-9	20
10th	....	....	.....	....	....	.....	.....	.....	.....	10

Points will be figured on the largest number of starters in any heat and that number figured on all heats.

If there are more than ten entries, percentages will be figured proportionately.

PRIZES

Prizes will be awarded as follows for the series of three races:

Class A—First prize.....$300 Winner receives championship flag.
Second prize..... 180
Third prize..... 120

Class P—First prize.....$400 Winner receives championship flag.
Second prize..... 225
Third prize..... 125

Class F—First prize.....$300 Winner receives championship flag
Second prize..... 180 and the Commodore Geo. W.
Third prize..... 120 Gardner Cup.

Class R—First prize.....$300 Winner receives championship flag
Second prize..... 180 and I.-L. Y. A. winner secures
Third prize..... 120 one heat on I.-L. Y. A. Cup. (See note.)

Class H—First prize.....$200 Winner receives championship flag.
Second prize..... 150
Third prize..... 100

Class J—First prize.....$125 Winner receives championship flag.
Second prize..... 75
Third prize..... 50

PRIZES—CONTINUED

Class L—First prize.....$ 75 Winner receives championship flag.
Second prize..... 60
Third prize..... 40

Class Y—First prize.....$100 Winner receives championship flag.
Second prize..... 75
Third prize..... 50

Class D—First prize.....$100 Winner receives championship flag.
Second prize..... 75
Third prize..... 50

Cat Boats— First prize....$100 Winner receives championship flag.
Second prize.. 80
Third prize... 60
Fourth prize.. 40
Fifth prize... 20

Obstacle Boat Race— First prize....$30
Second prize... 20
Third prize.... 10

Best Dressed Yacht— First prize....$60 See note regarding this contest.
Second prize... 40
Third prize.... 20

Best Illuminated Yacht—First prize.....$60 See note regarding this contest.
Second prize... 40
Third prize.... 20

Ladies' Cat Boat Race.....$75 Suitable prizes for first, second and third place will be provided amounting to $75.

IMPORTANT NOTICES

There will be no entrance fees.

There will be a bulletin board at headquarters where changes in program and special instructions will be posted throughout the week.

Full information regarding social events, smokers and illumination of yachts will be found in the general program.

At the meeting of the I.-L. Y. A. in Cleveland February 15, 1913, a resolution was adopted changing the course for Class R from two triangular and one leeward and one windward race to three triangular races, at the option of the Sail Yacht Regatta Committee.

All yachts, whose preparatory gun has not been fired, must keep clear of starting line.

Attention is called to the universal rules, printed herewith, in which some changes were made at the Yacht Racing Union meeting at Toronto, February 1, 1913. The rules as printed herewith are as adopted at that meeting.

Captains who have not reported to the Fleet Captain on board the flagship Priscilla are requested to do so, register and be assigned anchorages.

Headquarters will be at Doller's Boat House, and the Secretary-Treasurer and Regatta Committee may be found at that place. Open from 7 a. m. to 6 p.m.

It will be necessary that every entry be accompanied by a measurement certificate, signed by the official measurer of the home club. This rule will be enforced. Entry blanks may be obtained from the Regatta Clerk at headquarters.

Entries for all races must be made with the Sail Yacht Regatta Committee at headquarters before 6 p.m. Monday, July 21.

Alterations of the race program or sailing course may be made at the discretion of the Sail Yacht Regatta Committee. Such changes will be posted on bulletin board.

Numbers must be carried by each yacht on each side of its mainsail. These numbers will be supplied by the Sail Yacht Regatta Committee at headquarters.

Judges and Regatta Committee boat will fly a white flag with blue letters R. C. thereon. No person other than the Judges, Regatta Committee and Clerks will be allowed on Judges' boat without the consent of the Sail Yacht Regatta Committee.

All stakes are to be left to port unless changed by Regatta Committee. If the Regatta Committee decides to reverse the course and have stakes left to starboard, a blue flag with white letters R. C. thereon will be flown on the Committee boat.

The two outside marks for the longer triangle will be a white flag with red ball in center, all other marks will be white flags with black balls in the center.

William M. Miller of Put-in-Bay is equipped with a steel car on which he can haul out any yacht up to 40 feet.

Guns must not be fired from any yacht within one hour of the time of starting a race, and not until every yacht has crossed the line.

All vessels following the races must keep to leeward, and at such a distance as not to interfere with the manœuvers of the competing yachts.

The races are open to every yacht which complies with the rules and which is regularly enrolled in any club in the Inter-Lake Yachting Association, or which has been invited to participate in the races.

The Revenue Cutter Morrill has been detailed by the Treasury Department at Washington to patrol the course. She will be assisted by other boats appointed by her Captain. They will have authority to enforce the regulations, and will display a red flag with white letter P.

Class D, or veteran cruisers, are boats built prior to 1900.

The prizes for the contest for "Best Dressed Yacht" will be awarded to the yachts which are kept in most shipshape style and appearance during the entire week. Points will be counted based on general handling, appearance of the canvas while hoisted and furled, general neatness in appearance, painting, uniforms of crew both afloat and ashore, general deportment of crew afloat and ashore, and observance of all rules and regulations.

The prizes for the contest "Best Illuminated Yacht" will be awarded to the yachts making the best general appearance on the night the fleet is illuminated.

The decision of the Judges will be final in the contests for "Best Dressed Yachts" and "Best Illuminated Yachts." The Flagship is not a contestant.

In the races for Class R those yachts belonging to clubs which are members of the I.-L. Y. A. will be figured in on the races for the prize money and in addition will be figured on the heats for the I-L. Y. A. Class R trophy.

SAIL YACHT RACING RULES

Classes A, P and R will sail under Yacht Racing Union Rules and time allowance will be figured as per Yacht Racing Union tables, printed herewith. Adopted February 1, 1913.

Class D will be raced under following rule:

$$\text{Racing length} = \frac{\frac{1}{2}\sqrt{\text{sail area}} + \text{over-all length.}}{2}$$

Sail area will be figured in accordance with rules given in 1909 I.-L. Y. A. Manual, and time allowance will be figured as per Yacht Racing Union tables.

Classes F, H, J, L and K will sail under I.-L. Y. A. restricted rules, printed herewith.

Class Y will be raced under the following rule:

$$\frac{\text{L. O. A.} + \text{L. W. L.} \times \sqrt{\text{S. A.}}}{70}$$

One and one-half per cent will be added to actual sailing time of yachts without engine as allowance to yachts with engine. Yachts with engine must have engine sealed.

RULES AND REGULATIONS FOR 21-FOOT CLASS

(CLASS F)

1. A 21-foot Cabin Class Yacht is intended to be a seaworthy type of cruising and racing sloop or cutter, substantially constructed, properly ballasted, and with moderate sail-plan, either with flush deck or cabin trunk, having suitable cabin accommodations below, and conforming to the limitations herein mentioned. Yachts in this class are intended to be of ordinary type, and any evasion in the shape of Sharpie, Catamaran, double hull, or other unusual type, or any yacht fitted with bilge fins, bilge boards or other similar contrivances will not be countenanced.

2. The load-water-line length shall be the distance in a straight line between the points farthest forward and farthest aft where the hull, exclusive of the rudder stock, is intersected by the surface of the water when the yacht is afloat in racing trim in smooth water, and shall not exceed 21 feet.

All yachts shall be measured for load-water-line length, beam and freeboard with required ballast on board and in proper position, and all extra sails, spars and required equipment shall be on board and placed amidship. There shall also be on board at time of measurement a deadweight of 450, 600 or 750 pounds, according to whether the owner elects to carry a crew of three, four or five men, which deadweight shall also be placed amidships. The term "amidship," as here used, means the point midway on the load-water-line, and the requirement as to position of equipment applies only to time measurement is being taken.

If any portion of the stem, stern-post or other part of the yacht below the load-water-line projects beyond the length thus measured, such projection shall be added to the measured length, and a form resulting from the cutting away of the fair line of the stem, stern-post or the ridge of the counter for the apparent purpose of shortening the load-water-line shall be measured between fair lines.

The Measurer, at the time of taking measurements, shall affix a distinctive permanent mark at each end of the load-water-line.

No adjustable or movable truss or other device for shortening or changing the load-water-line length of yachts shall be allowed.

A yacht altering her trim so as to increase her load-water-line length must immediately notify the Secretary of the Club or Association governing the race and obtain a new measurement.

3. The over-all length shall be the distance in a straight line between the points of the hull farthest forward and farthest aft, and shall not exceed 36 feet.

4. A square or snub-nose bow shall not be allowed. The beam, measured on deck at a point equi-distant from the water-line forward and the extreme bow, shall not exceed 45 per cent of the greatest water-line beam, and the deck-line shall not run at an angle with the center-line greater than 30 degrees. Any evasion of the spirit as well as the letter of this rule shall disqualify a yacht from racing in this class.

The length of the forward or after overhang shall not exceed 65 per cent of the total overhang.

BEAM

5. In computing the allowances specified in tables, the beam shall be measured at L. W. L.

COCKPIT

6. The cockpit floor shall be above the L. W. L. with scuppers draining outboard.

FREEBOARD

7. The least freeboard shall be measured from the top of covering board to the surface of the water.

Beam of, or less, than 7 feet.

FREEBOARD (minimum), 20 inches. Less one (1) inch for every foot of additional L. W. L. beam.

8. *Any excess of freeboard over the minimum required shall be deducted from the height allowed for the cabin trunk.

CABIN TRUNK

9. The height of the cabin trunk measured from the level of top side of covering board to highest point of †top side of cabin trunk shall not exceed two (2) inches for every foot of greatest beam. (See Section 8.) The width of cabin trunk shall be not less than 60 per cent of the greatest beam.

10. ‡If the required head-room is obtainable under this rule, additional height of cabin trunk is allowed.

CABIN FLOOR

11. The minimum width of the cabin floor space above the cabin floor shall be not less than one-quarter of the greatest beam.

CABIN FLOOR, length (minimum), 7 feet.

To be measured a distance below the cabin trunk beams equal to the required head-room.

HEAD-ROOM

12. The minimum head-room under deck or cabin trunk beams shall be in the clear over the entire required cabin floor space above the cabin floor, exclusive of skylights and hatches.

HEAD-ROOM (minimum), 3 feet 10 inches.

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* "That the excess of freeboard deducted under Section 7 from the height allowed for cabin trunk under Section 9 shall be measured at the after end of the cabin floor space over which the specified head-room is required, and that the allowed height of cabin trunk above the top side of covering board thus determined shall not be exceeded at any cross-section (except as is provided in Section 8.)"

†Has no reference to the height of side of the cabin trunk, but refers to the highest point of the upper side of the top of the cabin trunk.

‡If additional height of cabin trunk is taken, an equal amount of additional head-room is required.

A reduction of 3/8 inch allowed on planking if canvas covered.

SCANTLINGS

13. Dimensions and areas expressed in inches:

A—Stem, sided at Head	3
B—Sternpost, sided at Tuck	3¼
C—Keel, Minimum Thickness	3
Sectional Area	48
D—Frames, Sectional Area—Heels	2¾
Bilge	2¼
Heads	1¼
Spacing (Maximum)	10
E—Floors, Sectional Area	5
Spacing (Maximum)	18
F—Shelf or Clamp, Sectional Area—Middle	4½
Ends	3
G—Bilge Stringers, Sectional Area—Middle	3
Ends	2
H—Deck Beams, Sectional Area—Main	4½
Auxiliary	2¾
Half-Beams	1¾
Spacing (Maximum)	10
I—Planking, to finish full	⅞
Hoodends (above L. W. L.)	¾
J—*Deck and Cabin Trunk Top to finish full	⅞

*A reduction of 1/8 inch allowed on planking if canvas covered.

GENERAL SPECIFICATIONS AND EXPLANATIONS OF SCANTLING TABLE

A—Stem. The minimum siding (thickness) measured at the rabbet at highest point on stemhead, no decrease of siding allowed.

B—Sternpost. Minimum siding at tuck (the crossing of the rabbet). The siding may diminish from tuck to heel. The rudder stock, if of wood, to be equal in diameter to the siding of post.

C—Keel. Minimum depth allowed for a length of one-third of the L. W. L. length beyond which may be tapered to one-third less at stem and stern. The minimum of sectional area, including keelson and deadwood (breadth multiplied by depth in the middle of keel), may be made up, if desired, by a deeper keel. The breadth of keel will taper from point of greatest section to siding of stem and sternpost.

D—Frames. The sizes laid down in the table show the minimum sectional area of frames (the siding multiplied by the moulding) at three points —the heel of frame where it is boxed into the keel, the middle of frame about the flat of the floor, and turn of bilge, and the head, at plankshеer. The sectional area is that of a single frame for a uniform spacing between centres not exceeding that given in the table. This required area may be made up of smaller frames spaced closer together, or larger frames farther apart; or of combinations of large and small frames with appropriate spacings. This minimum sectional area shall apply to a space of at least two-thirds of the L. W. L. length in the center of the vessel; forward and aft of this, the sectional area may be reduced 20 per cent.

Two adjoining frames abreast the mast, and one at each runner-plate must be increased in size in proportion as they are cut by the chainplate fastenings.

Where bent frames only are used, of one size throughout, they shall be not less than area required for bilge. Where bent frames are used in combination with sawn, the bent frames may be of uniform scantling from end to end; but the sawn frames must be large enough to make up the required

average sectional area at the heels where they are cut by the fastenings of floors.

Spacing of Frames. The maximum spacing of frames as given in the table is based not on the size of frames, this being variable, but on the thickness of planking allowed for the class; being the greatest spacing that will insure a tight seam with the usual caulking for the minimum thickness of planking allowed.

E—Floors. There shall be at least six strong floors in the center of the vessel in way of metal keel, and two at each mast step.

F—Shelf or Clamp. The minimum sectional area given for the middle shall cover a length of at least one-half of the shelf (or clamp) and in the middle, a taper being allowed to the size given at each end. The ends of deck beams may be jogged into top of shelf a distance not exceeding one-third of their own depth. If a beam clamp is used, fitted close up to the plankshеer, the beams being thus jogged in for their full depth, the sectional area shall be increased in proportion.

G—Bilge Stringer. The minimum sectional area at middle shall cover at least one-half the full length of bilge stringer, with taper allowed at the ends. At least one bilge stringer must be run on each side, at about the lower part of turn of bilge. In yachts whose extreme beam exceeds twice the greatest depth from underside of deck to upper side of keel, two such stringers on each side must always be fitted.

H—Deck Beams. The minimum sectional area of deck beams shall cover at least the middle third of the beam, allowing a taper, in the moulding, to each end. There must be one main beam at the bitts, two at the mast (partner beams), one at fore-end of cabin trunk, one at after end, two at each skylight, hatch and companion in flush-deck vessels, and one at transom. The auxiliary beams and the half beams abreast of house, skylights, etc., may be of the smaller areas given for each. The beams may be spaced at will, provided the maximum distance between centers does not exceed that given in the table which is based upon the thickness of deck planking. The beams should be jogged into the shelf or clamp a distance equal to one-third of the moulded depth of beams at end.

I—Planking. The dimensions given in the table are the minimum thicknesses allowed, after final planing, over a distance in the middle of the vessel equal to at least one-half of the over-all length.

J—Decking. The thickness given for the deck plank applies also to the cabin trunk top, plankshеer (covering board), and the partner planks. The ends of the deck plank should be well supported, and in no case should they be wrought to a shim edge, which will crush down in caulking.

The keel, stem, sternpost, deadwood, frames, floors, cabin trunk beams and main deck beams shall be of oak, and solid.

NOTE—Builders' Certificate of scantling required for new yachts.

SAIL AREA

14. The sail area, based on maximum class length and actual L. W. L. beam, shall not exceed the number of square feet specified in accompanying table and shall be measured as follows:

15. The actual area of the sails allowed in Section 27, except balloon jib and spinnaker, shall be measured by the official measurer. The number of square feet in each sail shall be stamped on each sail by the official Measurer in full round black figures not less than three inches high. This number shall be known as the official number of the sail and shall always be visible. Any yacht using a sail not bearing the official number shall be disqualified, any rules to the contrary notwithstanding.

16. In no case shall the area of the mainsail and main topsail exceed 80 per cent of the entire area allowed.

17. The official Measurer shall be provided with the correct sail plan of

any boat to be measured and shall cause distinguishing marks to be placed on the spars as follows: On the mast at the tack and at the throat of the mainsail; on the boom at the clew of the mainsail and on the gaff at the peak of the mainsail. There shall be only one mark at each point. These marks shall be black bands not less than one inch wide painted around the spars in a manner satisfactory to the Measurer. The inner edges of the bands shall mark the limits to which the sails may stretch without exceeding the sail area allowed. No part of any sail shall extend beyond these marks or beyond the point limited for spinnaker and jib halyard blocks in Section 21.

18. No yacht when close hauled shall carry any jib other than the working jibs for which she has been measured.

19. The distance from the center of the mast to the outer end of the spinnaker boom when the latter is at right angle to the fore and aft center line of the yacht, multiplied by the height of the spinnaker halyard block above the deck, shall not exceed 550 per cent of the actual area of the working headsails.

20. The distance from the forward end of the bowsprit to the center of the mast multiplied by the height of the highest jib halyard block above the deck shall not exceed 300 per cent of the actual area of the working headsails.

21. Spinnakers and all headsails the actual area of which is not measured shall be triangular. No spinnaker shall extend above the spinnaker halyard block, or beyond the end of the spinnaker boom. No jib shall extend above the highest jib halyard block, or beyond the end of the bowsprit.

BALLAST

22. The weight of ballast, based on maximum class length and actual L. W. L. beam, shall be not less than the number of pounds specified in accompanying table and must be below the floor of cabin or cockpit.

FIXTURES

23. The cabin shall contain two permanent berths or transoms, extending fore and aft, one on each side, which shall be not less than 6 feet and 6 inches in length and not less than 2 feet in width.

FITTINGS

24. Each yacht sailing in races for this class shall have on board the following equipment: One anchor of not less than 35 lbs. in weight, a suitable anchor cable not less than 25 fathoms in length, a serviceable and suitable bilge pump, at least five life-preservers, a compass, a riding-light, a fog-horn, a bucket and a boat-hook.

EXISTING YACHTS

25. Any yacht which existed on any one of the Great Lakes on November 14, 1903, which measures not to exceed 21 feet 6 inches on the load-water-line and conforms to these restrictions except as to over-all and load-water-line length, may sail in this class.

CREW

26. Yachts contesting in races for this class shall carry a crew of not less than three or more than five men. One member of a yacht's crew may be a professional; but the helmsman must be a Corinthian yachtsman and a member in good standing of some recognized yacht club on the Great Lakes.

SAILS

27. Yachts in this class may carry the following sails: Mainsail, stay-sail, jib, jib-topsail and main-topsail, all of which shall be measured by the

Measurer and included in the allotted area under the table in Section 28. Balloon-jibs and spinnakers may also be carried, but are not included in such allotted sail area.

28. Table of Maximum Sail and Minimum Ballast.

BEAM	SAIL	BALLAST	BEAM	SAIL	BALLAST
Ft. In.	Sq. Ft.	Pounds	Ft. In.	Sq. Ft.	Pounds
6	578	3616	9	830	1968
1	585	3573	1	837	1925
2	592	3530	2	844	1882
3	599	3487	3	851	1839
4	606	3444	4	858	1796
5	613	3401	5	865	1753
6	620	3358	6	872	1710
7	627	3315	7	879	1667
8	634	3272	8	886	1624
9	641	3129	9	893	1581
10	648	3086	10	900	1538
11	655	3043	11	907	1495
7	662	3000	10	914	1452
1	669	2957	1	921	1409
2	676	2914	2	928	1366
3	683	2871	3	935	1323
4	690	2828	4	942	1280
5	697	2785	5	949	1237
6	704	2742			
7	711	2699			
8	718	2656			
9	725	2613			
10	732	2570			
11	739	2527			
8	746	2484			
1	753	2441			
2	760	2398			
3	767	2355			
4	774	2312			
5	781	2269			
6	788	2226			
7	795	2183			
8	802	2140			
9	809	2097			
10	816	2054			
11	823	2011			

LIMITS

CONDITIONS GOVERNING THE INTER-LAKE CORINTHIAN TROPHY FOR CLASS R

1. Designation

The name of this trophy shall be The Inter-Lake Class R Corinthian Trophy.

2. Trophy

The Trophy shall be a solid silver cup of original suitable design, costing not less than $200. On its quadrant faces there shall be four suitable shields, within one of which in each year shall be engraved in order, the names of the yachts, the skippers, and of the Clubs, of the yachts winning first, second and third places, together with the number of points of each such yacht in each race; and her total number of points for the series; and the place and time of each of the first four series of races. Such three yachts shall be declared the Successful Contestants of that year.

Surmounting the four shields shall be an appropriate encircling space wherein shall be engraved the like particulars of the fifth, or final, series, and the final score of every final contestant.

3. Eligibility

This trophy shall be open to competition by proper entry from any Corinthian member in good standing in a club holding membership in the I.-L. Y. A.

Yachts eligible to compete for this trophy shall be only such as shall conform to the restrictions of Class R of the Universal Rule as adopted and amended by the I.-L. Y. A. and in force prior to the 31st of May, 1911.

4. Contests

The first series of contests for the trophy shall be an event in the Regatta of the I.-L. Y. A. of 1911; provided that not less than three yachts are duly entered and start in the series, otherwise in the first year thereafter, when there may be such number of entrants and starters.

The second, third and fourth series shall be each an event in the I.-L. Y. A. Regattas of the first, second and third years following the first series.

The fifth and final series shall be an event in the I.-L. Y. A. Regatta of the fourth year, following the first series, and the contestants therein shall be limited to the Successful Contestants in the previous four series.

5. Custody

Upon the conclusion of each series the trophy shall be delivered into the custody, as Custodian and Trustee, of the Club from which is entered the successful contestant having the highest score in the series. Such Club so receiving the trophy in trust shall thereupon deliver to the Commodore of the I.-L. Y. A. a bond issued by a surety company authorized to do business in the State wherein the said Club is located, in the penal sum of $500, conditional upon its due return to said Commodore or his successor in office. Such return shall be made not later than the opening of the next succeeding I.-L. Y. A. Annual Regatta.

In the event that no challenger appears to contest the races of the series in any of the second, third or fourth years, the custody of the trophy shall again vest in the Custodian from the previous year, under like conditions, and the name of such Custodian shall be engraved on the shield for such year or years, under the words, "Won by Default."

Should any such club fail or be dissolved while acting as Custodian and Trustee, or should any such club desire to discontinue its Trusteeship, the Trophy shall at once be returned to the Commodore of the I.-L. Y. A., who

shall hold it as Trustee until the succeeding I.-L. Y. A. Annual Regatta. Should any such club decline to accept the said Trusteeship, the Trophy shall be delivered to the Commodore of the I.-L. Y. A., and his successor, in trust for the purposes hereof.

6. Prizes

The successful contestant having the highest number of points of the series in each of the first four years, excluding any year of default, shall be awarded a solid silver souvenir replica of the Trophy of a value of not less than $25, and a cash prize. Other contributed prizes may be awarded. Each such award shall be made annually at the conclusion of the Annual Regatta.

7. Races

There shall be three races of nine miles each in each year and which shall constitute a series. The first and last such race shall be triangular—three miles to the leg, and the yachts shall be sent around the triangle each time in such manner as in the judgment of the Regatta Committee will require the nearest approach to windward work on at least one leg. The second race shall be to windward and leeward, or leeward and windward, four and one-half miles to each leg. The time limit for each race shall be two and one-half (2½) hours. No race shall be postponed for lack of wind until thirty minutes after the starting signal thereof.

All races in every series shall be held on the open water and the course shall be so laid out as to provide not less than 12 feet of water at every point as shown by the Government charts for this current year.

That in all matters pertaining to the supervision of races and the award and amount of prizes, authority shall be vested with the Regatta Committee of the Association; said Regatta Committee to be guided by the intent of the Rules Committee report.

Triangular courses shall have the starting and finishing lines marked by a suitable flag at each end, and the starting and finishing lines shall be at right angles to the first and last leg, respectively, and at an angle of 120° to each other.

There shall be no person or persons other than her Corinthian crew on any yacht from the time of the firing of the preparatory gun to the finish of any race. The helmsman of each yacht shall have been a Corinthian member in good standing of the club from which such yacht is entered for at least three months prior to the date of the first race of any series.

The Regatta Committee of the I.-L. Y. A. are hereby invested with discretionary power upon unanimous vote and the approval of the Commodore, to nullify the entry of any yacht after a start, or to disqualify any yacht when they shall be satisfied that its start was not made in good faith to sail the race to win; or for the violation of any of the provisions hereof.

No score shall be awarded such yacht for such series but the series shall be used in ascertaining her divisor. Such action shall not affect such yacht for any other series.

If any yacht finishes within the time limit, the times of the others shall be taken and percentages awarded.

The scoring shall be on the percentage system in effect for the Country Club Competitive Cup for the special 21-foot restricted Cabin Class. The score for each race shall be computed upon the number of yachts starting in that race.

8. Award

At the conclusion of the final series, the sum total of all the points in all the series of each contestant in the final series shall be termed the Dividend for that Contestant and shall be divided by the number of series in which such yacht was a successful Contestant, which number shall be termed the Divisor; the result so found shall be termed the Average for each

yacht. To said average shall be added 5% of the said Dividend, and the resultant sum shall be the Final Score.

The yacht having the highest Final Score so found, shall thereby become the absolute owner of the Trophy, which shall thereupon be delivered to her designated owner.

In the event of a tie for first place in any of the first four series a sailoff shall determine the prize winner, and in the event that four or more contestants are tied for first place, the first, second and third boats finishing the sailoff shall be declared the successful contestants in that series. Ties for other than first place shall be determined by a similar procedure. Ties in the fifth series shall not be subject to sailoff.

9. Authority

The Racing Rules of the I.-L. Y. A., subject to the limitations constituting Clause 3 hereof, shall govern all races for this Trophy.

The defacto Regatta Committee of the I.-L. Y. A. are hereby invested with absolute supervisory powers over the Trophy from its inception to its final award. They shall act as judges of every race. A majority vote of the Committee shall decide all questions, subject only to appropriate appeal from any technical decision to the Council of the Y. R. U., and as provided in Clause 7. The member or members of the Committee present acting with the Commodore as a member ex officio, shall have power to appoint a substitute for any absent member, to act in any race or for any series, but such substitute appointment shall cease upon the conclusion of the business of such series.

EXAMPLE OF A POSSIBLE CLASS R SERIES, WITH SCORE DETERMINED BY LOT

First Series

	A	B	C	D
A—	75			
	75			
	25			175
B—	100			
	25			
	100			225
C—	25			
	50			
	75			150
D—	50			
	100			
	50			200

Second Series

	A	B	C	D	E	F	G
A—	100						
		42.9					
		71.4					214.3
B—	85.7						
	14.3						
	85.7						185.7
C—	71.4						
	57.1						
	42.9						171.4
D—	28.6						
	100						
	57.1						185.7
E—	57.1						
	85.7						
	14.3						157.1
F—	42.9						
	28.6						
	100						171.5
G—	14.3						
	71.4						
	28.6						
	28.6						114.3

Third Series

	B	C	D	E	G
B—	100				
		20			
		40			160
C—	40				
	40				
	80				160
D—	60				
	80				
	100				240
E—	80				
	100				
	60				240
G—	20				
	60				
	20				100

Fourth Series

	A	B	C	F	G	H	J	K
A—	100							
		25						
		50				175		
B—	75							
	37.5							
	100					212.5		
C—	87.5							
	62.5							
	37.5					187.5		
F—	62.5							
	75							
	25					162.5		
G—	12.5							
	87.5							
	12.5					112.5		
H—	50							
	50							
	62.5					162.5		
J—	37.5							
	100							
	75					212.5		
K—	25							
	12.5							
	78.5					125		

Final Series

Previous Successful Contestants		
A— 50		
40		
50		140
B— 33.3		
20		
83.3		136.6
C— 66.7		
60		
66.7		193.4
D— 16.7		
80		
33.3		130
E—100		
0		
100		200
J— 83.3		
100		
16.7		200

Cash Prize and Replica to B.

Cash Prize and Replica to A.

B and C sailoff: C wins.
D and E sailoff; D wins.
Cash Prize and Replica to D.

B and J sailoff; J wins
Cash Prize and Replica to J.

E does not enter the 2nd race, and score for it computed on basis of 5 yachts in race.

DIVIDEND

A—1	—	175	B—1	—	225
2	—	214.3	2	—	185.7
3	—	____	3	—	____
4	—	____	4	—	212.5
5	—	140	5	—	136.6
Divisor	—	3–529.3	Divisor	—	4–759.8
Average	—	176.43	Average	—	189.95
529.3 x 5%	—	26.465	759.8 x 5%	—	37.99
Final Score	—	202.895	Final Score	—	227.94
D—1	—	200	E—1	—	____
2	—	185.7	2	—	240
3	—	240	3	—	240
4	—	____	4	—	____
5	—	130	5	—	200
Divisor	—	4–755.7	Divisor	—	2–440
Average	—	188.925	Average	—	220
755.7 x 5%	—	37.785	440 x 5%	—	22
Final Score	—	226.710	Final Score	—	242

E WINS TROPHY

C—1	—	____			
2	—	____			
3	—	160			
4	—	187.5			
5	—	193.4			
Divisor	—	3–540.9			
Average	—	180.3			
540.9 x 5%	—	27.045			
Final Score	—	207.345			
J—1	—	____			
2	—	____			
3	—	212.5			
4	—	200			
5	—	____			
Divisor	—	2–412.5			
Average	—	206.25			
412.5 x 5%	—	20.65			
Final Score	—	226.875			

RULES AND RESTRICTIONS OF THE 18-FOOT KNOCKABOUT CLASS—(CLASS H)

Definition

Yachts in this class shall be seaworthy cabin boats and no catamaran, double-hull or other unusual type of boat, or one having square sides or square snub-nosed bow, or one fitted with bilge-boards, double rudders or similar contrivances shall be allowed.

Such boats shall have ballast on keel or fixed below floor and shall be rigged simply with mainsail, jib, balloon or reaching jib and spinnaker.

Any evasion of the spirit as well as the letter of these rules shall disqualify a boat from racing in this class.

Length

The length on the L. W. L. with full equipment on board shall not exceed 18 feet 6 inches or be less than 17 feet.

The over-all length shall not exceed 31 feet and neither forward nor aft overhang shall exceed 65 per cent of the total overhang.

Beam

The beam at the L. W. L. in keel boats shall be at least 6 feet 1 inch and in center-board boats at least 6 feet 6 inches. The extreme beam at a point half way between the forward end of the L. W. L. and the extreme bow shall not exceed 40 per cent of the greatest W. L. beam. The girth of hull at said point shall not exceed the number of inches represented by the sum of beam, plus the depth of the hull, plus 3, measured at the same point. The girth, depth and beam shall be measured to a point 22 inches above the L. W. L. The freeboard at this point shall be not less than 22 inches.

Freeboard

The minimum freeboard shall be at least 17 inches. The depth of hull, the girth and the freeboard shall be measured from the top-side of the covering board.

Displacement and Draft

For centerboard boats the draft shall be not less than 2 feet 6 inches for at least four feet length of keel.

All boats shall weigh when rigged and equipped in accordance with these rules, not less than 4,000 lbs., exclusive of inside ballast. Not more than 50 per cent of the weight of a boat shall be in ballast. It shall be the duty of the Measurer to see that nothing is on board when the boat is weighed, except what these rules prescribe and that the boat is in every way in her normal condition.

Cabin and Cockpit

The cabin house shall have a length of at least 6 feet and a width equal to 60 per cent of the greatest beam on deck; the sides and ends shall be vertical, have a height at the forward end of at least 4 inches and at the after sides of at least 6 inches above the deck. The top, sides and ends of cabin trunk must be permanently constructed and closed in with wood (port lights must be watertight) and with a companionway and door; the sill of the latter to be at least 3 inches above the cockpit floor. The cockpit floor shall be watertight and above the L. W. L. with scuppers draining outward and its sides and ends shall be bulkheaded and watertight.

No metal centerboard over 5-16 inch thick shall be allowed and wooden boards shall not be ballasted more than enough to overcome flotation.

Sails

The sail area shall not be over 450 square feet and not over 360 square feet of actual area shall be in the mainsail. The Measurer shall have a correct

sail plan of any boat to be measured and shall cause distinguishing marks to be placed on the spars, as follows:

On the mast at the tack and at the throat of the mainsail, on the boom at the clew of the mainsail, on the gaff at the peak of the mainsail. No part of the mainsail shall be allowed to extend beyond these marks. The marks shall be black bands painted around the spars. The inner edge of the bands shall be the limit of the sail.

The actual area of the jib shall be measured.

The spinnaker shall be triangular. The spinnaker boom shall not exceed 12 feet in length from mast to end, and this rule shall apply to all new and existing boats. No battens over 26 inches in length to be used in sails. Spars shall be solid and round and sails made of cotton only. Amendment December 14, 1907, permitting yachts to carry hollow spars.

Equipment

Equipment to include anchor of not less than 35 lbs., not less than 150 feet of 1⅛ inch rope; also bucket, pump, compass, foghorn, boat hook, lantern and four life preservers.

Crew

Crew is limited to four persons and they shall all be Corinthians. The helmsman shall be a member of some organized Yacht Club.

Conditions

There shall be no time allowance between boats of this class. No boat shall be painted or hauled out oftener than once a month, except in order to repair accidental damage.

Existing Yachts

Yachts built under and conforming to the restrictions of 1904 and yachts built under and conforming to the restrictions of the 18-foot knockabout class of the Yacht Racing Association of Massachusetts up to October 1, 1906, if no changes have been made, shall be admitted to this class, provided that, in the case of open boats, they shall be equipped with permanent cabin trunk at least 5 feet long, constructed substantially accordingly to these rules for height and scantlings and conforming to the cockpit requirements.

TABLE OF SCANTLING

Stem, oak, sided at head inches	2½ in.
Sternpost, oak, sided at truck	2½ in.
Keel, oak or rock elm, minimum thickness	2 in.
Sectional area, square inches	10 in.
Frames, oak or rock elm, sectional area, heels	1¼ in.
Frames, oak or rock elm, sectional area, bilge	1 in.
Frames, oak or rock elm, sectional area, heads	¾ in.
Spacing	9 in.
Floors, wood, sectional area sq. in	3 in.
Shelf or clamps, oak, rock elm or hard pine	2½ in.
Sectional area, square inch, middle	2½ in.
Sectional area, square inch, ends	1½ in.
Bilgestringer, oak, rock elm or hard pine, sectional area, square inch, middle	2½ in.
Deck, beams, main, sectional area, oak	2 in.
Auxiliary	1 in.
Half beams	⅞ in.
Spacing	9 in.
Planking to finish full, inches	¾ in.
Hood ends above L. W. L.	⅝ in.
Deck to finish full	⅝ in.
Keel Bolts, spaced 12 inches	½ in.
Metal Centerboard, thick	5–16 in.

RULES AND RESTRICTIONS FOR THE 16-FOOT CLASS—(CLASS J)

I. Y. R. U. Rules

Except as specified in these rules, the restrictions, scantling, scantling materials, ballast and equipment of all yachts shall be in accordance with the rules of the Yacht Racing Union of the Great Lakes.

II. Type

Yachts in these classes are intended to be of the ordinary type, and any evasion in the shape of catamaran, double hull or other unusual type, or any yacht fitted with bilge fins, bilge boards, double rudder or other similar contrivances, will not be accepted.

III. Bow

A square or snub-nosed bow shall not be allowed. The beam measured on deck at a point equi-distant from the water-line forward and the extreme bow shall not exceed 45 per cent of the greatest load water-line beam, and the deck line shall run at an angle with the center line not greater than 35 degrees. Any evasion of the spirit as well as the letter of this rule shall disqualify a yacht.

IV. Overhang

The total overhang shall not exceed 70 per cent of the class load water-line length, and neither the forward nor the aft overhang shall exceed 65 per cent of the total overhang.

V. Cabin

Cabin yachts shall have watertight self-bailing cockpits. For open yachts of the 16-foot class, the cockpit shall have a maximum length of 8 feet, and a maximum width between coamings of 60 per cent of the extreme beam. The coamings shall have a minimum height of 3 inches. Open yachts shall be fitted with air tanks, or watertight bulkheads sufficient to float fixed ballast.

VI. Sails and Spars

Yachts in these classes may be sloop or yawl rigged. For sloops the sails shall be restricted to mainsail, jib, spinnaker, and balloon jib; for yawls to mainsail, jigger, jib, spinnaker and balloon jib. The total area of the sails abaft the main mast shall not exceed 75 per cent of the total allowed sail area. Cotton sails shall be used. Yachts in this class shall have solid spars. Amendment December 14, 1907, permitting yachts to carry hollow spars.

The maximum length of the spinnaker boom shall be 75 per cent of the length of the main boom for sloops and 100 per cent of the main boom for yawls. The spinnaker halyard block shall not be above the jib halyard block.

VII. Measurements

Measurements for load water-line length and freeboard shall be made with all racing equipment on board and without crew.

The immersed vertical cross-section shall be determined by measuring the area bounded by the outside of the hull and included between the load water-line plane and a line parallel to it and intersecting the keel one inch below the lowest point of the interior of the hull at the measured section.

The owner of each yacht shall file with the Secretary of the Association a copy of the designer's draft of the largest immersed vertical cross-section, certified by designer and builder. The builder shall mark, by affixing round-headed brass screws on the outside of the hull, the upper and lower boundaries of the largest immersed vertical cross-section. Access to the bottom of the

interior of the hull at the measured section shall be provided by hatch or otherwise, unobstructed by ballast, frames, floors or other timbers.

In computing the sail area the forward triangle, exclusive of the spinnaker boom, shall be measured.

VIII. Crews

The maximum number of persons in the crew of each boat shall be limited to three persons. Amendment adopted December 14, 1907. Crew is limited to three persons and they shall all be Corinthians. The helmsman shall be a member of some organized yacht club.

Yachts eligible to race under the rules of the 16-foot class adopted in 1904, and yachts of the 15-foot class of the Atlantic coast and the 16-foot class of the Lake Sailing Skiff Association of Lake Ontario may race in the 16-foot class.

IX. Pot Lead

The Inter-Lake Yachting Association adopted a resolution on December 3, 1910, that no pot lead be allowed on 16-foot class.

Table of Restrictions

	16-ft. class
Maximum load water-line	16 ft.
Minimum area of largest immersed vertical cross-section	4.50 sq. ft.
Minimum free board. K.	16 in.
Minimum free board. C. B.	15 in.
Maximum sail area, measuring fore triangle and excluding spinnaker	400 sq. ft.

Stem, oak, sided at head, inches	2¼ in.
Sternpost, oak, sided at truck	2¼ in.
Keel, oak or rock elm, minimum thickness	1¾ in.
Sectional area, square inches	9 in.
Frames, oak or rock elm, sectional area, heels	1 in.
square inches bilge	⅞ in.
heads	¾ in.
Spacing	8 in.
Floors, wood, sectional area, sq. in.	2½ in.
Shelf or clamps, oak, rock elm or hard middle	2¼ in.
pine, sectional area, sq. in. ends	1½ in.
Bilgestringer, oak, rock elm, or hard pine, sectional area, sq. in. middle	2½ in.
Deck, beams, main, sectional area, oak	1 in.
Auxiliary	¾ in.
Half beams	¾ in.
Spacing	8 in.
Planking to finish full inches	⅝ in.
Hood ends above L. W. L.	½ in.
Deck to finish full	⅝ in.
Keel bolts, spaced 12 inches	⅜ in.
Metal centerboard, thick	¼ in.

RULES AND RESTRICTIONS FOR 14-FOOT CLASS—(CLASS L)

Boats in this class are intended to be of the ordinary type, and any invasion in the shape of catamaran, double hull, square or snub-nosed bow, shall not be accepted. The total overhang shall not exceed 60 per cent of the class load water-line length, and neither the forward nor the aft overhang shall exceed 65 per cent of the total overhang.

Yachts in these classes shall be sloop-rigged. The sails shall be restricted to mainsail, jib, spinnaker, and balloon jib. The total area of the sails, abaft the main mast, shall not exceed 80 per cent of the total allowed sail area. Cotton sails shall be used. The actual area of the jib shall be measured. Yachts in this class shall have solid spars.

The maximum length of the spinnaker boom shall be 75 per cent of the length of the main boom. The spinnaker halyard block shall not be above the jib halyard block.

Measurements for load and water line length and free-board shall be made with all racing equipment on board and without crew.

Ballasted boats shall be fitted with air tanks or water-tight bulkheads sufficient to float fixed ballast. Metal center-boards shall not be considered fixed ballast. The maximum number of persons in the crew of each boat shall be limited to three persons. No pot lead allowed.

All boats sailing in the 14-foot class prior to the adoption of this rule, February 18, 1911, are allowed to race under these restrictions. Sail area limited to 300 square feet. These rules and restrictions to remain in force for five years from December 2, 1911.

Table of Restrictions

Maximum load water-line	14 ft.
Minimum free-board	12 in.
Maximum sail area, excluding spinnaker	275 sq. ft.
Minimum beam	5 ft. 9 in.

Table of Scantlings

Stem, oak, sided at head	2 in.
Sternpost, oak, sided at truck	2 in.
Sectional area, keel	8 sq. in.
Frames, sectional area	¾ sq. in.
Frames, spacing	8 in.
Floors, wood, sectional area	1½ sq. in.
Shelf or clamps, oak or pine, sectional area	2 sq. in.
Bilgestringer, oak or pine, sectional area	2 sq. in.
Deck beams, main, sectional area	1½ sq. in.
Deck beams, auxiliary, sectional area	1 sq. in.
Deck beams, spacing, sectional area	8 in.
Planking, to finish full	⅝ in.
Deck, to finish full	½ in.
Metal centerboard, thick (minimum)	3–16 in.

RULES AND RESTRICTIONS FOR THE 15-FOOT CAT BOAT CLASS—(CLASS K)

I. Type

Boats in this class are intended to be of the ordinary type, and any invasion in the shape of catamaran, double hull, square or snub-nosed bow, or other unusual type, or any boat fitted with bilge fins, bilge boards, double rudders, or other similar contrivances, shall not be accepted. Rudders must be hung on a skeg or dead wood. No pot lead allowed.

II. Rating Measurement

Boats shall not exceed 15 feet rating measurement, which shall be obtained as follows:

$$\frac{\text{Length Over-all} + \text{Extreme Breadth}}{2} = \text{Rating Length.}$$

Provided that the length over-all shall not exceed 22 feet, and the minimum free board shall be 14 inches.

III. Sails and Spars

Boats in this class shall be single cat rigged, and there shall be no other sails allowed. Cotton sails, manilla or cotton halyards and solid spars only shall be used. The area of the sail shall not exceed 18 square feet for each foot of Rating Length.

IV. Table of Minimum Scantling

Stem, oak, sided at head	2¼	in.
Stern board, oak	1¼	in.
Keel, oak, sectional area	12	sq. in.
Frames, oak, sectional area, sharpie	2½	sq. in.
Frames, oak, sectional area, round bilge	1½	sq. in.
Frame spacing, centers	10	in.
Bilge stringer or chime piece, oak; sectional area of each	2	sq. in.
Floors, oak, sectional area	2	sq. in.
Deck, beams, oak, sectional area	1¼	sq. in.
Deck beam spacing, centers	10	in.
Planking, to finish full	¾	in.
Decking, to finish full	¾	in.

V. Crews

The number of persons in the crew of each boat shall be two, who must be members of the entering club.

YACHT RACING UNION RULES AND TABLE OF TIME ALLOWANCE

RULE I

Measurement for Classification and Time Allowance

Yachts shall be rated for classification and time allowance according to the following formula:

$$\text{Measurement} = 0.18\,\frac{\text{L.}\sqrt{\text{S. A.}}}{\sqrt[3]{\text{D.}}}$$

Eighteen per cent of the product of length multiplied by the square root of sail area divided by the cube root of displacement.

The result is the measurement and rating for classification and time allowance of sloops. Yawls shall be rated at 93 per cent, and schooners at 90 per cent of their measurement as determined from the above formula.

Measurements shall be made in accordance with the provisions of this rule.

Length

Before being measured, a yacht must have a "load water-line plane" established and permanently marked at bow and stern and on each side of the yacht near the point of greatest breadth. This plane shall be, as nearly as practicable, the plane of flotation when in racing trim. Each side mark shall consist of two equal equilateral triangles, whose apices touch at the established plane of flotation, and whose bases are parallel to such plane. The total vertical height of each side mark shall be one two-hundredths ($\frac{2}{100}$) of the load water-line length. The bow and stern marks shall be four (4) inches long and two (2) inches in vertical height, so placed that the bottom of the marks shall indicate the position of the established plane.

When in trim, under cruising or racing restrictions, the vessel floating on an even keel in fresh water of usual density, both side marks must be cut by the surface of the water.

This "load water-line plane" is to be the plane from which all calculations are made, including displacement, quarter-beam length, and draft. When once established it cannot be changed before the beginning of the next racing

season, unless the yacht has undergone extensive alterations in hull. Notice of such alterations must be filed with the Measurer at least two weeks prior to the day of any race in which the yacht may start.

"Load water-line length" (L. W.-L.) is the distance in a straight line between the points farthest forward and farthest aft in the established plane and likewise "load water-line breadth" is the extreme breadth in the established plane.

Quarter-beam length (Q.-B. L.) shall be measured in a line parallel with the middle fore and aft vertical plane, at a distance from it equal to one-quarter of the load water-line breadth and one-tenth of this breadth above the load water-line plane.

The length used in calculating the measurement (L. in formula) shall be the "load water-line length" plus one-half the excess of quarter-beam length over the percentage of the load water-line length given by the formula,

$$\text{Percentage:} = 100 - \sqrt{\text{L. W.-L.}}$$

provided, however, that in all boats over one hunderd (100) feet L. W.-L. the percentage shall be ninety (90).

Any concavity at the plane of measurement of the quarter-beam length, in either the quarter-beam buttock or tenth-beam water-line, shall be bridged by a straight line of a length equal to one-third (1/3) of the greatest load water-line beam. The center of such straight line, to which the quarter-beam length shall be measured, shall be placed horizontally opposite the point of measurement.

Any local concave jog or notch (curved or angular) at the plane of measurement of either end of the load water-line length, shall be bridged by a straight line and the L. W.-L. taken to the intersection of such lines with the established load water-line plane. The stem or stern profile lines, where they cross the load water-line plane, may be fair easy curves; but any concavity in the stem line shall be bridged by a straight line equal to one-third (1/3) of the greatest load water-line beam, placed equally above and below the load water-line plane. The load water-line (L. W.-L.) shall be measured to the intersection of this line with the established load water-line plane.

Sail Area

The Measurer shall make the following measurements, calculate the sail area therefrom in accordance with the following formula, and the square root of this area shall be the $\sqrt{\text{S.A.}}$ in the rating formula.

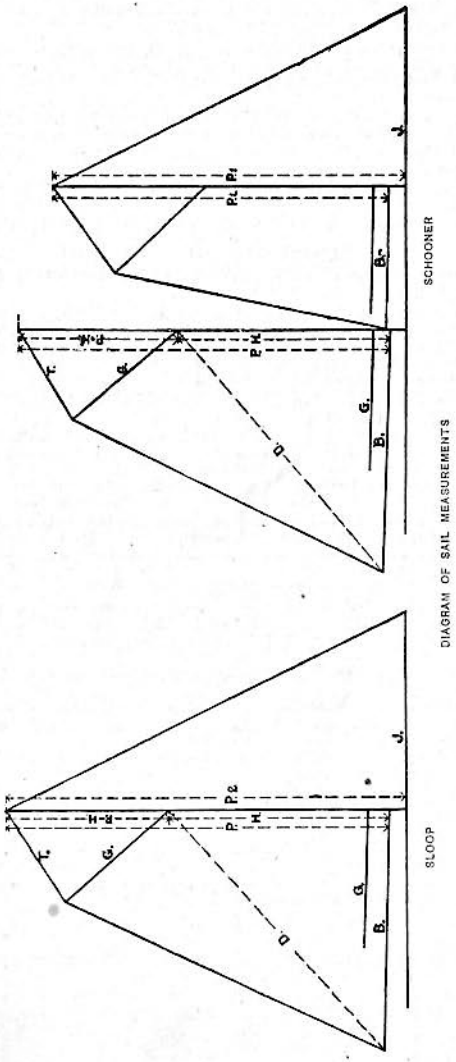

DIAGRAM OF SAIL MEASUREMENTS

Mainsail and Topsail of Sloops, Schooners, and Yawls, and Mizzen and Topsail of Three-masted Schooners

B. Length of boom measured from after-side of mast to outboard end.

G. Length of gaff, when lying on top of the boom, measured from the after-side of mast to outboard end.

P. A perpendicular to be measured along the after-side of the mast from the top of the highest sheave in the mast or topmast, or from the juncture of the mast or topmast with the eyebolt or pennant of the highest halyard block, to the upper side of the boom when touching the upper part of the goose-neck.

In yachts which carry the upper halyard block on a pennant, the upper point of measurement shall be the point at which the pennant is fastened to the mast.

H. A perpendicular to be measured along the after-side of the mast from the upper side of the boom, when touching the upper part of the goose-neck, to the lower edge of a black band, at least one inch in width, upon the mast, above which mark the throat cringle of the mainsail shall not be hoisted.

D. The diagonal shall be calculated as follows:

$$D = 0.96 \sqrt{B^2 + H^2}$$

T. The length of the leech of the working topsail or jib-header to be measured from the sail when dry and stretched hard taut.

The area of the mainsail in sloops, schooners, and yawls, and of the mizzen in three-masted schooners and in yawls shall be obtained from the above measurements by multiplying B by H, and G by D, adding the two products together, and dividing the result by 2.

$$\text{Formula: } \frac{B \times H + G \times D}{2}$$

The area of the working topsail or jib-header shall be calculated from area of a triangle whose three sides are G, P—H, and T. In pole-masted vessels carrying sprit topsails, the length from the highest point of the sprit to the upper point of measurement of H shall be used instead of P — H in computing the area of the topsail.

Foresails of Two-masted Schooners, and Foresails and Mainsails of Three-masted Schooners

B_1. The distance to be measured between the fore-side of mainmast and after-side of foremast.

P_1. A perpendicular to be measured along the after-side of the foremast from the top of the highest sheave in the mast or topmast, or from the juncture of the mast or topmast with the eyebolt or pennant of the highest halyard block, to the upper side of the boom, when resting against the upper part of the goose-neck.

The area of the foresail and topsail of schooners shall be obtained from these measurements by multiplying B_1 by P_1 and taking 80 per cent of the product.

$$\text{Formula: } 0.80 \ (B_1 \times P_1).$$

The area of the mainsail and topsail in three-masted schooners shall be obtained in a similar manner from like measurements made on the mainmast and between the main and mizzen masts.

Headsails

J. The base J to be measured from the foreside of mast (foremast in the case of a schooner) to where the line of the luff of the foremost headsail when extended cuts the bowsprit, other spar, hull, etc., as the case may be.

P_2. A perpendicular to be measured along the forward-side of the mast in sloops, cutters, and yawls, and of the foremast in schooners, from the

top of the highest sheave in the mast or topmast used for headsails or spinnaker, or from the juncture of the mast or topmast with the eyebolt or pennant of the highest halyard block used for headsails or spinnaker, to the deck.

The spinnaker boom shall be measured when in position and at right angles to the center line of the boat from its outboard end to the center of the mast.

The length of the spinnaker boom in yachts over 31 feet rating shall be limited to the base J of the fore-triangle, and in yachts 31 feet rating and under shall be limited to 40 per cent of the entire base line determined by the sum of B plus J plus the diameter of the mast at the boom goose-neck, in single-masted yachts, and by the sum of B plus B_1 plus J plus the diameter of the masts in schooners and yawls. Any excess in the length of the spinnaker boom over the above limits shall be added to the base J of the fore-triangle when computing the area of the headsails.

In all yachts the area of the headsails shall be obtained by multiplying P by P_2, dividing the product by 2, and taking 85 per cent of the result.

$$\text{Formula: } 0.85 \frac{P_2 \times J}{2}$$

Total Area

In sloops and cutters the total sail area for purposes of measurement shall be the sum of the area of mainsail, topsail, and headsails, as calculated by the above method; in yawls the sum of the areas of mainsail and topsail, mizzen and topsail and headsails; in schooners, the sum of the areas of mainsail and topsail, foresail and topsail and headsails; in three-masted schooners, the sum of the areas of the mizzen, mainsail, foresail and topsails and headsails.

The number of battens in any single sail shall be limited to five for yachts rating 46 feet or over and to four for yachts rating under 46 feet. Length of battens shall not exceed the following: Upper and lower battens 10 per cent of the length of the foot of the sail plus one foot; intermediate battens 12 per cent of the length of the foot of the sail plus one foot.

A spinnaker may have a headstick or board not longer than one-twentieth of the length of the spinnaker boom, but not a footyard or more than one sheet, or any other contrivance for extending the sail to other than a triangular shape.

In case a yacht shall carry a square sail, or square topsail, or raffee (together or separately) instead of a spinnaker, the actual area of the same shall be computed; and if such area exceed the area of the foretriangle, the excess shall be added in computing the total area for determining the measurement.

In case a yacht shall carry a forward or jib-stay strut, the actual area between the stay and the mast shall be calculated, and 85 per cent of the excess of such area over that of the foretriangle shall be added in computing the total area for determining the measurement.

In case the area of a club-topsail carried by any yacht shall exceed 150 per cent of the area of the working topsail or jib-header, such excess shall be added in computing the total area for determining the measurement. The area of the club-topsail shall be found from the measured lengths of the three sides.

Displacement

D. Displacement to be obtained by weighing or as follows:

The load water-line shall be divided into ten equal parts and the areas of the immersed cross-sections found in square feet. From these areas and the load water-line length the displacement in cubic feet shall be calculated by Simpson's Rule.

When the displacement of a yacht has been properly ascertained, it need not be redetermined except in case of specific protest, or upon notice as provided for in the third paragraph under the heading "Length."

Limits and Penalties

The limit of draft of yachts shall be in feet:

16% of the L. W.-L. plus 1.75.

Any excess of draft, exclusive of center-board, as per above formula, shall be multiplied by 3 and added to the rating; this penalty, however, shall not apply to yachts launched, or keel laid, prior to January 1, 1909, whose draft has not been increased since that date.

There shall be no limit on the actual displacement of yachts, but the cube root of the displacement, D, as used in the measurement formula, shall never exceed.

20% of the L. W.-L. plus 0.50.

If the actual displacement is smaller than that allowed by this limit, the actual displacement shall be used in computing the measurement; if the actual displacement be greater, then the limiting value of the cube root of D shall be used in computing the measurement.

The foreside of the mainmast of a schooner at the deck shall not be farther forward than fifty-five (55%) per cent of the water-line length from fore end of the water-line.

The after side of the mizzen mast of a yawl shall not be more than ten (10%) per cent of the water-line length abaft of the aftermost point of measurement of the load water-line.

The displacement limit and the limiting definitions of schooners and yawls shall not apply to yachts in existence, on October 11, 1912, provided no radical change in hull or rig be made subsequent to that date.

Yachts increasing their rating by lengthening their spinnaker booms so as to sail in a higher class, must rate at the highest limit of that class.

Scantlings

General Formula.

Sectional area in square inches of any keel, frame, deck beam, shelf, clamp or bilge stringer, shall be expressed in terms of the square root of the displacement in cubic feet times a constant. Thickness in inches of planking, deck or house deck, and moulded depth of keel shall be expressed in terms of the cube root of the displacement in cubic feet times a constant.

Keel

Moulded Depth	$\sqrt[3]{D} \times 0.65$
Sectional area in square inches	$\sqrt{D} \times 3.00$

To be of oak or some other hard wood of equal strength. May be tapered fore and aft, following the usual practice. Rabbet may be cut from these areas.

Frames.

Frames to be of white oak. On the basis of 12-inch spacing on centers.

Minimum Sectional Area in square inches	heels	$\sqrt{D} \times 0.2$
	heads	$\sqrt{D} \times 0.12$

Taper between heels and heads to be straight.

The bevel, due to angle of planking, allowed from these areas.

Shelf or Clamp.

To be of hard pine or at least its equivalent in strength.

Minimum sectional area in square inches, $\sqrt{D} \times 0.4$.

To run from stem to transom with taper allowed due to necessary bevelling.

Bilge Stringer.

To be hard pine or at least its equivalent in strength.

Minimum sectional area in square inches $\sqrt{D} \times 0.3$.

To extend at least two-thirds the over-all length of the boat, and to be of full sectional area for at least half of its length, allowing a taper at ends of a 20 per cent reduction of area.

DECK BEAMS.

On the basis of 12-inch spacing on centers.

All beams to be of white oak, or at least its equivalent in strength.

Minimum sectional area of main beams in square inches $\sqrt{D} \times 0.3$.

Minimum sectional area of auxiliary beams in square inches $\sqrt{D} \times 0.2$.

Minimum sectional area of half beam in square inches $\sqrt{D} \times 0.15$.

There must be two main beams at each mast, one at fore end of cabin house, one (or its equivalent in strength at this height) at after end of cabin house, and two at each skylight, hatch and companion.

The minimum sectional area of main and auxiliary beams shall be at the center of the beam, allowing a taper in moulding of 25 per cent reduction of area at each end.

PLANKING.

Minimum thickness in inches, $\sqrt[3]{D} \times 0.16$.

Minimum thickness in inches, $\sqrt[3]{D} \times 0.14$ if hard pine or at least its equivalent in strength is used.

If, as in the case of double planking, a light wood and a heavy wood layer are used to make up the total thickness of planking, these formulae shall be applied in direct proportion to the weight of their respective woods.

DECK.

Minimum thickness in inches, $\sqrt[3]{D} \times 0.15$.

Minimum thickness of deck may be reduced 1/8 inch if canvas covered with not lighter than 8 oz. duck.

HOUSE DECK.

Minimum thickness in inches, $\sqrt[3]{D} \times 0.13$.

Minimum thickness of house deck may be reduced 1/8 inch if canvas covered.

Cabin House

Class	Minimum Area	Minimum Height
P—31 ft. Rating	50 sq. ft.	8 inches
Q—25 ft. Rating	35 sq. ft.	7 inches

HOUSE SIDES AND FORWARD END.

To be of white oak or at least its equivalent in strength.

Minimum thickness in inches, $\sqrt[3]{D} \times 0.16$.

CABIN HOUSE.

Sides and forward end of cabin house must be vertical.

Minimum area of top of cabin house and minimum height above deck of sides and end, including cabin top, must be as given in the above tables.

The above scantling restrictions apply to classes "P," "Q," "R" and "S" only.

Yachts built on, or brought to the Great Lakes prior to November 1, 1908, are exempt from the above scantling restrictions.

Certificates of Measurement

The Measurer, or his assistants, shall personally measure the spars, the load water-line and quarter-beam lengths, as established and marked in accordance with the section headed "Length." He may accept drawings, dimensions, and calculations of any or all other specified measurements when certified to by the designer; but previous to issuing the certificate of measurement he, or

his assistants, shall personally verify the line of flotation. Certificates of measurement shall give all the principal elements of length, sail area, and displacement used in computing the rating, and shall specify whether obtained from actual measurements or designer's certificates. Any request on the part of the Measurer to the designer for calculations of displacement or other factors must give length over all, length of established water-line, and lengths of over-hangs, as actually measured, and shall be accompanied by a sketch sufficient to clearly show the location of the extreme forward and after points of measurement relative to the stem head, taffrail, and established load water-line plane.

If, for any reason, the Measurer shall be of the opinion that a yacht is not fairly rated by these measurement rules, or that she does not fully or fairly comply with their requirements, he shall, after due inquiry, award such certificate of rating as he may consider equitable.

An error in measurement discovered at any time prior to the first day of November shall be corrected, and the results of that season's races made to conform to the correct measurement.

Certificates of measurement, subject to the foregoing and subject to the changes effected through remeasurement, shall be valid for two years only from date of issue.

Remeasurement

Yachts shall be remeasured and a new certificate issued:

(a) At the expiration of two years from date of last certificate.

(b) Should the Regatta Committee so direct on account of protest, Rule XVIII., Section 2; or because, in their opinion, infringement of the measurement rule or irregularity in the certificate exists.

(c) Upon notification by the owner or the Regatta Committee that changes have been made in the yacht affecting her L. W.-L. or sail Plan. Rule XIX., Section 3.

The results of remeasurement, as reported by the Measurer, shall be final, subject to the right of appeal, as provided in Rule XVIII., Section 3.

RULE II

Management of Races

All races, and all yachts sailing therein, shall be under the direction of the Regatta Committee of the Association or club under whose auspices the races are being sailed. All matters shall be subject to their approval and control, and all doubts, questions and disputes which shall arise shall be subject to their decision. Their decision shall be based upon these rules as far as they apply, but as no rules can be devised capable of meeting every incident and accident of sailing, the Regatta Committee should keep in view the ordinary customs of the sea, and discourage all attempts to win a race by other means than fair sailing and superior skill and speed. The decision of the Regatta Committee shall be final, unless they think fit, on the application of the parties interested, or for other reasons, to refer the questions at issue for the decision of the Council of this Union, whose decision shall be final. No member of the Regatta Committee or Council shall take part in the discussion or decision upon any disputed question in which he is interested.

RULE III

Classification

Yachts shall be classified by rating and shall be divided into classes as below:

SCHOONERS

1st Class—I	All over 100 feet, rating..
100 Foot Class—A	Not over 100 feet and over 88 feet, rating.
88 Foot Class—B	Not over 88 feet and over 76 feet, rating.
76 Foot Class—C	Not over 76 feet and over 65 feet, rating.
65 Foot Class—D	Not over 65 feet and over 55 feet, rating.
55 Foot Class—E	Not over 55 feet and over 46 feet, rating.
46 Foot Class—F	Not over 46 feet, rating.

SLOOPS AND YAWLS.

1st Class—I	All over 100 feet, rating.
100 Foot Class—G	Not over 100 feet and over 88 feet, rating.
88 Foot Class—H	Not over 88 feet and over 76 feet, rating.
76 Foot Class—J	Not over 76 feet and over 65 feet, rating.
65 Foot Class—K	Not over 65 feet and over 55 feet, rating.
55 Foot Class—L	Not over 55 feet and over 46 feet, rating.
46 Foot Class—M	Not over 46 feet and over 38 feet, rating.
38 Foot Class—N	Not over 38 feet and over 31 feet, rating.
31 Foot Class—P	Not over 31 feet, and over 25 feet, rating.
25 Foot Class—Q	Not over 25 feet, and over 20 feet, rating.
20 Foot Class—R	Not over 20 feet and over 17 feet, rating.
17 Foot Class—S	Not over 17 feet, rating.

Each yacht of thirty-eight (38) feet rating and under, launched after January 1, 1905, and each yacht over thirty-eight (38) feet rating, the keel of which was laid after January 1, 1909, except those in the first classes of schooners, sloops and yawls shall rate at the highest limit of its class, when racing in its regular class.

The Regatta Committee, in the notice of a race, shall specify for what class or classes the race is given; and in such notice, may combine classes, and establish special classes and conditions therefor.

RULE IV

Time Allowance

Time allowance shall be calculated according to the table of allowance of the Union.

RULE V

Restrictions. (Racing Trim)

1. SAILS. A Yacht in races may carry the following sails:

A Sloop, mainsail, forestaysail, jib, jib-topsail, gaff-topsail, and spinnaker. A Sloop over 31 feet rating measurement may carry a club-topsail.

A Yawl, same as a Sloop, with mizzen, mizzen-topsail, and mizzen-staysail.

A Schooner, mainsail, foresail, forestaysail, jib, jib-topsail, fore and main gaff or club-topsail, main-topmast-staysail, and spinnaker. Lug-foresails shall be barred.

A Three-Masted Schooner, same as a Schooner, with mizzen, mizzen-topsail, and mizzen-staysail.

A Yacht may set light sails over or in place of working sails, and may carry square sails, square topsails and raffees (together or separately) in place of a spinnaker. A pole-masted yacht may carry her regular sprit topsails.

2. LIFE BUOYS. Each yacht shall carry at least two serviceable life buoys, or belts, on deck, ready for use.

3. BOATS. Each yacht of any class named below shall carry on deck a serviceable, non-collapsible boat with round bottom, of a length not less than herein specified for her class; such boat to have oars and oarlocks lashed in.

Classes I, A and B of Schooners, I, G and H of Sloops or Yawls, fourteen feet in length. Classes C and D of Schooners and J and K of Sloops or Yawls, twelve feet in length. Classes E and F of Schooners and L of Sloops or Yawls, ten feet in length.

4. BULKHEADS, BALLAST, ETC. Floors must be left down and bulkheads and doors left standing; water tanks kept in place, and at least one bower anchor and suitable cable kept on board. Each yacht shall keep her galley fixtures and fittings on board and in their proper places. Trimming by dead weight shall not be allowed after the preparatory signal. Neither ballast nor water shall be taken in or discharged after 9 p.m. of the day before a race, but this restriction may be waived as to water only, by permission of the Regatta Committee.

A race postponed or resailed shall, so far as regards this rule, be considered a new race.

5. CREW. The total number of persons permitted on a yacht during a race shall not exceed one for every 250 square feet of sail area and fraction thereof *except as below.*

In smaller classes the crew shall be limited as follows:

Class Q, 25-foot class, 4 persons.
Class R, 20-foot class, 3 persons.
Class S, 17-foot class, 3 persons.

On yachts over thirty-one (31) feet rating women, not taking any active part in the management of the yacht, may be carried and not counted as members of the crew.

Yachts of 38-foot rating measurement and under must be steered by a Corinthian, who must be a member of a club belonging to an association, which association must be a member of the Union. Corinthianism to be defined as under:

"Corinthianism in yachting is that attribute which represents participation for sport as distinct from gain, and which also involves the acquirements of nautical experience through the love of sport rather than through necessity or the hope of gain. It is consistent with the motive higher than mercenary found in the ranks of officers of the navy and naval architects, notwithstanding the remuneration they receive, while it is inconsistent with the trade of the fisherman, even though one following such a trade has never been a paid sailor." In this respect the following general definition is given:

"No person who follows the sea as a means of livelihood, or who has accepted remuneration for services rendered in handling or serving on a yacht, or who is a professional in any other sport, shall be considered a Corinthian yachtsman."

The total number of professional sailors employed on a yacht during a race of the 38 and 31-foot classes shall not exceed two, and of the 25-foot class and under shall not exceed one.

6. BOARDING AND LEAVING. No person shall board or leave a yacht after the preparatory signal for her class has been made, except in case of accident, or injury, to a person on board.

7. PRIVATE SIGNAL AND NUMBER. Each yacht shall carry her private signal at the main peak, and display her racing number above the reef points at approximately equal distances from the luff and leach on both sides of the mainsail.

Racing numbers with class letters or class distinguishing mark directly above them must be displayed on both sides of the mainsail. They must be painted in dark color of clear-cut block type on rectangular pieces of canvas and securely attached to the sail, so that the bottom of the number will be on horizontal line with throat of sail and midway between luff and leach, and parallel to water line. The size of the numbers, letters, or distinguishing mark shall be not less than 15 inches each in height for yachts not over 31 feet rating, and not less than 18 inches each in height for yachts over 31 feet rating.

8. LIGHTS AND FOG SIGNALS. The Government regulations regarding lights and fog signals shall be observed.

9. PROPULSION. No means of propulsion other than sails shall be employed.

10. ANCHORING, ETC. A yacht may anchor, but must weigh anchor again and not slip. A yacht shall not warp nor kedge, nor make fast to a buoy, pier, vessel, or other object, except as provided in Section 12 of this Rule.

11. SOUNDING. No other means of sounding than the lead and line shall be employed.

12. RUNNING AGROUND AND FOULING. A yacht running aground or fouling a buoy, pier, vessel, or other object, may use her anchors, warps, boats,

etc., to get clear, but may not receive any assistance, except from the crew of the vessel fouled.

13. Power. Manual power only shall be used in handling sails.

RULE VI

Restrictions. (Cruising Trim)

When cruising trim is required a yacht shall conform to the following restrictions:

1. Fittings. Cruising deck, cabin, galley, and forecastle fittings and fixtures suitable to the size of the yacht (davits and accommodation ladder accepted) shall be kept in place. Davits and accommodation ladder shall be kept on board.

2. Anchors and Cables. An equipment of anchors and cables suitable to the size of the yacht shall be carried and of these at least one Bower anchor with suitable cable bent shall be kept ready for immediate use.

3. Sails. A yacht may carry the sails allowed in Racing Trim, except that topsails extending above the truck of the topmast or beyond the end of the gaff shall be barred. A pole-masted yacht may carry her regular sprit-topsails.

4. Boats. Each yacht shall carry on deck or on davits at least one serviceable, non-collapsible boat with round bottom, of the size prescribed for her class in the restrictions of Rule V (Racing Trim). Further, each yacht shall carry one such boat of not less than the following sizes: Class M, ten (10) feet in length; Class N, nine (9) feet in length; and each sloop, yawl, or schooner of thirty-one (31) feet rating and under shall carry such boat, if any, as may be prescribed by the Club or its Regatta Committee.

5. Crew. Only such paid hands, pilot excepted, shall be carried as live in the crew's quarters of the yacht, and the total number of persons on board shall not exceed the number allowed in Racing Trim.

6. A yacht shall conform to all the restrictions of Rule V (Racing Trim) which are not replaced or modified by the foregoing sections of this Rule.

RULE VII

Entries

1. A yacht cannot be entered for a Club race unless her ownership, rig, and rating for time allowance, as computed in accordance with the Rules of the Union, are on record with the Regatta Committee.

2. Entries shall be made as required by the Regatta Committee in the notice of the race.

3. Unless otherwise specifically directed in the notice of a race, as provided in Rule III, a yacht starting alone in a class where two or more entries have been received shall be entitled to sail over the course for a "Sail over" prize; or such yacht may enter in the next class above at the minimum rating in such class, provided she notifies the Regatta Committee and her competitors by hoisting at the starboard main spreader the flag designating the letter of the class she so enters. Such letter must be kept flying during the entire race.

4. Two or more yachts owned, wholly or in part, by the same person shall not be entered in the same class.

RULE VIII

Instructions

1. The owner of each yacht entered for a race shall be furnished at the time of the entry, or as soon thereafter as possible, with written or printed instructions as to the conditions of the race and the courses to be sailed.

2. The Regatta Committee may change the courses or amend the instructions, provided notice of such change is given to each yacht before the warning signal is made.

RULE IX

Amenable to Racing Rules

A yacht shall be amenable to the Racing Rules from the time the preparatory signal for her class is made, and shall continue so until her entire hull and spars have passed across the finish line.

From the setting of the warning signal, yachts whose preparatory signal has not been made, must keep clear of other yachts whose preparatory signal has been made. After crossing the finishing line a yacht shall not interfere with any yacht still in the race.

RULE X

Start and Finish

1. The starting and finishing lines shall be indicated by a stake-boat or other mark at one end, and a white flag displayed on the Regatta Committee's boat or station at the other end.

2. The Regatta Committee may establish, by means of a buoy or buoys, a restricted area about the starting line, within which no yacht should enter until the preparatory signal of her class is made.

3. The Committee boat or station at the finish line shall show a red ball, and after sunset shall show two red lights.

A person may be placed on the stake-boat or station, at the finishing line, who shall time the yachts in the absence of the Regatta Committee.

4. The time at the start shall be taken when any part of a yacht's hull or spars first crosses the line after the starting signal has been made.

5. If this point in any yacht be across the line when the starting signal is made, she must return and start again.

6. A yacht so returning, or one working into position from the wrong side of the line after the signal for starting has been made, must keep clear of and give way to all competing yachts.

7. The time at the finish shall be taken when any part of a yacht's hull or spars first crosses the line.

RULE XI

Starting Signals

1. The Starting Signals for all races, to which attention shall be called by gun or whistle, shall be as follows:

Warning. The hoisting of a white flag or cone.

Preparatory. Five minutes after the warning signal, the lowering of a white flag or cone and the hoisting of the blue peter or blue peter cone.

Start. Five minutes after the preparatory signal, the lowering of the blue peter or blue peter cone and the hoisting of a distinctive signal, as provided in instructions.

2. In starting yachts by classes or divisions, the classes or divisions shall be started at five-minute intervals by hoisting other distinctive signals for each additional class or division so started. The starting signal for one class or division shall be the preparatory signal for the next succeeding class or division.

3. The Regatta Committee may alter the time intervals between signals, when so stated in the instructions.

4. All starts shall be one-gun starts unless otherwise specified in the instructions for the race.

5. When the time of starting is postponed until later in the day the Committee shall hoist code flag "G"; postponements shall be for even fifteen-minute intervals.

RULE XII

Right of Way

DEFINITIONS:

(a) Close-hauled.

A yacht is close-hauled when sailing by the wind as close as she can lay with advantage in working to windward.

(b) Wind Aft.

A yacht with the wind aft is deemed to have the wind on the side opposite to that on which she is carrying her main boom.

(c) Overlapping and Clear.

Two yachts sailing the same, or nearly the same, course are said to be overlapping when either yacht has no longer a free choice on which side of the other she shall pass, and the overlap continues to exist so long as the leeward yacht by luffing, or the windward yacht by bearing away, is in danger of fouling. Otherwise they are said to be clear.

(d) Overtaking.

Of two yachts sailing the same, or nearly the same, course, the one clear astern, if approaching the other so as to involve an overlap, is said to be the overtaking yacht, and she continues such after the yachts overlap until she has again drawn clear.

(e) Luffing.

A yacht is luffing when she so alters her course as to sail a course more nearly into the wind.

(f) Mark.

A mark is any vessel, boat, buoy, or other object used to indicate the course.

Every essential or ordinary above-water part of any object named as a mark, counts as a mark for the purpose of this Rule, but no part below water, nor any object accidentally or temporarily attached to the mark counts as part of the mark.

RIGHT OF WAY.

When one yacht is approaching another yacht, so as to involve the risk of fouling, one of them shall keep clear of the other as follows:

1. ON DIFFERENT POINTS OF SAILING.

A yacht free shall keep clear of one close-hauled.

2. ON SAME POINT OF SAILING, WITH WIND ON OPPOSITE SIDES.

(a) When both yachts are close-hauled and have the wind on opposite sides, the yacht with the wind on the port side shall keep clear.

(b) When both yachts are free, or both have the wind aft, and have the wind on opposite sides, the yacht with the wind on the port side shall keep clear.

3. ON SAME POINT OF SAILING, WITH WIND ON SAME SIDE.

When both yachts are free, or both have the wind aft and have the wind on the same side, the yacht to windward shall keep clear.

4. CONVERGING CLOSE-HAULED.

When two yachts, both close-hauled on the same tack, are converging by reason of the leeward yacht holding a better wind and neither can claim the rights of a yacht being overtaken, then the yacht to windward shall keep clear.

5. ALTERING COURSE.

When of two yachts one is obliged to keep clear, the other, subject to the provisions of Section 6, Clause (a), shall not so alter her course as to involve the risk of fouling.

6. OVERTAKING, LUFFING, AND BEARING AWAY.

A yacht overtaking another yacht shall keep clear of the overtaken yacht.

(a) Passing to Windward.

Provided that the overtaking yacht makes her overlap on the side opposite to that on which the overtaken yacht then carries her main boom, the overtaken yacht may luff as she pleases to prevent the overtaking yacht passing her to windward, until the overtaken yacht is in such a position that her bowsprit end, or stem head, if she has no bowsprit, would strike the overtaking yacht abaft the main shrouds, when her right to luff farther from her course shall cease.

(b) Passing to Leeward.

An overtaken yacht must never bear away to prevent another yacht from passing her to leeward—the lee side to be considered that on which the leading yacht of the two carries her main boom. The overtaking vessel must not luff until she has drawn clear ahead of the yacht which she has overtaken.

The provisions of this section override Section 2 (b), Section 3, and Section 5 of this Rule.

7. RIGHTS ON NEW COURSE.

A yacht shall not be entitled to her rights on a new course:

(a) Until she has filled away.

(b) If she so alters her course as to involve the immediate risk of fouling another yacht which, owing to her position, cannot keep clear.

8. PASSING AND ROUNDING MARKS.

If an overlap exists between two yachts when both of them, without tacking, are about to pass a mark on a required side, then the outside yacht must give the inside yacht room to pass clear of the mark.

A yacht shall not, however, be justified in attempting to establish an overlap and thus force a passage between another yacht and the mark after the latter yacht has altered her helm for the purpose of rounding.

9. OBSTRUCTION TO SEA-ROOM.

When a yacht is approaching a shore, shoal, pier, rock, vessel, or other dangerous obstruction, and cannot go clear by altering her course without fouling another yacht, then the latter shall, on being hailed at once give room; and in case one yacht is forced to tack or to bear away in order to give room, the other shall also tack or bear away as the case may be at as near the same time as is possible without danger of fouling. But should such obstruction be a designated mark of the course, a yacht forcing another to tack under the provisions of this section shall be disqualified. (See Rule XIX, Section 2, where this rule is particularly referred to.)

A vessel under way (including another yacht racing) of which the yacht concerned has to keep out of the way, ranks as an obstruction for the purpose of this Rule.

RULE XIII

Wrecking or Shifting of a Mark

Should any mark be missing or moved from its proper position during a race, the Regatta Committee shall, if possible, replace it or substitute a boat with Code flag "O" hoisted, and call attention by gun or whistle. Failing thus to re-establish the mark, the race may be ordered resailed or not, at the option of the Regatta Committee.

RULE XIV

Accidents

Each yacht shall render every possible assistance to any vessel or person in peril, and if in the judgment of the Regatta Committee she shall have thereby injured her chances of winning, they shall order the race resailed between such yacht and the winner in her class.

RULE XV

Postponed and Resailed Races

1. At any time before the Preparatory Signal the Regatta Committee shall have power to postpone any race should unfavorable weather conditions render such postponement advisable. Should the race be postponed for the day, then such postponed race shall be considered a new race. The signal for such postponement shall be Code flag "H."

2. At any time after the starting signal and before the finish the Regatta Committee shall have power to declare off or order resailed any race, should unfavorable weather conditions render a finish improbable within the time limit. The signal denoting such action shall be Code flag "J." New entries shall not be received for such resailed race, and a yacht disqualified in the original race shall not be eligible to start in the resailed race.

RULE XVI

Shortening Course

Should it be necessary during a race to shorten the course, Code flag "M," and two blasts of the whistle or two guns fired, shall show that the race is to be finished with the round about to be completed or at the mark where the Regatta Committee's boat is stationed when giving the signal, and the time allowance shall be proportionally reduced.

RULE XVII

Time of Race Limited

Except when otherwise specified in the instructions, a race in any class in which no yacht has finished at one-half hour after sunset shall be declared off.

RULE XVIII

Protest

1. A yacht having cause, during a race, to protest against any other yacht for violation of these rules shall at once display Code flag "B," which shall be known as the Protest Flag, and keep such flag flying until the finish of the race. A protest must be supplemented by a written statement of the facts, which must be sent to the Regatta Committee before 6 p.m. of the next (week) day following the race.

2. If through protest the measurement of any yacht be called in question, the Regatta Committee shall direct the Measurer, by whom such yacht was measured, or if, in their judgment, such Measurer is not available, then another Measurer to remeasure such factor or factors of the rating formula as are nominated in the protest, disregarding designers' drawings and certificates, and the result, as reported by him, shall be final. The expenses of such remeasurement shall be borne by the party against whom such protest is decided.

3. The decision of the Regatta Committee, as to the facts involved in any protest under the Racing Rules, and the report of the Measurer as to the physical measurement of a yacht upon remeasurement, shall be final.

RULE XIX

Disqualifications

1. Each yacht must go fairly around the course, and in rounding each specified mark her track from the preceding to the following mark must enclose it on the required side. A yacht touching a mark, unless wrongfully compelled to do so by another yacht, shall at once abandon the race.

2. If a yacht, in consequence of her neglect of any of these Rules, shall foul another yacht, or compel another yacht to foul any yacht, mark, or obstruction, or to run aground, she shall be disqualified and shall pay all damages; and any yacht which shall wrongfully cause another to luff, bear away, or tack, in order to avoid fouling, or shall without due cause compel another yacht to give room or to tack under Section 9, Rule XII, or shall herself fail to tack or to bear away, as required in that Section, or shall in any other way infringe or fail to comply with any of these Rules or attempt to win a race by other means than fair sailing and superior speed and skill, shall be disqualified.

3. After having been officially measured, a yacht shall not make alterations in her sail plan, without written notice to the Regatta Committee, specifying the changes that have been made and embodying a request for remeasurement.

4. The Regatta Committee shall without a protest disqualify any yacht, should they know prior to the conclusion of the race that she has committed a breach of these Rules. They may disqualify any yacht for a breach of these Rules should such breach be brought to their attention in writing prior to 6 p.m. of the (week) day following the race.

RULE XX

Award of Prizes

1. The owner of a winning yacht, or his representative on the yacht during the race, shall, before the awarding of prizes, file with the Regatta Committee a declaration that all the rules and regulations were complied with.

2. A prize shall be awarded to that yacht in each class which makes the best corrected time over the course.

3. If a winning yacht be disqualified the prize shall be awarded to the yacht making the next best corrected time over the course.

Table of Time Allowance

The allowances in this table are based upon the rule accepted by naval architects, that within economic limits opportunities for speed vary in different vessels as the square roots of their respective lengths. As strong winds are required, however, to give to larger vessels the full extent of their advantage in size, and as such a scale of allowance is not adapted to ordinary summer racing 60 per cent only of the allowance due to the rule is given in the table, and may be stated thus:

Time equals .6 $\left\{ \frac{3600}{\sqrt{I}} \quad \frac{3600}{\sqrt{L}} \right\}$; 3,600 representing the number of seconds in an hour, I the smaller yacht and L the larger one. Practically the formula is $\frac{2160}{\sqrt{I}} \quad \frac{2160}{\sqrt{L}}$:6/10ths of 3,600 being 2,160.

RULE FOR USING THE TABLE

The figures to be found in the table show in seconds and hundredths of a second what a yacht of the measurement opposite to these figures would be allowed by one of 96.9 feet rating measurement in sailing one nautical mile. To find what a yacht of any measurement should receive from a larger one, take the figures to be found opposite to the smaller measurement; from these subtract the figures opposite to the measurement of the larger yacht, and the difference multiplied by the number of nautical miles in the course will give the amount of the allowance due to the smaller vessel, in seconds and hundredths of a second.

EXAMPLE

What time will a yacht of 39 feet rating measurement have to allow to one of 36.7 feet rating measurement in a course of 20 nautical miles?

The time opposite 36.7 feet is	167.11
The time opposite 39 feet is	156.44
Difference	10.67
Number of nautical miles	20
Allowance	213.40

Or 3 minutes 33 2-5 seconds.

For the fractions of a foot in the measurement use the nearest tenth to be found in the table.

TIME ALLOWANCE

Rating Measurement	Allowance	Rating Measurement	Allowance	Rating Measurement	Allowance	Rating Measurement	Allowance
13.0	409.64	17.0	334.44	21.0	281.90	25.0	242.57
.1	407.35	.1	332.90	.1	280.79	.1	241.70
.2	405.08	.2	331.38	.2	279.68	.2	240.84
.3	402.84	.3	329.87	.3	278.57	.3	239.99
.4	400.63	.4	328.38	.4	277.48	.4	239.15
.5	398.44	.5	326.90	.5	276.40	.5	238.31
.6	396.27	.6	325.43	.6	275.32	.6	237.47
.7	394.13	.7	323.97	.7	274.25	.7	236.64
.8	392.01	.8	322.53	.8	273.18	.8	235.81
.9	389.92	.9	321.10	.9	272.12	.9	235.00
14.0	387.84	18.0	319.68	22.0	271.07	26.0	234.18
.1	385.79	.1	318.27	.1	270.02	.1	233.36
.2	383.76	.2	316.87	.2	268.99	.2	232.55
.3	381.76	.3	315.49	.3	267.96	.3	231.74
.4	379.77	.4	314.11	.4	266.94	.4	230.94
.5	377.80	.5	312.75	.5	265.92	.5	230.15
.6	375.86	.6	311.40	.6	264.91	.6	229.37
.7	373.93	.7	310.06	.7	263.92	.7	228.58
.8	372.03	.8	308.73	.8	262.92	.8	227.80
.9	370.14	.9	307.41	.9	261.94	.9	227.02
15.0	368.27	19.0	306.10	23.0	260.95	27.0	226.25
.1	366.42	.1	304.80	.1	259.98	.1	225.48
.2	364.59	.2	303.51	.2	259.01	.2	224.71
.3	362.78	.3	302.23	.3	258.05	.3	223.96
.4	360.98	.4	300.96	.4	257.09	.4	223.20
.5	359.20	.5	299.70	.5	256.14	.5	222.44
.6	357.44	.6	298.45	.6	255.19	.6	221.70
.7	355.70	.7	297.21	.7	254.26	.7	220.96
.8	353.97	.8	295.98	.8	253.32	.8	220.22
.9	352.26	.9	294.76	.9	252.40	.9	219.49
16.0	350.56	20.0	293.54	24.0	251.47	28.0	218.76
.1	348.88	.1	292.34	.1	250.56	.1	218.03
.2	347.22	.2	291.16	.2	249.65	.2	217.31
.3	345.57	.3	289.97	.3	248.74	.3	216.59
.4	343.93	.4	288.79	.4	247.84	.4	215.87
.5	342.31	.5	287.63	.5	246.95	.5	215.16
.6	340.71	.6	286.46	.6	246.06	.6	214.45
.7	339.12	.7	285.31	.7	245.18	.7	213.74
.8	337.55	.8	284.17	.8	244.31	.8	213.05
.9	335.99	.9	283.03	.9	243.43	.9	212.35

TIME ALLOWANCE—CONTINUED

Rating Measurement	Allowance	Rating Measurement	Allowance	Rating Measurement	Allowance	Rating Measurement	Allowance
29.0	211.66	33.0	186.59	37.0	165.67	41.0	147.90
.1	210.97	.1	186.01	.1	165.19	.1	147.48
.2	210.29	.2	185.44	.2	164.71	.2	147.07
.3	209.60	.3	184.87	.3	164.23	.3	146.66
.4	208.92	.4	184.31	.4	163.75	.4	146.26
.5	208.25	.5	183.74	.5	163.28	.5	145.85
.6	207.58	.6	183.19	.6	162.82	.6	145.44
.7	206.91	.7	182.64	.7	162.35	.7	145.04
.8	206.24	.8	182.09	.8	161.88	.8	144.65
.9	205.58	.9	181.55	.9	161.42	.9	144.25
30.0	204.92	34.0	181.01	38.0	160.97	42.0	143.87
.1	204.26	.1	180.46	.1	160.50	.1	143.46
.2	203.62	.2	179.92	.2	160.04	.2	143.06
.3	202.97	.3	179.38	.3	159.59	.3	142.63
.4	202.32	.4	178.84	.4	159.13	.4	142.27
.5	201.67	.5	178.30	.5	158.68	.5	141.88
.6	201.04	.6	177.77	.6	158.22	.6	141.49
.7	200.40	.7	177.24	.7	157.76	.7	141.11
.8	199.78	.8	176.71	.8	157.32	.8	140.72
.9	199.15	.9	176.20	.9	156.88	.9	140.34
31.0	198.53	35.0	175.68	39.0	156.44	43.0	139.97
.1	197.90	.1	175.15	.1	156.00	.1	139.58
.2	197.28	.2	174.64	.2	155.56	.2	139.20
.3	196.66	.3	174.12	.3	155.11	.3	138.82
.4	196.03	.4	173.60	.4	154.67	.4	138.43
.5	195.42	.5	173.09	.5	154.26	.5	138.05
.6	194.81	.6	172.57	.6	153.80	.6	137.68
.7	194.20	.7	172.07	.7	153.37	.7	137.30
.8	193.60	.8	171.56	.8	152.94	.8	136.93
.9	193.00	.9	171.06	.9	152.52	.9	136.57
32.0	192.41	36.0	170.57	40.0	152.10	44.0	136.20
.1	191.81	.1	170.06	.1	151.67	.1	135.83
.2	191.21	.2	169.56	.2	151.24	.2	135.46
.3	190.62	.3	169.07	.3	150.80	.3	135.08
.4	190.03	.4	168.58	.4	150.38	.4	134.72
.5	189.44	.5	168.08	.5	149.96	.5	134.35
.6	188.86	.6	167.59	.6	149.54	.6	133.99
.7	188.28	.7	167.11	.7	149.14	.7	133.63
.8	187.72	.8	166.63	.8	148.72	.8	133.27
.9	187.15	.9	166.15	.9	148.31	.9	132.91

TIME ALLOWANCE—CONTINUED

Rating Measurement	Allowance	Rating Measurement	Allowance	Rating Measurement	Allowance	Rating Measurement	Allowance
45.0	132.56	49.0	119.15	53.0	107.27	57.0	96.67
.1	132.20	.1	118.82	.1	106.98	.1	96.41
.2	131.84	.2	118.50	.2	106.69	.2	96.16
.3	131.48	.3	118.19	.3	106.42	.3	95.90
.4	131.12	.4	117.88	.4	106.14	.4	95.65
.5	130.76	.5	117.56	.5	105.86	.5	95.40
.6	130.42	.6	117.25	.6	105.59	.6	95.16
.7	130.07	.7	116.95	.7	105.31	.7	94.92
.8	129.72	.8	116.64	.8	105.04	.8	94.68
.9	129.38	.9	116.34	.9	104.77	.9	94.44
46.0	129.05	50.0	116.04	54.0	104.51	58.0	94.20
.1	128.70	.1	115.73	.1	104.23	.1	93.95
.2	128.35	.2	115.42	.2	103.96	.2	93.70
.3	128.00	.3	115.12	.3	103.68	.3	93.44
.4	127.66	.4	114.82	.4	103.42	.4	93.20
.5	127.31	.5	114.50	.5	103.14	.5	92.96
.6	126.96	.6	114.20	.6	102.88	.6	92.72
.7	126.62	.7	113.90	.7	102.61	.7	92.48
.8	126.29	.8	113.60	.8	102.35	.8	92.24
.9	125.96	.9	113.32	.9	102.08	.9	92.02
47.0	125.64	51.0	113.03	55.0	101.82	59.0	91.79
.1	125.30	.1	112.73	.1	101.56	.1	91.54
.2	124.97	.2	112.43	.2	101.29	.2	91.30
.3	124.63	.3	112.13	.3	101.03	.3	91.06
.4	124.30	.4	111.84	.4	100.75	.4	90.82
.5	123.97	.5	111.54	.5	100.50	.5	90.58
.6	123.65	.6	111.25	.6	100.24	.6	90.34
.7	123.32	.7	110.96	.7	99.97	.7	90.10
.8	122.99	.8	110.80	.8	99.71	.8	89.88
.9	122.66	.9	110.51	.9	99.46	.9	89.65
48.0	122.34	52.0	110.11	56.0	99.20	60.0	89.42
.1	122.00	.1	109.81	.1	98.94	.1	89.18
.2	121.68	.2	109.52	.2	98.68	.2	88.94
.3	121.36	.3	109.24	.3	98.42	.3	88.72
.4	121.03	.4	108.95	.4	98.17	.4	88.49
.5	120.71	.5	108.66	.5	97.91	.5	88.26
.6	120.38	.6	108.37	.6	97.66	.6	88.03
.7	120.07	.7	108.10	.7	97.40	.7	87.80
.8	119.77	.8	107.82	.8	97.15	.8	87.58
.9	119.46	.9	106.54	.9	96.91	.9	87.35

TIME ALLOWANCE—CONTINUED

Rating Measurement	Allowance	Rating Measurement	Allowance	Rating Measurement	Allowance	Rating Measurement	Allowance
61.0	87.13	65.0	78.48	69.0	70.61	73.0	63.37
.1	86.90	.1	78.26	.1	70.42	.1	63.19
.2	86.68	.2	78.06	.2	70.22	.2	63.01
.3	86.45	.3	77.86	.3	70.03	.3	62.84
.4	86.22	.4	77.65	.4	69.84	.4	62.68
.5	85.99	.5	77.45	.5	69.65	.5	62.51
.6	85.76	.6	77.24	.6	69.47	.6	62.34
.7	85.54	.7	77.04	.7	69.29	.7	62.17
.8	85.32	.8	76.84	.8	69.11	.8	62.00
.9	84.10	.9	76.64	.9	68.93	.9	61.84
62.0	84.89	66.0	76.45	70.0	68.75	74.0	61.67
.1	84.66	.1	76.25	.1	68.56	.1	61.49
.2	84.43	.2	76.04	.2	68.36	.2	61.31
.3	84.20	.3	75.84	.3	68.17	.3	61.14
.4	83.99	.4	75.64	.4	67.99	.4	60.97
.5	83.77	.5	75.43	.5	67.81	.5	60.80
.6	83.56	.6	75.23	.6	67.63	.6	60.64
.7	83.34	.7	75.04	.7	67.45	.7	60.47
.8	83.12	.8	74.84	.8	67.27	.8	60.30
.9	82.91	.9	74.65	.9	67.09	.9	60.14
63.0	82.70	67.0	74.46	71.0	66.91	75.0	59.99
.1	82.48	.1	74.26	.1	66.72	.1	59.82
.2	82.26	.2	74.05	.2	66.54	.2	59.65
.3	82.04	.3	73.85	.3	66.36	.3	59.48
.4	81.83	.4	73.66	.4	66.18	.4	59.32
.5	81.61	.5	73.46	.5	66.00	.5	59.15
.6	81.41	.6	73.27	.6	65.82	.6	58.98
.7	81.19	.7	73.08	.7	65.64	.7	58.81
.8	80.98	.8	72.89	.8	65.46	.8	58.64
.9	80.77	.9	72.70	.9	65.29	.9	58.49
64.0	80.57	68.0	72.50	72.0	65.12	76.0	58.33
.1	80.35	.1	72.30	.1	64.94	.1	58.16
.2	80.14	.2	72.11	.2	64.76	.2	58.00
.3	79.92	.3	71.92	.3	64.58	.3	57.83
.4	79.72	.4	71.72	.4	64.40	.4	57.67
.5	79.51	.5	71.53	.5	64.24	.5	57.52
.6	79.30	.6	71.34	.6	64.06	.6	57.36
.7	79.09	.7	71.15	.7	63.88	.7	57.19
.8	78.89	.8	70.97	.8	63.71	.8	57.04
.9	78.68	.9	70.79	.9	63.54	.9	56.88

TIME ALLOWANCE—CONTINUED

Rating Measurement	Allowance	Rating Measurement	Allowance	Rating Measurement	Allowance	Rating Measurement	Allowance
77.0	56.72	81.0	50.57	85.0	44.83	89.0	39.50
.1	56.56	.1	50.41	.1	44.69	.1	39.37
.2	56.39	.2	50.26	.2	44.54	.2	39.24
.3	56.23	.3	50.11	.3	44.40	.3	39.11
.4	56.08	.4	49.96	.4	44.26	.4	38.98
.5	55.92	.5	49.81	.5	44.12	.5	38.84
.6	55.76	.6	49.67	.6	43.99	.6	38.71
.7	55.61	.7	49.52	.7	43.86	.7	38.59
.8	55.45	.8	49.38	.8	43.73	.8	38.47
.9	55.30	.9	49.24	.9	43.60	.9	38.35
78.0	55.14	82.0	49.09	86.0	43.46	90.0	38.23
.1	54.97	.1	48.94	.1	43.32	.1	38.10
.2	54.82	.2	48.79	.2	43.19	.2	37.97
.3	54.66	.3	48.65	.3	43.06	.3	37.84
.4	54.50	.4	48.50	.4	42.92	.4	37.70
.5	54.35	.5	48.36	.5	42.79	.5	37.58
.6	54.19	.6	48.22	.6	42.66	.6	37.46
.7	54.04	.7	48.07	.7	42.53	.7	37.34
.8	53.88	.8	47.93	.8	42.40	.8	37.22
.9	53.74	.9	47.78	.9	42.26	.9	37.10
79.0	53.59	83.0	47.64	87.0	42.13	91.0	36.98
.1	53.44	.1	47.50	.1	42.00	.1	36.85
.2	53.28	.2	47.35	.2	41.87	.2	36.72
.3	53.12	.3	47.21	.3	41.74	.3	36.59
.4	52.97	.4	47.06	.4	41.60	.4	36.47
.5	52.81	.5	46.92	.5	41.47	.5	36.35
.6	52.66	.6	46.78	.6	41.34	.6	36.23
.7	52.50	.7	46.63	.7	41.21	.7	36.11
.8	52.36	.8	46.49	.8	41.08	.8	35.99
.9	52.21	.9	46.36	.9	40.94	.9	35.87
80.0	52.07	84.0	46.22	88.0	40.81	92.0	35.75
.1	51.91	.1	46.08	.1	40.68	.1	35.62
.2	51.76	.2	45.94	.2	40.55	.2	35.48
.3	51.60	.3	45.79	.3	40.42	.3	35.36
.4	51.44	.4	45.65	.4	40.28	.4	35.24
.5	51.30	.5	45.50	.5	40.15	.5	35.12
.6	51.14	.6	45.36	.6	40.02	.6	35.00
.7	51.00	.7	45.23	.7	39.89	.7	34.88
.8	50.86	.8	45.10	.8	39.76	.8	34.76
.9	50.71	.9	44.96	.9	39.62	.9	34.64

TIME ALLOWANCE—CONTINUED

Rating Measurement	Allowance	Rating Measurement	Allowance	Rating Measurement	Allowance	Rating Measurement	Allowance
93.0	34.52	94.0	33.35	95.0	32.16	96.0	31.01
.1	34.40	.1	33.23	.1	32.04	.1	30.89
.2	34.28	.2	33.11	.2	31.92	.2	30.77
.3	34.16	.3	32.99	.3	31.80	.3	30.65
.4	34.04	.4	32.87	.4	31.68	.4	30.53
.5	33.92	.5	32.75	.5	31.56	.5	30.41
.6	33.80	.6	32.63	.6	31.44	.6	30.30
.7	33.68	.7	32.51	.7	31.33	.7	30.19
.8	33.56	.8	32.39	.8	31.22	.8	30.08
.9	33.46	.9	32.27	.9	31.12	.9	29.98

27.8
25.23
257
125
266
2785

3184 = 5.69
625 / 11500
625
5250
5000
2500

30 × 2785
3
569 / 8355 | 1469
569
2665
2276
3890
3414
4760

1469
18
11752
1469
26,442