

SCANTLING RULES FOR SANCTIONED CLASSES

SECTION I

80 GENERAL RULES APPLYING TO CLASSES C AND X.

For General Rules applying to Classes Club 420, A, E, I-20, Melges 17, MC, and IOD, see Sections II, III, IV, V, VIII, IX, and X respectively, herein.

80.1 NOT USED

80.2 PROCEDURE FOR BUILDER SEEKING CERTIFICATE OF MEASUREMENT

Any boat builder seeking a certificate of measurement in any ILYA class for which the ILYA holds the digital shapes shall follow the following procedure: Send a written request to build specific classes to the ILYA Secretary a minimum of 90 days before a regularly scheduled ILYA Board of Directors meeting. This request should include the following information:

- a. Classes that they wish to build and digital shapes they request from ILYA.
- b. Evidence that the builder is capable of using the digital shapes and then building to our scantlings.
 1. Prospective builder has access/relationship with provider of laser interferometer equipment.
 2. Prospective builder commits to use a 5-axis milling machine to produce a plug without alteration of the digital shape.
 3. Prospective builder has access/relationship with provider of spars that meet the extrusion shapes and tolerances defined by the scantlings.

Upon receipt of the request the ILYA Secretary will schedule a meeting between the proposed builder, the Class Committee(s) of the appropriate class(es), and the ILYA Executive Committee to allow the proposed builder to present his or her request in detail. After this meeting the request will be presented to the ILYA Board of Directors. If the builder is found to meet the criteria in item b above, and pending payment of access fees, if any, and absent any reason for the Board to deny it, the Board will provide the digital data to the builder.

80.3 FEES RELATED TO BUILDER SEEKING CERTIFICATE OF MEASUREMENT

a. Classes C and X

The fee for access to the digital shape of Class C or Class X shall be \$5,000. The Class X measurements held by the ILYA are measurements of a boat. Prior to use, the class X measurements will be modified to back out the shrinkage that occurs when a plug is made into a mold, and the shrinkage that occurs when a mold is used to build a boat. This modified set of measurements will be the set that is used to verify the dimensions of any X plug that is manufactured.

- b. Subsequent fees payable by the prospective builder may include the fee for digitizing the plug, the fee for comparing the data obtained from the plug to the original data and determining whether the data was within the allowable tolerances. In addition the ILYA may charge a fee for measuring the deck, spars, rudder, etc. from the first boat produced.

80.4 BUILDER REQUIREMENTS FOR CLASSES C AND X

The plug for any new mold shall be an existing plug, or can be a manufactured plug. The tolerance of the plug ready to use to make a mold shall be $\pm 2.5\text{mm}$. In addition, the length and width of the plug at their maximum dimensions must not change more than 2.5mm. When the plug is manufactured, it shall be measured using a laser interferometer (or a like technology which has been approved by the ILYA rules committee Chairperson). Because temperature does affect the size of a fiberglass structure, the plug shall be measured at $75^{\circ}\text{F} \pm 5^{\circ}\text{F}$. This temperature shall be verified by measuring the surface temperature at least once in every nine square feet surface. This measurement must be within the specified temperature every hour for 4 hours prior to measuring the plug. The digital image from this measuring will be compared to the original measurement held by the ILYA Executive Secretary to insure that it falls within the tolerance approved above. Approval to use the plug must be granted by the rules committee prior to using the plug to build a mold. If any point on the plug is not within the tolerance specified, the plug must be re-worked then re-measured to get approval to use to build a mold.

SCANTLING RULES-GENERAL

When the first boat is produced, representative spars, rigging, bilgeboards or centerboard, rudder and any other relevant equipment to be furnished which is covered by these rules will be submitted to the ILYA Official Measurer for approval in accordance with the ILYA scantling and measurement rules. The party presenting the item(s) for measurement (i.e. the boat manufacturer) will be responsible for all costs associated with the measurements and comparisons.

80.5 NOT USED

80.6 MEASUREMENTS AND MEASURING POINTS DEFINED

a. HULL

1. The hull moulding or rub rail shall not be considered as part of the hull dimensions. Overall widths, length, etc. are taken to the outside surface hull material.
2. The moulded depth is defined as the vertical distance at the deepest section taken from the bottom on the outside of the boat to the top of the deck at the gunwale, at the highest point of the sheer.

b. SAILS, SPARS, AND RIGGING

1. All measurement bands shall be one inch wide and of contrasting color to the spars. The band shall completely encircle the spars and elsewhere, such as on deck, shall be 12" long or extended 6" beyond obscuring equipment. All bands must be in place before making application for certificate of measurement to the official measurer.
2. All measurement bands must be permanently affixed, either painted, permanent decals, or tape of sufficient quality, but may not be adjustable. No boat shall be measured if any of the required mast, boom, or deck bands are missing or mutilated.
3. The foreside of a spar or its extension or aft side of a spar or its extension, wherever mentioned, shall be interpreted to be the fair profile of the spar or the extension of such profile. Measurement of mast depth fore and aft is taken at the deepest point from the foremost point to the aft edge of the sail tunnel or track or its extension.
4. The mastline shall be (a) the aft side of the mast or its extension or (b) the aft side of the sail tunnel or track or its extension, whichever is farther aft.
5. The peak shall be the bottom of the black band nearest the top of the mast.
6. All measurements used for computation of the sail areas shall be expressed in feet and tenths of feet; all areas in square feet and tenths of square feet.
7. Not used.
8. Not used.
9. The outside edge of the leach of the mainsail shall be cut to a fair curve. A "fair curve" shall be a curve of relatively constant turn in one direction. A series of approximately straight lines connecting the clew, the ends of the batten pockets and the head which result in a constant turn in one direction only shall be considered a "fair curve".
10. Methods of measuring girth: Girths of mainsails and jibs are measured with the fair lay of the cloth between two points found as follows:
 1. First point is the mid point of the luff found by bringing tack and head together, the mid fold being the first point.
 2. Second point is the mid point of the leach, found by bringing head and clew together, the mid fold being the second point.
 3. Additional girths are found by bringing the tack and head to the mid point creating a quarter fold point.
 4. A vertical girth measurement is taken from the head of the sail to the mid point of the foot found by bringing the tack and clew together.
 5. The girth measurement is taken from the inside edge of the bolt rope to the outside edge of the cloth at the leach.

11. All headboards, in all types of sails where allowed, will be measured in accordance with the manner in which they are carried, both horizontally and vertically, at their maximum dimensions. The headboard may not be farther than 1" from the inside edge of the bolt-rope. (See Diagram No. 1)
 12. The luff of the jib shall be measured from the end of the sail at the tack to the end of the sail at the head. The foot of the jib shall be measured from the end of the sail, or its extension's intersection with the luff, or its extension to the end of the sail at the clew. The leach shall be measured from the end of the sail at the head to the end of the sail at the clew. All jib measurements are to be made with a tension of five pounds applied between the points of measurement. No cunningham holes, shock cord, or similar devices are allowed on jibs.
 13. Luff wire of jibs in all classes shall be measured between center of cringle at head and center of cringle at tack.
 14. Where Mainsail leach measurements are stipulated, the leach shall be measured from the end of the sail at the inside edge of the boltrope or its extension at the head to the boltrope at the clew. This measurement shall be made with a tension of five pounds and applied between points of measurement.
 15. Not used.
- 80.7 LIMITATIONS UPON HULL CONSTRUCTION
- a. ILYA sanctioned class yachts must be so constructed that, on a cross-section athwartships taken at any point, no part of the hull shall be sensibly below the center part of the hull.
 - b. Hull dimensions, scantlings and equipment shall be in accordance with the requirements set for the class.
- 80.8 NOT USED
- 80.9 LIMITATIONS UPON SPARS & RIGGING
- All spars shall be constructed of materials as specified for such sanctioned class.
- 80.10 LIMITATIONS UPON WEIGHT OF YACHTS
- a. At the Championship Regattas each yacht entered must be weighed at the scheduled time of launching on the official scale provided by the association. However, a yacht may be weighed late prior to one hour before the time of the first scheduled race for an additional fee of \$25 provided official weighing facilities are still available, and provided further that if the cost of holding these facilities exceeds \$25, the total amount of the additional expense shall be apportioned equitably among the late entrants. The late weighing option can be used only in emergency and with the permission of the Head Judge. Class A Scows must be weighed once on an ILYA scale and certified on their Form 1. Skippers shall sign weight affidavits in years following the initial weighing.
 - b. The host club shall provide a launching and weighing committee which will check and weigh those entries deemed appropriate to be weighed under the supervision of the ILYA Rules Committee or its appointed deputies. The yacht and its equipment, as enumerated below, or specified by Class Rules for Classes E and I-20 will be checked and weighed at the time of being hoisted from its trailer for launching according to procedures established by the ILYA Rules Committee. An official certificate of weight will be made available to the skipper who in turn will present same to the official Registration Clerk for his or her class as part of his or her credentials for proper entry.
 - c. Yachts of the "home fleet" shall be made available for weighing by being picked out of the water at the launching site by the launching crane prior to the rush of incoming visiting yachts.
 - d. If the person or persons appointed by the ILYA to supervise the weighing of yachts at a regatta determine with approval of the ILYA Measurer or Measurers at hand, that, because of bad weather or other cause, an accurate weight cannot be obtained, they may require a yacht to carry the same amount of corrector weight as it was required to carry at its last official weighing.
 - e. Builders shall weigh and add lead to new boats to bring them up to the required minimum weight in each class. Builders may use scales provided by the ILYA. A two pound tolerance per 500 pounds will be allowed.

SCANTLING RULES-GENERAL

80.11 LIMITATIONS UPON SAILS

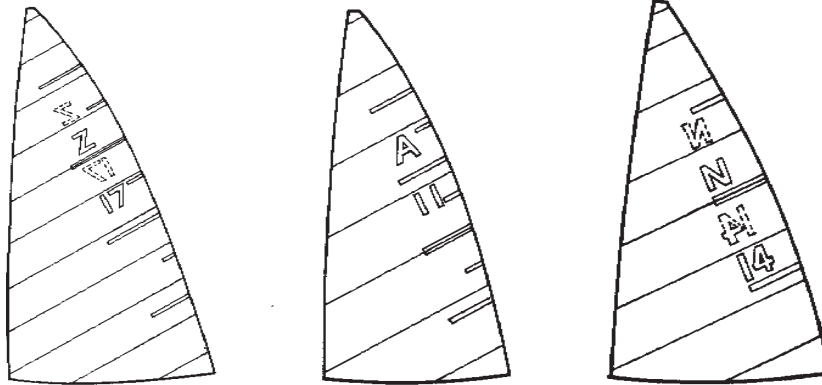
- a. When mainsails are measured, all tensioning devices (cunningham holes, cords, etc.) must be relaxed. With a fair lay of the cloth, the luff may not exceed the hoist "A" dimension, the foot may not exceed the boom "B" dimension, in addition to the required leach and girth dimensions. The tack shall be where the luff and foot or their extensions meet.
- b. Serialization of sails by the manufacturer shall be mandatory on the head patches of all sails starting in 1983 and thereafter. The serial number shall also identify the manufacturer.

80.12 RACING NUMBERS, CLUB DESIGNATORS, CLASS EMBLEMS & BOAT NAMES

- a. A yacht's working sails shall carry no markings other than those provided in this rule and as provided in in the *Racing Rules of Sailing*.
- b. Each yacht must carry on both sides of her mainsail a letter, representing the Member Club from which she is entered, as well as her correct assigned racing number. Any whole integer between 0-999 is allowed. The integer '0' may be represented by '0', '00', or '000;' no other integers shall include leading zeros. The letter and number shall be placed on the sails in accordance with the official sail-letters placement diagram. Sails which have more than one club designator letter shall show the designator letters closely side by side on the same plane. An emblem, letter, or number denoting the class to which the yacht belongs may be affixed, as provided in the Class Scantlings.
- c. Letters and numbers must be either all blue, red, green, pink or black of a sans serif, non-italic, non-script font type style attached directly to the sail by sewing and/or adhesive. All sails shall have letters and numbers of the same color with a minimum stroke width of 2.5" and a maximum stroke width of 3.5".
- d. Letters and numbers shall be on both sides of the sail and shall not be back to back except where letters and numbers show identically the same on both sides of the sail. Letters and numbers when not back to back shall be higher on the starboard side of the sail.
- e. Letters shall be placed between the top and first lower battens and numbers between the first lower and second lower battens as shown, with approximately even space vertically between them and according to the following specifications:
Height of letters and numbers: Class C, 18-20"; Class X, 14-16".
Centerline of letters and numbers will be located aft the leading edge of the first lower batten as follows, plus or minus 2": Class C, 36"; Class X, 8".
Vertical spacing between letters and numbers will be no less than: Class C, 10"; Class X, 8".
- f. A skipper's home lake yacht club burgee and or the ILYA burgee may be displayed on the mainsails of Class C or Class X. The burgee(s) should be located within a 5 foot radius of the clew of the mainsail. Each burgee should fit within a 12" X 18" rectangle and must be flown horizontally. Other advertising on Class C and X hulls or sails is not allowed unless the advertising is regatta specific, approved by the organizing authority, and benefitting the entire fleet.
- g. Each yacht shall have her own letter and number horizontally placed on both sides of the after deck at least ten (10) inches high, facing outward in solid color contrasting to the deck color. These letters and numbers may be marked directly on the deck, or in letters securely affixed to the hull, or on a separate piece of canvas or plate securely fastened to the deck.
- h. Each yacht shall carry a name on both sides or on its transom in addition to a number on its sail. The name shall either be painted on, or be on a plate or in letters securely affixed to the hull. The letters shall be at least three (3") inches in height, exclusive of shading, with proportional width.
- i. Class C yachts displaying a commercial company name as a boat name shall not be penalized under advertising restrictions if such name was the name for that helmsman's yacht prior to 2013.
- j. No yacht shall be disqualified for violation of a rule in this section except after individual warning communicated to her and reasonable opportunity to correct the violation.

SCANTLING RULES-GENERAL

UNIFORM SAIL LETTERS PLACEMENT DIAGRAMS—EXAMPLES (NOT TO SCALE)



SECTION II

81 Specifications for Club 420

All yachts must comply with the Club 420 Association class sail measurement, and hull measurement rules. These rules are available from the Club 420 Association at the following address:

Club 420 Association
PO Box 50
North Kingstown, RI 02852
<http://www.club420.org>
info@club420.org

SECTION III

82 Specifications for Class A

All yachts must comply with the class, sail measurement, and hull measurement rules of the National Class A Scow Association (NCASA). These rules are available from the NCASA at the following address:

National Class A Scow Association (NCASA)
W330 S3000 CR G
Dousman, WI 53118
Commodore Lee Alnes
(651) 341-5871
leealnes@comcast.net
www.ascow.org

SECTION IV

83 Specifications for Class E

All yachts must comply with the class, sail measurement, and hull measurement rules of the National Class E Scow Association (NCESA). These rules are available from the NCESA at the following address:

NCESA
Secretary Lon Schoor
P.O. Box 3022
Madison, WI 53704-0022
(608) 347-1480
lon@E-scow.org
www.E-Scow.org

SECTION V

84 Specifications for Class Inland 20

All yachts must comply with the class, sail measurement, and hull measurement rules of the National Inland 20 Scow Sailing Association (NISSA). These rules are available from the NISSA at the following address:

Secretary/Treasurer Pat Fleming
4760 North Arm Drive
Orono, MN 55364
www.inland20.org
Patrick.Fleming@MCHSI.com

SCANTLING RULES-CLASS C

85 Specifications for Class C

85.1 GENERAL

- a. Class C shall be guided by the following statement in determining the eligibility for use of any equipment, hardware, rigging, or sail not specifically referred to in the following specifications. Any question as to whether or not said equipment, hardware, rigging, or sail is proper shall be resolved in the negative thereby making it illegal to use unless prior written approval of the Class C Committee is obtained.
- b. Requirements - A yacht, its sails, spars and all equipment, must conform strictly throughout with respect to design, dimensions, construction and material to the official plans and specifications of the ILYA as well as all other Rules and Regulations governing participating in ILYA Sanctioned Events.
- c. Options - Nothing is optional in these specifications unless the word "optional" appears in the article, and then only within the limitations described, in which case that which is mentioned is that which is recommended from both points of safety and speed. Use of a substitute, even where allowed, is always at the user's risk. Plywood, veneer board, laminated woods, pressed wood, fibre board, composition board, laminated plastic materials, balsa, cork, or woods without sufficient strength structurally, or to hold fastenings, are not to be considered as options unless specifically mentioned as such.
- d. Exotic Materials - The use of fibers other than glass is prohibited in any part of the hull, spars, rigging, boards, rudders, and related equipment. Core materials that are presently accepted are Balsa, PVC, Airex, Klegecell, Core Cell and Urethane. The intent of this statement is to ban the use of Kevlar, Carbon Fibre, Hexcell, and other similar reinforcing material until more is known about how they affect the Classes. In this connection it is hoped that some tests will be conducted, and if it is found that such material could result in a cheaper or longer lasting (but not faster) boat, then the ban would be lifted as appropriate. The tiller and tiller extension are exempt from this rule, thus allowing any material to be used for the tiller and/or the tiller extension.

85.2 HULL

- a. General. The shape of the hull of yachts built after October 18, 2003 shall be in accordance with the digitized C scow shape held by the ILYA Executive Secretary. The allowable +/- tolerances for this digital shape shall be 10 mm. Any hull previously built from a fiberglass hull mold in existence prior to October 18, 2003 shall be considered qualified.
- b. A builder must receive permission from the ILYA Board of Directors to produce a new mold, or modify or rebuild an existing certified hull mold. The present mold known as the Melges 2008 is certified. Any outside party may produce a production mold only with the permission of the ILYA.
- c. Crown of deck—7" maximum
- d. Hull thickness—3/8" minimum*
- e. Deck thickness—3/8" minimum
- f. Materials permitted— fiberglass; polyester resin. In yachts built after October 10, 1980, aluminum shall be permitted only at stress points such as chainplates, bow castings, rudder, gudgeons, G-strings, etc., but not as interior framing of structure.
- g. If any method of construction other than the accepted standard fiberglass construction is desired, the proposed method of construction shall be submitted in advance in writing to the C class committee. The proposal shall be submitted by September 1 of the year before the first year in which a yacht constructed by the proposed method will be entered in a sanctioned event. The class committee shall make a recommendation on the request in writing to the Rules Committee

which shall have the authority to approve or disapprove. The decision by the Rules Committee shall be communicated in writing with copies provided to the class committee chairperson and the ILYA Measurer. Builders receiving approval under this paragraph must also comply with the builder requirements in Rule 80.1.

- h. All hulls shall be stamped or identified in a permanent manner as to year built, builder and hull number. Any boat completed and/or delivered prior to October 1st must be stamped with the date of that calendar year. (The purpose of this is to identify any hull from all other hulls.)
- i. The hull molding or the rub rail shall not, measured horizontally at the deck level, exceed 2 1/2 inches, and measured vertically exceed 1 1/2 inches. All measurements shall originate at the outermost point of the hull. The intent of this rule is to prohibit adding to the effective hull width.
- j. A lifting bridle shall be included by the builders on all boats built in 1967 and after. All boats competing in ILYA sanctioned events must have a lifting bridle.

85.3 BILGE BOARD BOXES

- a. Maximum width of bilge board slots at hull—3/4".
- b. Bilge board slot length at hull—66" maximum; no minimum.
- c. Bilge board slot distance at hull from center line—27" ± 2" front; 27" ± 2" back.
- d. Bilge board slot distance at deck from center line—20" ± 2" front; 20" ± 2" back.
- e. Bilge board box pivot pin position—121" ± 3" from outside the transom measured parallel to center line.
- f. Multiple pin positions shall be permitted provided they fall within the position measurements given for the bilge board box pivot pin.
- g. Gaskets are prohibited.

85.4 BILGE BOARDS

- a. Number required—two (2).
- b. Extension beyond hull—39" Maximum when measured with the leading edge of the board perpendicular to the hull.
- c. Material—Aluminum alloy plate 6061-T6 or equivalent tensile strength.
- d. Thickness: .250 plus or minus .013.
- e. Width—19" +2"-1".
- f. Sectional shape—flat to within four inches of the edges with leading and trailing edges straight and all edges rounded to no less than 1/32" radius. *Must conform to attached drawing. Boards produced prior to Nov 6, 2016 are allowed if unchanged in the boats installed prior to Nov 6.
- g. Bilge boards may be anodized. Type III anodizing, or hard coating, is not allowed.
- h. Bilge boards shall be so constructed that they can be wholly housed without leaving any projection below the hull and shall be so hung that in the event of the yacht capsizing, the boards cannot fall from their boxes. Bilge boards shall not be loaded except to overcome flotation

85.5 RUDDER

- a. Number allowed—one (1).
- b. Extension below hull—28" maximum when measured at the transom in a vertical plane. Extension behind hull—29" maximum when measured at the transom in a horizontal plane.
- c. Material—Aluminum alloy plate 6061-T6 or equivalent tensile strength.
- d. Thickness—1/4" minimum; 5/16" maximum, 3/16" on thru hull rudders.
- e. Sectional shape—must conform to one of the attached drawings. (Melges Drawing & SeaFinn to submit up to 2 (two) drawings that fit rules prior to November 6, 2016).
- f. Rudder post location—mounted on the transom.
- g. Rudders produced prior to November 6, 2016 are allowed.
- h. Rudder may be anodized. Type III anodizing, or hard coating, is not allowed.
- i. All drawings will be considered public domain without intellectual property protection.

SCANTLING RULES-CLASS C

85.6 FLOTATION

It is solely the responsibility of the builder to design and provide suitable and adequate flotation in each yacht. Any flotation provided by the builder shall not be removed. Minimum amounts of supplemental foam flotation shall be installed by the builders beginning in model year 1988 and through 1993 as follows: 10 cubic feet. Minimum amounts of supplemental foam flotation shall be attached permanently (not with shock cord) to the hull and or deck by the builders beginning in model year 1994 as follows: 13 cubic feet. Cubitainers or foam may be used, but must be permanently attached or trapped in an enclosed area of the boat.

85.7 BOAT WEIGHT

- a. 650 pounds minimum.
- b. Hull weight in is measured less the sails but shall include mast, boom, standing and running rigging, boards and their lines, rudders, tillers, all hull fittings and flotation equipment excluding life jackets and throwable life-saving devices (PFD-IV). The boat must be bailed completely dry. Any deliberate wetting of the hull, lines, or rigging or concealment of improper weight shall be considered a gross infringement of the rules and shall be penalized under The Racing Rules of Sailing, Rule 69. Drawers shall be removed and stowage space shall be empty.
 1. If the hull and its equipment weighs less than the minimum weight for the class, additional corrector weight, preferably sheet or block lead, must be added and permanently affixed over the keel line and located not more than 4" below deck, 10" either side of centerline, and within 14" of mastline, to bring the all up weight to the minimum weight for the class.
 2. Glassing in lead or any other type of weight, to bring boat up to minimum weight, or adding extra glass not otherwise required structurally, including any glass that causes any portion of the hull to deviate from uniform or normal thickness, is illegal.
- c. A hull and its equipment, as enumerated above, if built to a weight lighter than 25 lbs will be disallowed from competing in sanctioned events.
- d. Builders shall weigh and add lead to new boats to bring them up to the required minimum weight in each class. Builders may use scales provided by the ILYA. A two pound tolerance per 500 pounds will be allowed.

85.8 CREW WEIGHT

- a. No maximum or minimum.
- b. Minimum of two people.

85.9 PERMISSIBLE RIG

- a. Cat rigged, one mainsail.
- b. Type—Triangular only.

85.10 MAINSAIL

- a. A = Hoist—27'.
- b. B = Boom—16'.
- c. Leach—30' 4".
- d. Girths—Top, 6' 2"; Mid, 10' 7 7/8"; Bottom, 13' 11"; Vertical, 28' 3 3/8".
- e. Battens shall divide the after leach in approximately equal parts. To prevent the leach from fluttering, it shall be permissible to use no more than three auxiliary battens each located approximately midway between main battens. No batten shall extend through any mainsail, and no contrivance other than regulation battens shall be used to hold out the leach:

Top—44" maximum	3rd Lower—44" maximum
1st Lower—64" maximum	Auxiliary—14", 3 max.
2nd Lower—64" maximum	
- f. Headboard—6" maximum.
- g. Windows—unlimited as to number, size, or placement.

- h. A patch is defined as 2-7 layers of sail cloth which cannot extend beyond the existing limits of the rules.
- i. Reinforcing at head, tack, and clew—reinforcement having the effect of stiffening the sail shall be permitted only within a 48" radius at the clew, and a 48" radius at the head and tack. Reinforcement patches shall be of a maximum weight of 6 1/2 ounces.
- j. A seam is defined as an overlap of two parallel layers of cloth not more than one inch wide.
- k. No sail shall be hoisted higher than the lower edge of the upper black band on the mast, nor carried lower than the upper edge of the lower black measurement band. No part of the sail shall be carried aft of the forward edge of the black measurement band on the outer end of the boom. The bottom of the tunnel or tube extension (boom line), may not be carried lower than the upper edge of the lower black measurement mast band. All mainsails must have a single tack and be pinned within 1' aft of mastline.
- l. Cringles shall not be over 1 1/2 inches outside diameter.
- m. No fabric other than soft dacron or yarn tempered dacron shall be used in sanctioned ILYA events, No other special finishes will be allowed. 3.8 oz. minimum.
- n. A maximum of two flutter patches on the leach of a sail, consisting of two layers of sail cloth, may be installed provided they fit within a 7" square.

85.11 SPARS

a. Mast

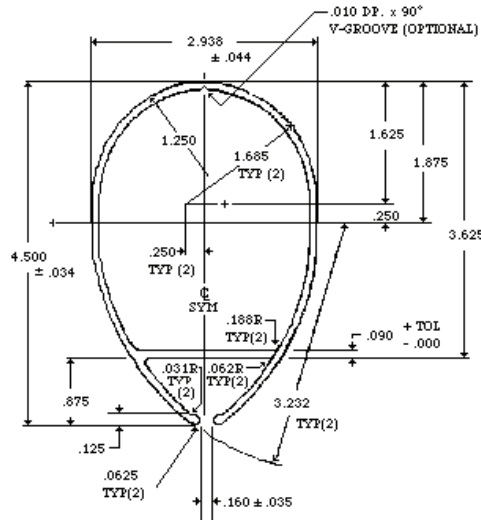
- 1. Peak from deck—28' 6" maximum.
- 2. Stepping position—on deck, swiveling only.
- 3. Step location from transom—177" plus or minus 2". No special rigging to permit the step location to be changed while a yacht is underway shall be permitted.
- 4. No special rigging for bending, bending due to special rigging or bending prevention or rotation or rotation prevention shall be permitted.
- 5. Material and specifications:
 - a. Aluminum is the only permitted material.
 - b. The heat treat and wall thickness of the extruded section shall be uniform. The section shall not be cut or notched in any way to facilitate bending. Section must be sealed.
 - c. Alloy specifications:
 - 1. 6061-T6 or approved equal.
 - 2. Aluminum content 85% minimum.
 - 3. Minimum weight per foot—1.25 lb.
 - d. Sectional shape—straight non-tapered only.
 - 1. Shall be constructed with a continuous fixed groove integral with the spar section to hold the sail luff rope.
 - 2. The mast line shall be straight both fore and aft and athwartships when under zero applied pressure. Tolerance—1" aft bend due to permanent set.
 - 3. Prior approval in writing shall be obtained from the C Committee and ILYA Board of Directors before any other mast section may be used. Exact specifications and a one foot sample of any intended extrusion should be submitted to the chairperson at least 60 days prior to the date on which approval is required.

SCANTLING RULES-CLASS C

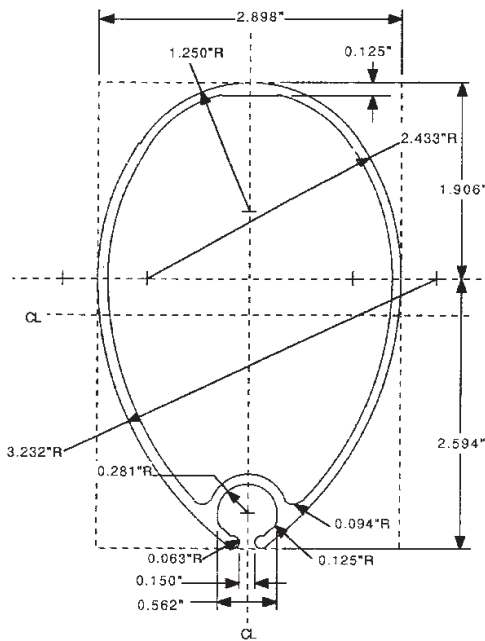
6. All masts built in 1976 and thereafter shall be of aluminum material in accordance with the specifications below:

UNMARKED WALL:
 Starting in 1994: $.095 \pm .010$
 Prior to 1994: $.090 \pm .010$

STANDARD ALUMINUM ASSOCIATION
 TOLERANCES APPLY UNLESS
 SPECIFIED OTHERWISE



7. All masts built after January 31, 1998, shall be of aluminum material in accordance with the specifications below:



0.005R indent on 3 centerlines fairing radii as required
 0.090" nominal wall thickness
 6061-T6 aluminum

Overall section dimensions: 4.500" x 2.898"

Scale 1:1
 Wt/Ft = 1.26 lbs.

Designed by H. A. Brereton, 20 May, 1997

This design remains the property of H. A. Brereton and an unlimited license is granted to the National Class C Scow Association and Melges Boat Works.

- a. Length of tube: $28'6" \pm 0.1"$
- b. Unmarked wall: $0.090" - 0.005 + 0.015$
- c. Weight per foot:
 1. Minimum: 1.25 pounds per foot.
 2. Maximum: 1.40 pounds per foot.

- b. Boom
 - 1. Materials of construction—aluminum
 - a. Alloy specifications:
 - 1. Type—6061-T6 or approved equal.
 - 2. Aluminum content—85% minimum.
 - 3. Wall thickness 0.060" minimum; maximum 0.100".
 - 4. Weight per running foot—minimum, 0.58 lbs; maximum 1.4 lbs.
 - 2. Shape: Optional uniform cross section extrusion with continuous isolated mainsail foot rope area. No taper or chamfer allowed except beyond black band at boom end. Any device used for stiffening the boom is considered a part of the cross-section and must be uniform throughout the length of the boom.
 - 1. Width—3" maximum; 2" minimum
 - 2. Depth—4" maximum; 3" minimum
 - 3. Length—6" maximum beyond the black band.
 - 4. Rigging—optional except aluminum extrusion to be open at the outboard end.
 - 5. Track or other interruptions of the uniform cross sectional area for rigging adjustments longer than two (2) feet for rear traveler or vang adjustments, or longer than three (3) feet for midboom adjustments are potentially illegal, and any excess in length must be proven to be required for rigging adjustment only and can in no way be affixed so as to cause additional stiffness to the boom.

85.12 STANDING RIGGING

- a. Forestay
 - 1. Number permitted—one. Fastened externally on mast.
 - 2. Material—galvanized or stainless steel 1 x 19 aircraft cable, minimum thickness 1/8"
 - 3. Devices for adjustment of length of forestay permitted.
- b. Sidestays
 - 1. Number permitted—two. Fastened externally on mast.
 - 2. Material—galvanized or stainless steel 1 x 19 aircraft cable, minimum thickness 1/8".
 - 3. Sidestay chainplates location 163" ± 2" measured from a straight line extension of the transom.
 - 4. Turnbuckles and adjustable tubes may be fitted at the lower end of each sidestay which must be attached to a fixed non-movable chain plate. Devices used to pull a mast to windward are not permitted.
- c. Backstays
 - 1. Number permitted—two. Fastened externally on mast.
 - 2. Materials - galvanized or stainless steel 1 x 19 aircraft cable minimum thickness 1/8", or other materials with minimum strength of 1800 pounds and minimum thickness 1/8".
 - 3. Backstay eye location measured from the mast step along the deck center line to a point where a line drawn between the two backstay eyes intersects the deck center line—93" ± 6".
 - 4. Permanent backstays or boomkins—not permitted.
- d. Jackstays
 - 1. Number permitted—two. Fastened externally on mast.
 - 2. Materials—galvanized or stainless steel cable.
 - 3. Lower mounting position—turnbuckles and adjustable tubes may be fitted at the lower end of each jackstay which must be attached to the mast at or within 6" of the base of the mast. No remote control adjusting device of any kind will be allowed.
- e. Spreaders
 - 1. Number of spreaders—two sets.
 - 2. Location of top spreader set—13' 0" ± 9" from peak.
 - 3. Location of bottom spreader set—20' 0" ± 9" from peak.
 - 4. Spreader length—10" minimum; 12" maximum.

SCANTLING RULES-CLASS C

- f. Tang
 1. Number permitted—one. Must be external.
 2. Tang location from peak of mast to point where projection of the forestay first intersects mast - 6' 5" plus or minus 1".
 3. Tang Vertical Length - 4" minimum—8" maximum.
- g. Halyard on aluminum mast must be external of mast and sail track.

85.14 LIMITATIONS ON HIKING AND BALLAST

- a. Hiking straps, if used, must be fastened below the deckline at two fixed points only, one of which is on the centerline. Any device to permit adjustment of the hiking straps must be located at one or both of these two fixed points, but must not permit adjustment while hiking.
- b. No yacht may use any device to simulate the effect of a trapeze or outrigger for the purpose of carrying or assisting in carrying live ballast outboard to prevent or promote heeling of a yacht.
- c. The helmsperson and all members of the crew must be in contact with the hull at all times, except while making temporary repairs or in case of accident.
- d. Any use of sidestays or backstays to assist in carrying live ballast outboard or to hold onto while leaning outboard is prohibited.

85.15 CLASS EMBLEM

- a. The C scow class emblem is a mainsail from whose luff has been cut the letter 'C', placed above two straight parallel bars whose leading edge is even with the luff and whose trailing edge extends slightly aft of the clew.
- b. When placed on a yacht's mainsail, the class emblem must have a luff of 15 1/2" and a foot of 9 1/2", and the bars must be 1 3/8" wide and 12" long, placed 1" below the foot and 1" apart. The emblem must be placed back-to-back on both sides of the sail, with the tack of the emblem closest to the luff of the sail and 32 3/4" in from the leach, and the foot of the emblem 12 1/2" above and parallel to the top batten pocket. End of bars even with luff of emblem, and extend beyond the leach parallel to foot. Centerline of the emblem 28" from the leach.
- c. A helmsperson who has won the ILYA Championship Regatta may place on his or her sail a red class emblem. A helmsperson who has won the NCSSA championship regatta may place on his or her sail a yellow class emblem. All other helmspersons may only place blue class emblems on their sails.



85.16 CHANGING EQUIPMENT

The bilge boards, rudder, spar, boom, standing rigging, and sails presented by any yacht at the time of registration of any sanctioned event must be used throughout the entire sanctioned event. Damaged equipment, if not repairable during the sanctioned event may be replaced with the permission of the Head Judge provided all substituted equipment meets scantling requirements.

85.17 ELECTRONICS

Devices displaying any data derived and or stored via magnetic compass, count-down timer, or GPS signal are permitted.

SECTION VII

86 Specifications for Class X

86.1 GENERAL

- a. Successful course racing is the result of skillful boat-handling and proper racing tactics executed in a competitive equal or superior boat. The ILYA sanctions Class "X" as a simple, safe yet responsive boat in which the young novice sailor can learn and develop the skills of boat handling and racing tactics.

To encourage his or her concentration on these two basic skills the young novice sailor should not be distracted, and possibly confused, by the competitive need for the sophisticated rigging and equipment so important to the advanced sailor.

The ILYA will be guided by the preceding statement in determining the eligibility for use of any equipment, hardware, or rigging not specifically referred to in the following specifications. Any question as to whether or not said equipment, hardware, or rigging is proper shall be resolved in the negative, thereby making it illegal to use unless prior written approval submitted to the Rules Committee and approved by the Board of Directors is obtained.

- b. Each boat must be constructed and rigged to conform to the official ILYA plans as well as all other Rules and Regulations governing participating in ILYA Sanctioned Events. For the X class per the following scantlings. Manufacturing tolerances of plus or minus 1/2" are permitted for all specifications set forth below except with respect to specifications where maximum and/or minimums are established.
- c. Options - Nothing is optional in these specifications unless the word "optional" appears in the article, and then only within the limitations described, in which case that which is mentioned is that which is recommended from both points of safety and speed. Use of a substitute, even where allowed, is always at the user's risk.
- d. EXOTIC MATERIALS The use of fibers other than glass is prohibited in any part of the hull, spars, rigging, boards, rudders, and related equipment. Core materials that are presently accepted are Balsa, PVC, Airex, Klegecell, Core Cell and Urethane. The intent of this statement is to ban the use of Kevlar, Carbon Fibre, Hexcell, and other similar reinforcing material until more is known about how they affect the Class.

86.2 HULL

- a. General. The shape of the hull of the yachts built after October 18, 2003 shall be in accordance with the digitized X boat shape held by the ILYA Executive Secretary. The allowable +/- tolerances for this digital shape shall be 10 mm. Any hull previously built from a fiberglass hull mold in existence prior to October 18, 2003 shall be considered qualified.
- b. A builder must receive permission from the ILYA Board of Directors to produce a new mold, or modify or rebuild an existing certified hull mold. The present mold known as the Melges 1998 is certified. Any outside party may produce a production mold only with the permission of the ILYA.
- c. Length—16' max., 15'-10" min.
- d. Beam—6'1".
- e. Crown of Deck—5" max., 4" min.
- f. Cockpit—The boat shall be decked over from side to side from a point at least 6' 9 1/4" aft of the bow and from a point 28" forward of the transom. Sidedeck in way of the cockpit shall be at least 17 1/4" wide from outside of cockpit coaming to sheer. Starting in model year 2007, the deck must conform with the 2007 Melges deck mold.

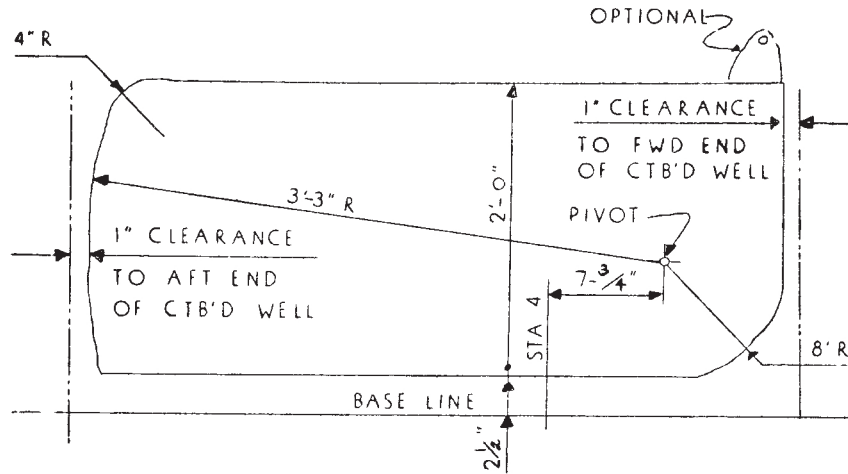
SCANTLING RULES-CLASS X

- g. Safety handles—Each yacht shall be equipped with two handles (DETMAR 121405 Soft White 9 ¼" boat grab rail/handle) securely bolted to the transom in a horizontal position, centered 10" of the keel line to port and to starboard, 7" ± 2" below the sheer line. (See Fig. 3) Unless of a non-ferrous metal, handles must be plated to prevent rusting.
- h. Amidships traveler of thwart piece is not allowed.
- i. Automatic bailers shall be allowed.
- j. Two types of main sheet travelers are allowed. Rod type travelers are allowed on boats built before 2005 and must be fastened to the deck no more than 14" nor less than 9" each side of the boat centerline and no more than 4" ahead of the transom. Rod type travelers must have the main sheet block fixed on the boat's centerline. Boats built after 2004 shall have a bridle traveler that is designed to hold a block for the main sheet on the boat's center line. Bridle travelers must be fastened to the deck no more than 14" nor less than 9" each side of the boat centerline and no more than 4" ahead of the transom. The top of the triangle that determines the sheeting point on the traveler shall be between 6" and 8" above the deck when pulled tight.
- k. Splashboards are optional.
- l. Cleating devices for sheets and board hauls are optional.
- m. Two drain holes measuring between 2.5" and 3" in diameter may be cut in the transom to facilitate drainage in case of a capsize. A means for closing the holes during normal sailing must be provided. This can be shock cord loaded valves, flaps, or sticky-back sailcloth stuck over the holes. All methods should be easy to remove or open. Boats built prior to model year 2007 must have these drain holes installed prior to July 28, 2010.
- n. The slot in the centerboard trunk must be at least 1/2" wide at all points.
- o. If any method of construction other than the accepted standard of fiberglass is desired, the proposed method of construction shall be submitted in advance in writing to X class committee. The X class committee shall make a recommendation on the request in writing to the Rules Committee which shall have the authority to approve or disapprove. The decision by the Rules Committee shall be communicated in writing with copies provided to the X class committee chairperson and the ILYA Measurer. Builders receiving approval under this paragraph must also comply with the builder requirements in Rule 80.1.
- p. All hulls shall be stamped or identified in a permanent manner as to year built, builder and hull number. Any boat completed and/or delivered prior to October 1st must be stamped with the date of that calendar year. (The purpose of this is to identify any hull from all other hulls.)
- q. The hull molding or the rub rail shall not, measured horizontally at the deck level, exceed 2 1/2 inches, and measured vertically exceed 1 1/2 inches. All measurements shall originate at the outermost point of the hull. The intent of this rule is to prohibit adding to the effective hull width.
- r. A lifting bridle shall be included by the builders on all boats. All boats competing in ILYA sanctioned events must have a lifting bridle.

86.3 CENTERBOARD

- a. Board extension beyond hull—2'-7" max.
- b. Centerboards shall be so constructed that they can be wholly housed without leaving any projection below the hull and keel and shall be so hung that in the event of the yacht capsizing, the boards cannot fall from their boxes. Bilge boards shall not be loaded except to overcome flotation.
- c. Aluminum as a material shall be used, 6061-T6 and shall be .3125 in thickness plus or minus .013.
- d. Centerboards must conform to Figure 1. Center Board Shape—Class X.

FIGURE 1. CENTERBOARD SHAPE--CLASS X



- e. No hard coatings of any centerboards and no coatings or treatments of aluminum centerboards are allowed.
- f. Centerboards shall have their edges dulled on a radius of no less than 1/32". The intent of this rule is to prevent the edges of boards from being sharpened to such a degree that they are a safety hazard.

86.4 RUDDER

- a. The rudder shall be of 6061-T6 aluminum and shall be 1/4" thickness to within 1" of the edges. Outline shape and location of portion below keel shall be in accordance with Fig. 2. The rudder shall be mounted in such a manner as to permit removal and as to prevent falling out in case of capsizing.
- b. The maximum length of the tiller from the rudder pintle pivot line to its furthest extremity, excluding any auxiliary tiller shall be no greater than 60 inches. Any other than standard tiller and extension, such as wishbone shape, not allowed. Tiller extension length is unlimited.
- c. Kick up rudders are not allowed.
- d. No hard coatings of any rudders and no coatings or treatments of aluminum rudders are allowed.
- e. Rudders shall have their edges dulled on a radius of no less than 1/32". The intent of this rule is to prevent the edges of rudders from being sharpened to such a degree that they are a safety hazard.

SCANTLING RULES-CLASS X

FIGURE 2. RUDDER SHAPE--CLASS X

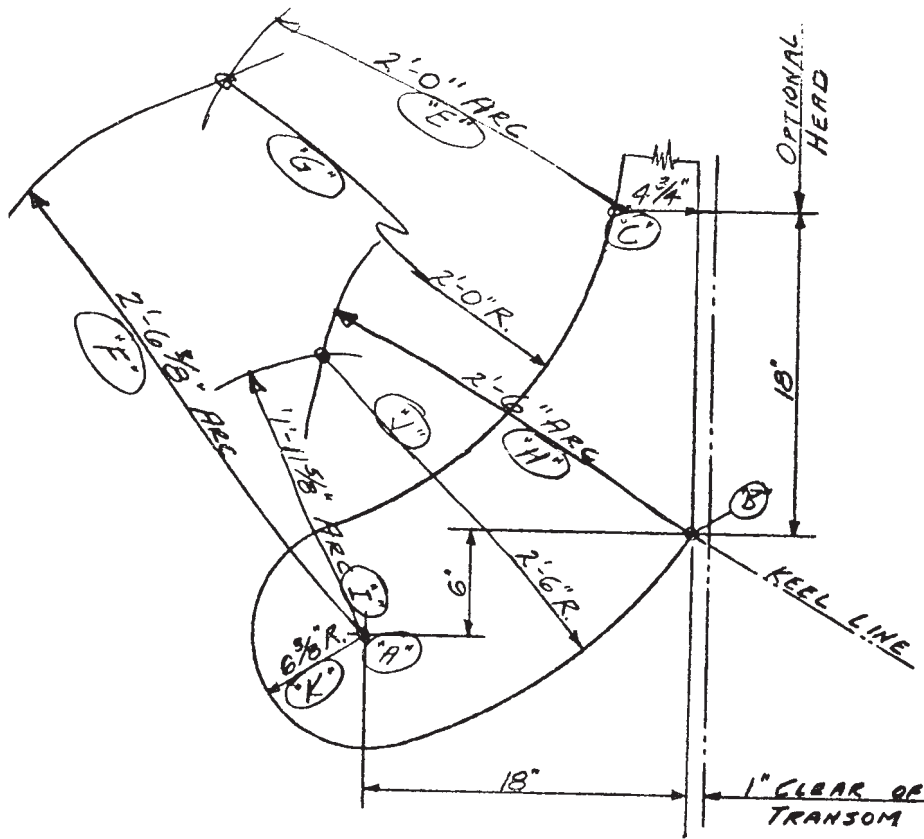
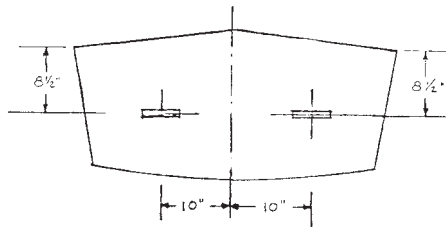


FIGURE 3. LOCATION OF TRANSOM HANDLES--CLASS X



86.5 FLOTATION

- a. It is solely the responsibility of the builder to design and provide suitable and adequate flotation in each yacht. Cubitainers or foam may be used, but must be permanently attached or trapped in an enclosed area of the boat. Any flotation provided by the builder shall not be removed. Minimum amounts of supplemental foam flotation shall be installed by the builders beginning in model year 1988 and through 1993 as follows: 6 cubic feet. Builder installed flotation shall not be removed intentionally, but flotation which has otherwise become ineffective may be replaced with airbags which would support the same weight as the missing flotation. Such airbags must be installed to fixed attachment points using webbing. Minimum amounts of supplemental foam flotation shall be attached permanently (not with shock cord) to the hull and or deck by the builders beginning in model year 1994 as follows: 10 cubic feet. Starting in model year 2007, minimum flotation required is six each unsecured five-gallon cubitainers.

86.6 BOAT WEIGHT

- a. 470 pounds minimum. Maximum 45 pounds corrector weight.
- b. Hull weight is measured less the sails but shall include mast, boom, whisker pole, standing and running rigging, boards and their lines, rudders, tillers, and all hull fittings and flotation equipment excluding life jackets and throwable life-saving devices. The boat must be bailed completely dry. Any deliberate wetting of the hull, lines or rigging or concealment of improper weight shall be considered a gross infringement of the rules and shall be penalized under the Racing Rules of Sailing, Rule 69. Drawers shall be removed and storage spaces shall be empty. Attached bags used for handling whisker poles while racing shall be considered storage spaces.
 1. If the hull and its equipment weighs less than the minimum weight for the class, additional corrector weight, preferably sheet or block lead, must be added and permanently affixed over the keel line and located no more than 4" below deck, 10" either side of center line and within 14' of mast line to bring the all up weight to the minimum for the class.
 2. Glassing in lead or any other type of weight to bring the boat up to minimum weight or adding extra glass not otherwise required structurally, including any glass that causes any portion of the hull to deviate from uniform or normal thickness, is illegal.
- c. A hull and its equipment, as enumerated above, if built to a weight lighter than 425 lbs will be disallowed from competing in sanctioned events.

86.7 CREW WEIGHT

- a. No limitation on weight
- b. A crew of 2 persons minimum required.

86.8 RIG PERMISSIBLE

- a. Sloop rig only.
- b. Type—triangular only. (Marconi)
- c. A whisker pole shall be permitted when running free.
- e. All masts shall be stepped on the deck in such a manner that they will not rotate.

86.9 SAILS PERMISSIBLE - Set at one time.

- a. One mainsail and one jib.

86.10 MAXIMUM MAINSAIL DIMENSIONS

- a. Multiple layers of sailcloth may be used to reinforce each corner of the mainsail, but the number of layers may not exceed seven, and the distance from the corner measurement point may not exceed the following: head—38", clew—30", tack—19". Mainsails and jibs shall be triangular
 - b. A = Hoist—17 feet.
 - c. B = Boom—10 feet.
 - d. Leach—18'-4 7/8".
 - e. Girths—Top, 3'8 1/8"; Mid, 6'6"; Bottom, 8'8"; Vertical, 17'-5 1/2"
 - f. Battens shall divide the after leach in approximately equal parts:
 - Top—24"
 - 1st lower—30"
 - 2nd lower—30"No auxiliary battens permitted.
- No batten shall extend through any mainsail, and no contrivance other than regulation battens shall be used to hold out the leach.

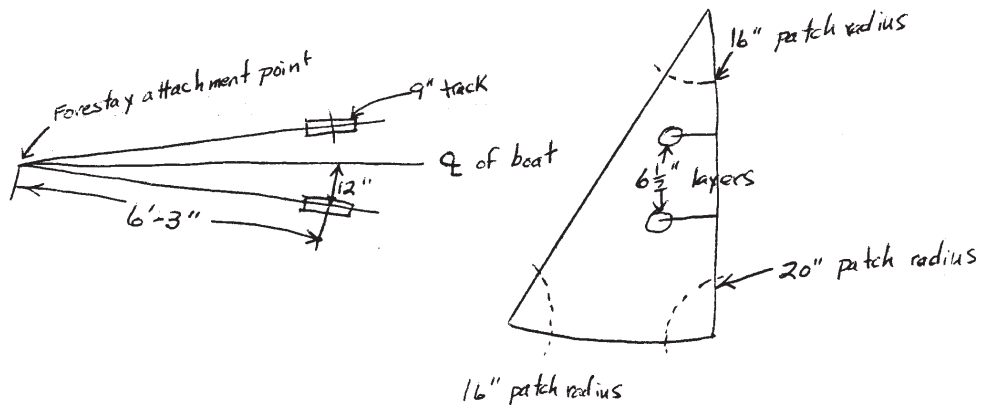
SCANTLING RULES-CLASS X

- g. Headboard—6". Clewboards—(similar to headboard at clew). No type of clewboard is allowed
- h. Windows—Number, size, and placement are unlimited.
- i. Material—Dacron only
- j. Measurements shall be made with 5 pounds of tension applied. A tolerance of no more than a minus 6" is allowed in any of the sail dimensions.
- k. Mainsails may not be loose-footed.
- l. The usual pucker string is allowed.
- m. A single cringle hole, not over 1 Ω inches in diameter at the tack is allowed. A cringle hole for Cunningham-type arrangements is also allowed.
- n. No sail shall be hoisted higher than the lower edge of the upper black band on the mast, nor carried lower than the upper edge of the lower black measurement band. No part of the sail shall be carried aft of the forward edge of the black measurement band on the outer end of the boom. The bottom of the tunnel or tube extension (boom line), may not be carried lower than the upper edge of the lower black measurement mast band. All mainsails must have a single tack and be pinned within 1' aft of mastline
- o. A maximum of two flutter patches on the leach of a sail, consisting of two layers of sail cloth, may be installed, provided they fit within a 7" square.

86.11 MAXIMUM JIB DIMENSIONS

- a. Luff—11 feet.
- b. Foot—5'-10".
- c. Leach—9'-10".
- d. Roach
 - 1) Leach roach—4", measured from a line connecting the forward edge of the head and the aft edge of the clew. The leach between battens may not be convex.
 - 2) Foot round—6", measured from a line connecting the bottom of the tack and the bottom of the clew.
- e. Battens:
 - 1) Upper—12"
 - 2) Lower—18"
 - 3) No other battens shall be permitted.
 - 4) Maximum batten width—3/4"
 - 5) Multiple layers of material used as reinforcement at the end of a batten pocket may not exceed 6-1/2" in any direction.
- f. Headboard—A headboard of aluminum or plastic measuring a maximum of 4" at the top and 5" at the luff is permitted. The total width of sailcloth and headboard at the top may not exceed 4-5/8".
- g. Luff snap hooks or tabs are optional.
- h. A tolerance of minus 4" is allowed in any of these dimensions.
- i. Any cleat to control the adjustable jib luff must be located forward of the leading edge of the cockpit..
- j. Luff wire 11' 3" to 11' 4.25" in length. Diameter and material—1/8" 7x19 302 or 316 stainless steel.
- k. Windows—Number and size are unlimited.
- l. Vertical girth—Limited only by the limit on foot round.
- m. Multiple layers of sailcloth may be used to reinforce each corner of the jib, but may not extend from the measurement point more than 20" from the clew or 16" from the head or tack.
- n. Fabric—Mylar (polyester or Pentex substrate/polyester film laminate) or Dacron weighing at least 3.0 oz. per yard or 130 grams per square meter may be used.
- o. The jib must be flown within the fore-triangle.

FIGURE 4. CLASS X LOOSE-FOOTED JIB



86.12 SPINNAKERS

- a. None.

86.13 SPARS

a. Masts

1. Peak from deck - 18'5" maximum.
2. Material allowed—Aluminum
 - a) The original heat treat and wall thickness of the extruded section shall not be changed nor shall the section be cut or notched in any way to facilitate bending. Section must be sealed.
 - b) Alloy Specifications
 - 1) Type of 6061-T6 or approved equal.
 - 2) Aluminum content 85% minimum.
 - 3) Minimum weight per foot (1.0 lbs.).
3. Sectional Shape (straight nontapered only).
 - a) Shall be constructed with a continuous fixed groove integral with the spar section to hold the sail luff rope.
 - b) Dimensions:
 - 1) Athwartships—2.6" minimum to 2.75" maximum.
 - 2) Fore and Aft (including luff rope groove) 4" minimum to 4.75" maximum.
 - c) The mast line shall be straight both fore and aft and athwartships when under zero applied pressure. Tolerance—1" aft bend due to permanent set.
 - d) Sections Permitted:
 - 1) Johnson
 - 2) Melges
 - e) Prior approval in writing shall be obtained from the "X" Committee and the ILYA Board of Directors before any other mast section may be used. Exact specifications of any intended extrusion should be submitted to the X chairperson at least 60 days prior to the date of the fall ILYA Rules Committee Meeting.
4. The mast line shall be 1'-5" forward of the pivot point of the centerboard.
5. No mast built with the intention of bending due to special rigging to accomplish that purpose shall be permitted
6. Measurement bands—Bottom of top band shall be 18'-5" above the deck and the top of the lower band shall be 17 feet below the bottom of the top band.

SCANTLING RULES-CLASS X

- b. Main Boom
 - 1. Material allowed—Aluminum
 - 2. The boom shall be a maximum of 10'6" long from the aft end to the mast line.
 - 3. Booms shall be non-tapered and non-chamfered, with the pulleys non-adjustable. Shall be 0.9 lb./running foot minimum, .075 nominal wall thicknesses: minimum width 1 1/4", maximum width 2 1/2"; minimum height 2 3/4", maximum height 3 1/2", 6005-T5 or 6061-T6 or approved equal, with aluminum content 85% minimum.
 - 4. Sections Permitted:
 - a) Johnson
 - b) Melges
 - c) Melges MC
 - 5. Boom goosenecks shall be of the swivel type.
 - 6. Measurement Band—The forward side of the measurement band on the boom shall be a maximum of 10 feet aft the mast line.
 - 7. Adjustable boom downhauls shall be optional, shall be only on the mast, and shall not be remote controlled.
 - 8. A boom vang is allowed, provided it runs from the base of the spar to the boom, and consists of self-locking block or cam cleat mounted on one of the blocks and rope. The point of attachment may be no more than 2' aft of the mastline.
- c. Whisker Pole
 - 1. Whisker poles may be used. When in use, the pole ends or pole rigging shall not act as an uphaul or downhaul on the end of the pole attached to the jib.
 - 2. Whisker poles may be aluminum and must float or be rigged in a way that keeps them attached to the boat at all times.
 - 3. Maximum overall length of the pole shall be 7'0" and shall be non-adjustable.

86.14 STANDING RIGGING

- a. Forestay—a forestay shall be fitted from the forward side of the stem head to a point 13 feet above the deck at the center of the forward side of the mast. Forestays shall be of at least 1200 pounds breaking strength. The lower end of the forestay may be fixed, have a chain, a turnbuckle, or a Hy-field type lever to adjust its length and tension. No other device is permitted, and adjustment is not permitted after the preparatory signal.
- b. A sidestay shall be fitted port and starboard from chain plates a minimum of 8 1/2" aft of the mast line to a point 13.00 feet above the deck at the center of the sides of the mast. Sidestays shall be of 1/8" 1x19 steel or stainless steel cable and be of at least 1200 pounds breaking strength each. Turnbuckles or adjustable tubes shall be fitted at the lower end of each sidestay.
- c. No other stays or shrouds shall be fitted.
- d. Main Halyard—The main halyard shall be of wire rope and shall be arranged to permit hoisting of a fixed point. This fixed point should be such that the hoist is at the lower edge of the upper mast measurement band.
- e. Jib Halyard—The jib halyard shall be of wire or other rope with a breaking strength of at least 1200 pounds and shall be arranged to prohibit hoisting the center of the eye in the wire at the tack of the jib more than 4 1/2" above the deck and hoisting the head of the jib above the point where the forestay intersects the mast. The jib halyard may be attached to a track, a hyfield lever, a pulley or balls swaged to the halyard, or a combination of these. Any of these attachment techniques may be tensioned with a block and tackle system with all fittings attached to the mast.
- f. The jib luff wire must be attached to the hull at a point not more than two inches above the deck. Jib must not be pulled beyond the ends of the luff wire.

86.15 RUNNING RIGGING

- a. Main sheet—Mechanical advantage shall occur at the back of the boom otherwise, the location of pulleys are optional.
- b. Jib Sheet— The first lead of the jib sheet on each side of the boat must be attached to a track on the deck. The track must be centered on a point 6'-3" aft of the point where the forestay attaches to the bow and 12" from the centerline of the boat. The track must lie along the line from the bow to the track's center point, so as to form a constant sheeting angle from the boat's centerline. The point of attachment may be adjusted fore and aft along the track, but the track may not be more than 9" long. See figure 4.
- c. Jib Attachment—The tack of the jib shall be attached to the deck a minimum of 5' 11-1/8" forward of the mast line. And not more than 4 1/2" above the deck.
- d. Cunningham-type rigging is allowed, provided that all the rigging is attached to the mast.
- e. Mechanical advantage on the main outhaul is unlimited, provided that all the rigging is affixed to the boom.

86.16 CLASS EMBLEM

A class emblem consisting of a Blue "X" may be displayed on the mainsail, above the lake identifier.

86.17 COMPASSES are not allowed.

86.18 LIMITATIONS ON HIKING AND BALLAST

- a. No yacht may use any device to simulate the effect of a trapeze or outrigger for the purpose of carrying or assisting in carrying live ballast outboard to prevent or promote heeling of a yacht. Hiking straps, if used, must be fastened below the deckline at two fixed points only, one of which is on the centerline.
- b. The helmsperson and all members of the crew must be in contact with the hull at all times, except while making temporary repairs or in case of accident.
- c. Any use of sidestays or backstays to assist in carrying live ballast outboard or to hold onto while leaning outboard is prohibited.

86.18 CHANGING EQUIPMENT

The centerboard, rudder, spar, boom, whisker pole, standing rigging, and sails presented by any yacht at the time of registration of any sanctioned event must be used throughout the entire sanctioned event. Damaged equipment, if not repairable during the sanctioned event may be replaced with the permission of the Head Judge provided all substituted equipment meets scantling requirements.

SECTION VIII

87 Specifications for Melges 17 Class

All yachts must conform with the class, sail measurement, and hull measurement rules of the Melges 17 Class Association. These rules are available from the class at the following address:

Melges 17 Class Association
Andy Burdick
PO Box 1
Zenda, WI 53195
(262) 275-1110 office
E-mail: andy@melges.com
www.melges17.com

SECTION IX

88 Specifications for Class MC

All yachts must conform with the class, sail measurement, and hull measurement rules of the MC Sailing Association. These rules are available from MCSA at the following address:

Chris Craig, Secretary
MC Sailing Association
W257 S10550 Horseshoe Lane
Mukwonago, WI 53149
(810) 449-3443
E-mail: secretary@mcscow.org
www.mcscow.org

SECTION X

89 Specifications for International Optimist Dinghy Class

All yachts must conform with the class, sail measurement, and hull measurement rules of the International Optimist Dinghy Association and the United States Optimist Dinghy Association. These rules are available from the USODA on line at www.usoda.org.

USODA
Genoa Fedyszyn
Executive Director
(609) 510-0798
E-mail: usoda@usoda.org
www.usoda.org