International One Design

Class Rules

The International One Design was commissioned by Cornelius Shields & designed by Bjarne Aas in 1936.
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INTRODUCTION

The International One-Design (IOD) Class was conceived to build, maintain and race a fleet of "One-Design Yachts, distinctive in appearance and performance, using one-design racing, and especially to develop the competitive capacities of both helmsmen and crews under the fairest and most equal conditions."

The design of the International One-Design was inspired by a Six Metre created by the famous Norwegian naval architect and builder Bjarne Aas, in 1935. Cornelius Shields, Sr., impressed by Saga's beauty and handling qualities, initiated action for an entire Class similar in design and appearance, but with a loftier rig and a short shelter and storage cabin. Aas submitted plans and specifications in 1936 and a syndicate was formed.

In late 1936, twenty-five International One-Designs were delivered from Norway and commenced racing on Long Island Sound. Since that time, other fleets have formed in Norway, Sweden, the UK, Bermuda, Canada and the United States. With 12 fleets in 6 countries and over 150 boats actively racing, the International One Design was the first class to be recognized by World Sailing (WS) as a "Classic" One Design Class.

This introduction only provides an informal background and the International One Design Class Rules proper begin on the next page.

IOD rigs and sails are measurement controlled. IOD hulls and hull appendages are measurement controlled, unless built with class-owned or class-approved molds.

IOD hulls, hull appendages, shall only be manufactured by class-approved builders.

Owners and crews should be aware that compliance with rules in Section C is not checked as part of the certification process. Rules regulating the conditions for racing are contained in Section C of these class rules, in Part I of the Equipment Rules of Sailing and in the Racing Rules of Sailing.
International One Design Class Rules

PART I - ADMINISTRATION

These rules are open class rules where anything not specifically prohibited by the class rules is permitted.

Section A - General

A.1 LANGUAGE

A.1.1 The official language of the class is English and in case of dispute over translation the English text shall prevail.

A.1.2 The word “shall” is mandatory and the word “may” is permissive.

A.1.3 Except where used in headings, when a term is printed in “bold” the definition in the ERS applies and when a term is printed in “italics” the definition in the RRS applies.

A.2 ABBREVIATIONS

A.2.1 WS World Sailing
MNA WS Member National Authority
IODWCA International One Design World Class Association
LFA Local Fleet Association
ERS Equipment Rules of Sailing
RRS Racing Rules of Sailing

A.3 AUTHORITIES

A.3.1 The international authority of the class is WS which shall cooperate with the IODWCA in all matters concerning these class rules.

A.3.2 The certification authority is the IODWCA Executive Committee.

A.3.3 Notwithstanding anything contained herein, the certification authority has the authority to withdraw a certificate and shall do so on the request of WS.

A.4 ADMINISTRATION OF THE CLASS

A.4.1 WS has delegated its administrative functions to the IODWCA which shall oversee all administrative functions of the class in accordance with the IODWCA Constitution and By-Laws.

A.5 CLASS RULES CHANGES

A.5.1 At Class Events - see RRS 89.1.d) - WS Regulations 10.5(f) applies. At all other events RRS 87 Applies.

A.6 CLASS RULE AMENDMENTS

A.6.1 Amendments to these class rules are subject to the approval of WS in accordance with WS Regulations.

A.6.2 Any amendments to these rules must be recommended by a majority of the IODWCA Technical Committee and approved by a two-thirds majority of the IODWCA Executive Committee.
A.6.3 Any approved amendment shall not take effect until the beginning of the following calendar year, unless the amendment specifically states otherwise. Notice of any approved amendment(s) shall be immediately circulated to all Fleets and Members.

A.7 CLASS RULE INTERPRETATION

A.7.1 Interpretation of class rules shall be made by the IODWCA in accordance with the WS Regulations.

A.8 INTERNATIONAL CLASS FEE, CLASSS ROYALTY

A.8.1 Approved hull builder shall pay the International Class Fee.

A.8.2 WS shall, after having received the International Class Fee for the hull, send the WS Building Plaque and a measurement form to the licensed hull builder.

A.8.3 New boats shall be required to pay a Royalty Fee to the IODWCA in accordance with the Schedule of Fees.

A.9 SAIL NUMBERS

A.9.1 Sail numbers shall be issued by the LFA. Numbers need not be consecutive.

A.10 HULL CERTIFICATION

A.10.1 A certificate shall record the following information:

A. Class

B. Certification Authority

C. Sail number issued by the LFA

D. Owner

E. Hull identification

F. Builder/Manufacturers details

G. Date of issue of initial certificate

H. Date of issue of certificate

A.11 INITIAL HULL CERTIFICATION

A.11.1 For a certificate to be issued to hull not previously certified:

A. Certification control shall be carried out by the official measurer who shall complete the appropriate documentation.

B. The documentation and certification fee, if required, shall be sent to the certification authority.

C. Upon receipt of a satisfactorily completed documentation and certification fee, if required, the certification authority may issue a certificate.
A.11.2 Hulls must be built by IODWCA-approved builders. Interested builders may apply to the IODWCA for designation as an Approved Builder. Approved commercial builders are as follows (active builders are underlined):

- 1974 - 1976, Fiberglass, Henrik Aas
- 1976 - 1979, Fiberglass, Harry Farmer
- 1990 - 1994, Fiberglass, Silvers Marine, Ltd., Rosneath, Scotland
- 1990 - 1995, Fiberglass, Offshore Glass Co. Portland, ME
- 1997 - 2005, Fiberglass, C. W. Hood Yachts, Marblehead, MA
- 1996 - Present, Fiberglass, Tjörns Yachtservice, Almögrund, Sweden
- 2006 - 2012, Fiberglass, Shaw Yachts, Rockland, ME
- 2009 - Present, Wood, Tern Boatworks, Chester Basin, NS, Canada
- 2016 - Present, Fiberglass, South Shore Marine, Chester Basin, NS, Canada

A.12 VALIDITY OF CERTIFICATE

A.12.1 A hull certificate becomes invalid upon:

A. the change to any items recorded on the hull certificate as required under A.10.
B. the date of expiry,
C. withdrawal by the certification authority,
D. the issue of a new certificate.

A.13 HULL RE-CERTIFICATION

A.13.1 The certification authority may issue a certificate to a previously certified hull:

A. when it is invalidated under A.12.1(a) or (b), after receipt of the old certificate, and certification fee if required.
B. when it is invalidated under A.12.1(c), at its discretion.
C. in other cases, by application of the procedure in A.11.

A.14 RETENTION OF CERTIFICATION DOCUMENTATION

A.14.1 The certification authority shall retain the original documentation upon which the current certificate is based.

A.15 APPLICATION/IMPLEMENTATION
International One Design Class Rules

A.15.1 For a boat to be eligible for racing, it shall comply with the rules in this Section.

A.15.2 Unless significantly altered after May 1, 2014, the hulls of all boats constructed prior to that date need not comply with Section D.2 of these rules.

A.15.3 Substantial renovations or reconstructions after January 1, 2015 shall be allowed to recreate documented original conditions, but otherwise shall comply with these rules.

A.15.4 Questions regarding compliance shall be made in writing to the IODWCA Technical Committee.

A.16 LOCAL FLEET RULES

A.16.1 Individual fleets must request permission from the IODWCA for any changes to the Class Rules. The IODWCA may grant fleet-specific amendments to these rules for local or historical conditions that warrant exception in accordance with the procedures in Section A.6. Fleet-specific amendments to these rules are listed below by Fleet.

A. Bermuda Fleet (BDA) established 1937
   1. All boats in the BDA Fleet shall use the Modern Rig.

B. Chester Fleet (CHE) established 2009
   1. All boats in the CHE Fleet shall use the Modern Rig.

C. Falmouth Fleet (FAL) established 2007
   1. All boats in the FAL Fleet shall use the Modern Rig.

D. Fishers Island Fleet (FIS) established 1988
   1. No changes.

E. Long Island Sound Fleet (LIS) established 1937
   1. All boats in the LIS Fleet shall use the Modern Rig.

F. Marblehead Fleet (MHD) established 1938
   1. No changes.

G. Nantucket Fleet (NKT) established 1997
   1. 1. BOAT OWNERSHIP
      (a) All boats in the Nantucket IOD Fleet shall be owned by the Nantucket International One Design Fleet Association (NIODFA).

2. RIGGING & EQUIPMENT
   (a) The boats shall be sailed as provided by the NIODFA. Modifying the boats, altering, removing or adding any equipment or rigging, other than as provided for herein or in the Sailing Instructions is prohibited.

   (b) Permitted Supplemental Equipment & Modifications:
(i) Non-permanent lines or devices are permitted unless otherwise prohibited, provided that they are removed following each day of racing. Examples include wind indicators (telltales), removable non-residue tape, personal flotation devices, other personal or safety gear, tools, spare winch handles, spare hiking sticks, fenders, docking lines, towing lines.

(ii) Temporary marks may be made only with pencils, washable markers or grease pencils, provided that such marks shall be completely removed after each day, leaving no trace.

(iii) Modifications are permitted for emergency repairs.

(c) No adjustments may be made to the standing rigging, except that the jumper stays and backstay may be adjusted within normal tolerances. Movement of the mast in the step or at the partners is not permitted.

(d) Running rigging shall be used as supplied and intended. No purchase may be added to existing rigging.

(e) Equipment supplied with the boats shall remain aboard at all times, unless removed for repair or replacement.

(f) The hulls may not be scrubbed, washed, wet-sanded or otherwise treated below the waterline except as designated by the Chief Technical Officer.

H. Northeast Harbor Fleet (NEH) established 1938
   1. Masts and booms in the NEH Fleet shall be made of wood to NEH's Wood Spar Plan.

I. Oslo Inner Fjord Fleet (OIF) established 1939
   1. Boats in the OIF Fleet shall use either the Modern or Classic Rig.

J. Oslo Outer Fjord Fleet (OOF) established 1937
   1. All boats in the OOF Fleet shall use either the Modern or Classic Rig.

K. San Francisco Fleet (SFO) established 1954
   1. No changes.

L. Swedish Fleet (SWE) established 1976
   1. Boats in the SWE Fleet shall use either the Modern or Classic Rig.

A.17 LIST OF PLANS:

I  Rigging Plan, by Bjarne Aas, May, 1936
II Working Plan, by Bjarne Aas, June, 1936 edited by R. Meslie, Oct 1, 1963
III Long Cabin, by Bjarne Aas, June 1936
IV Fiberglass, by Henrik Aas, September, 1972
V  Sail Plan, by Bjarne Aas, 1936
VI Lines, by Bjarne Aas, June, 1936
Section B - Boat Eligibility
For a boat to be eligible to race, the rules in this section shall be complied with.

B.1 CLASS RULES & CERTIFICATION

B.1.1 The boat shall:

A. be in compliance with the class rules.

B. have a valid hull certificate.
The crew and the boat shall comply with the rules in Part II when racing. In case of conflict Section C shall prevail.

Section C - Conditions for Racing

C.1 Rules

C.1.1 The ERS Part I - Use of Equipment shall apply.

C.2 Personal Equipment

C.2.1 Hatch covers and cabin doors may be removed from the boat for racing.

C.2.2 Electronic compasses, whether installed or hand held, are prohibited, except that,

   A. Electronic compasses may be permitted, if specified in the Sailing Instructions.

C.2.3 Performance instruments and systems, whether installed or hand held, are prohibited, except that,

   A. Electronic watches and stopwatches are permitted.

C.2.4 Electronic communications systems, whether installed or hand held, are prohibited, except that,

   A. VHF radios are permitted for authorized transmissions, if specified in the Sailing Instructions.

C.3 Portable Equipment

C.3.1 Boats may install a head.

C.3.2 Boats may carry an outboard motor with a maximum weight of 77 pounds (35 kg).

   A. Boats may carry a fuel container whose full weight shall not exceed 66 pounds (30 kg).

C.3.3 All boats must comply with the specific safety equipment requirements of the local jurisdiction while racing, however, at a minimum each boat must carry the following:

   1. The boat shall be equipped with a personal flotation device for each crew member to the minimum standard ISO 12402-5 (CE 50 Newtons), or USCG Type III, or AUS PFD 1.

   2. Paddle.

   3. 2.5 gal bucket.

   4. Bilge pump

   5. Fog horn.

   6. First aid kit.

C.4 Rig

C.4.1 Movement of the mast in the step or at the partners while racing is not permitted.

C.5 Sails

C.5.1 The sail inventory shall comply with the requirements of the LFA sail purchase plan.
International One Design Class Rules

C.6 ADVERTISING

C.6.1 Advertising shall only be displayed in accordance with WS Advertising Code (See WS Appendix 1 - Advertising Code Regulation 20)

Section D - Hull

D.1 GENERAL

D.1.1 Hull Construction

A. Wooden hulls shall be in general accordance with Plans I, II, III, VI, VIII, & IX above, as amended by these rules.

B. Fiberglass hulls shall be in general accordance with Plans I, IV, VI, VIII, & IX above, as amended by these rules.

C. Other methods & materials may be used for construction, provided they are compatible with the weights and measures applicable to these one-design standards and the IOD specifications and approved by the IODWCA in writing.

D. No material may be added to or removed from hull or deck other than routine sanding and painting as provided for under D.8 Reconstruction.

D.2 HULL SHELL

D.2.1 Hull Measurement

A. Principal Dimensions

1. Length 33’-5 3/16” (10190mm)
2. LWL 21’-5” (6528mm)
3. Beam 6’-9 5/16” (2066mm)
4. Draft 5’-2” (1575mm)
5. Displacement 7,200 lbs (3266 kg)
6. Sail Area 390 sf (36 sqm)

D.2.2 Fore-Aft Datum

A. The fore & aft measurement datum shall be the plane described as Station 10.

1. On wooden boats, Station 10 is the plane defined by the aft edge of the large frame near the front of the cabin house, or the front of the cabin house, if aligned with the aft edge of that station frame.

2. On fiberglass boats, Station 10 is the plane perpendicular to the centerline a distance from the transom either the fixed distance of 20’-2 ½” (6160mm) forward of the transom, or 60.4% of the overall length of the boat from the transom.

3. If it can be shown that Station 10 is located in some other plane, by laser measurement or other similar means, and accepted by the Class Measurer, then that datum point should be marked accordingly.
International One Design Class Rules

D.2.3 Methodology

A. Station Interval is 1’-11 5/8” (600mm).

B. Establish the following fore/aft reference points by locating points permanently at 3” (76mm) from edge of deck, 3” (76mm) below shear and approximately 3” (76mm) above waterline. This can be done with screws in wooden boats or dimples in fiberglass boats.

(a) Station 2
(b) Station 10
(c) Station 14

C. Level boat athwartships

D. Level boat fore/aft so that,
   1. The difference between the shear heights at Station 2 and Station 14 is 7” (179mm).
   2. The difference in height along the centerline between the bow and transom is 10 1/8” (256mm).

E. Stations shall conform to Plan VII, but tolerances shall not exceed the following at each station:

- Station 2 ± 1/2” (13mm)
- Station 4 ± 5/8” (16mm)
- Station 6 ± 5/8” (16mm)
- Station 8 ± 3/4” (19mm)
- Station 10 ± 5/8” (16mm)
- Station 12 ± 5/8” (16mm)
- Station 14 ± 1/2” (13mm)

D.2.4 Hull Weight

A. The weight of a boat fully rigged is 7,120 lbs (3230 kg), plus or minus two (±2%) percent.

B. The hull shell weight is 2,800 lbs (1270 kg), plus or minus two (±2%) percent.

C. Corrector weights
   1. Corrector weights shall be permanently fixed in place.
   2. A maximum of 200 lbs (90.72 kg) may be added between the lifting eye and the front of the mast step.
   3. The remaining corrector weight must be distributed evenly throughout the boat as directed by the technical committee or as follows: 1/3 aft of Station 3, 1/3 between Stations 8 and 10 attached to the cockpit sole or higher and 1/3 forward of Station 14.

D.3 DECK

Effective January 1, 2019
International One Design Class Rules

D.3.1 General
   A. The **deck** shall be in general accordance with Plans I, II, III or IV.

D.3.2 Material
   A. The **deck** may be rebuilt in 5/8” (16mm) T&G pine or in ½” (13mm) marine plywood with a minimum weight of 1.56 lbs./sq. ft.
      1. Additionally, a wood **deck** may be fiber-glassed.
   B. The **deck** may be foam-cored fiberglass built to the class-approved laminate schedule.

D.3.3 Partners
   A. The **forward limit** of the **partner opening** can be no further forward than 18” (457mm) in front of Station 10.
   B. The **aft limit** of the **partner opening** can be no further aft than 9” (229mm) in front of Station 10.

D.3.4 Headstay
   A. The **headstay point** shall be a maximum of 9'–7 ¾” (2940mm) forward of Station 10.

D.3.5 Backstay
   A. The **backstay point** shall be a maximum of 18’-9” (5715mm) aft of Station 10.

D.3.6 Chain Plates
   A. The chain plates shall be of optional design.
   B. On wooden boats there shall be a minimum of three tabs at each side.

D.4 CABIN

D.4.1 General
   A. **Boats** may use either the original long cabin or short cabin.
      1. The short cabin shall be in general accordance with Plans II or IV.
      2. The long cabin shall be in general accordance with Plans I or III.

D.4.2 Dimensions
   A. Cabin Length
      1. Short Cabins: The length of the cabin is 4’-1 ½” (1257mm).
      2. The forward face of the **bulkhead** on Plan II is at Station 8, two rib positions forward of the original 1936 design. Shortening of the cabin beyond this point is not allowed.
      3. Long Cabins: The length of the cabin is 5’-5 ¼” (1657mm).
   B. Cabin Width
      1. Forward end
International One Design Class Rules

(a) The forward end of the cabin is 2’-6” (762mm) wide.

2. Aft end

(a) Short Cabins: The aft end of the cabin is 4’-1 ½” (1257mm) wide.

(b) Long Cabins: The aft end of the cabin is 4’-2 ¾” (1289mm) wide.

C. Cabin Height

1. The height of the cabin front at centerline is 7 ¾” (197mm).

D. Cabin Hatch

1. The dimensions of the cabin top hatch opening are 20” (508mm) wide and 23” (584mm) long plus or minus 4” (100mm).

D.4.3 Materials

A. The cabin roof shall be a minimum of ½” (13mm) T&G white pine or not less than 3/8” (10mm) marine plywood.

B. The cabin bulkhead may be moved or replaced with 5/8” (16mm) teak or mahogany or ½” (13mm) marine plywood.

C. Cabins may be built in fiberglass according to the class-approved laminate schedule.

D.4.4 Seats

A. Cabin seats or bunks may be of optional design but must exist in approximately the locations shown on the Plans II, III or IV.

B. Total seating surface area must be at least 8 sq ft (.74sm).

D.5 COCKPIT

D.5.1 General

A. The cockpit shall be in general accordance with Plans II, III or IV.

D.5.2 Dimensions

A. Short Cabins: The cockpit length is 8’-6” (2591mm).

B. Long Cabins: The cockpit length is 7’-2 ¼”” (2191mm).

D.5.3 Seats

A. Cockpit seats may be of optional design but must exist.

B. Total potential seating area between the cockpit coamings must be at least 300 sq in (.194 sq m).

C. Design thickness of the surface is 19/32” (15mm).

D. Minimum thickness should be maintained at not less than ½” (13mm).

D.5.4 Coamings
International One Design Class Rules

A. Thickness

1. Cockpit Coamings have a design thickness of 11/16” (17mm).

2. Coamings may be rebuilt with not less than 5/8” (16mm) mahogany or teak.

B. Length

1. Short Cabins: The length of the coamings from the cabin bulkhead @ Station 8 is 13’-1” (3988mm).

2. Long Cabins: The length of the coamings from the cabin bulkhead is 11’-9 ¼” (3588mm).

C. Height

1. Minimum coaming heights above the deck on all boats are as follows:
   (a) 6” (152mm) at the cabin bulkhead.
   (b) 4 ½” (114mm) at the midpoint
   (c) 3” (76mm) at the after end of the cockpit.

D.6 BULKHEADS

D.6.1 The cabin bulkhead may be moved or replaced with 5/8” (16mm) teak or mahogany or ½” (13mm) marine plywood.

D.6.2 The bulkhead on Plan II is two rib positions forward of the original 1936 design Plan III. Shortening of the cabin beyond this point is not allowed.

D.7 MAST STEP

D.7.1 The forward limit of the mast butt is 1’-7 ½” (457mm) forward of Station 10.

D.7.2 The aft limit of the mast butt is 10 ½” (229mm) forward of Station 10.

D.7.3 The mast step may be level up to the design waterline.

D.8 RECONSTRUCTION

D.8.1 Any reconstruction shall maintain the weight and balance of the original boats. Efforts to alter the performance characteristics of the boats by altering the weight distribution of the original design is not allowed.

D.8.2 The cabin bulkhead may be moved or replaced with 5/8” (16mm) teak or mahogany or ½” (13mm) marine plywood. The bulkhead on the Plan II is two rib positions forward of the original 1936 design Plan III. Shortening of the cabin beyond this point is not allowed.

D.8.3 Fiber-glassing of the hull is allowed. Design thickness of the hull is ¾” (19mm). Preparation of the wooden surface should involve rough sanding but sandblasting may be utilized, in either case maintain a minimum wood thickness of 5/8” (16mm).

Section E - Hull Appendages

E.1 KEEL
International One Design Class Rules

E.1.1 General
   A. The keel shall be in accordance with Plans I, II, IV, VI, and X.

E.1.2 Material
   A. The keel shall be made of lead.

E.1.3 Weight
   A. The lead keel shall weigh 4,100 lbs (1860 kg), plus or minus two (± 2%) percent.

E.2 RUDDER, STOCK & TILLER

E.2.1 Rudder
   A. General
      1. The rudder shall be in general accordance with Plans I, II, IV, VI, and VII.
      2. At least one 2” (51mm) wide metal strap, approximately mid-way up the rudder post, shall be attached to the hull to support the leading edge of the rudder.
      3. No fairwaters may be installed where the rudder meets the hull.
      4. The addition of a rudder heel pintel is allowed.
   B. Material
      1. The rudder shall be made of either solid mahogany or cored fiberglass.
      2. The rudder stock shall be 1 1/4" (32mm) dia stainless steel or bronze for wood rudders and a min of 1" (25mm) dia for fiberglass rudders.
   C. Weight
      1. The rudder including stock shall weigh a minimum of 65 lbs (29.48 kg).
   D. Dimensions
      1. The leading edge of the rudder shall be radiused and have a minimum diameter of 1 1/2” (38mm).
      2. The trailing edge of the rudder shall be radiused and have a minimum diameter of 1/2” (13mm).

E.2.2 Tiller
   A. Tillers are required, but may be of optional design.

Section F - Rig

F.1 GENERAL
   A. There are two class-approved rig configurations, the Classic rig and the Modern rig.
      1. The Classic rig is the original 1937 configuration. It is a double spreader ¾ rig with an upper diamond and jumpers. Measurement information for this rig follows.
International One Design Class Rules

2. The Modern rig was developed in the 1970s and is sometimes referred to as the Long Island Sound rig. It is a single spreader 7/8 rig with jumpers and no upper diamond. Measurement information for the Modern rig is found in Section H of these rules.

B. Unless specified otherwise in A.16 - Local Fleet Rules, all boats shall use the Classic rig.

C. Masts shall be made of a single material, fasteners, fittings, corrector weights and adhesives excluded. Approved materials are wood, aluminum, or carbon fiber.

F.2 MAST

F.2.1 Measurement Points

A. Datum - The datum point should be 2’-8 7/8” (835mm) above the deck and is limited to plus or minus 3/8” (10mm).

   1. All vertical mast dimensions are measured to this datum point.

   2. The datum point shall be permanently etched into the surface of the mast.

B. Top Point - The top point shall be a maximum of 39’-5” (12014mm), above the datum.

C. Heel Point - The heel point can vary but shall be a minimum of 5’-2” (1575mm) below the datum.

D. The upper limit point shall be 38’-10” (11836mm), above the datum.

E. The lower limit point is the datum.

F. Mast Bands

   1. The distance between the lower mast band and the upper mast band shall not exceed 38’-10” (11836mm).

F.2.2 Weight

A. The mast weight shall be a minimum of 200 lbs (90.7kg).

B. The mast center of gravity shall be a minimum of 14’-4 1/8” (4372mm) above the datum point.

F.2.3 Section

A. Fore-aft dimension

   1. The typical fore-aft dimension of the mast section shall be a minimum of 5 5/8” (143mm) and a maximum of 6 ¾” (159mm).

   2. The fore-aft dimension of the mast section at the top of the taper shall be a minimum of 3 7/8” (98mm) and a maximum of 4 1/8” (105mm).

   3. The fore-aft dimension of the mast section at the top of the taper on wood masts shall be a minimum of 4 3/8” (111mm).

B. Transverse dimension

   1. The typical transverse dimension of the mast section shall be a minimum of 3 7/8” (98mm) and a maximum of 4 1/8” (105mm).
International One Design Class Rules

2. The transverse dimension of the **mast section** at the top of the **taper** shall be a minimum of 3 7/8” (98mm).

3. The transverse dimension of the **mast section** at the top of the taper on wood **masts** shall be 2 ¼” (57mm).

F.2.4  Taper

A. The **mast taper** shall not begin below the **forestay height**.

B. Wood **masts** shall conform to the Plan IX Wooden **Spars**.

   1. **Taper** begins at 9’-4 13/16” (2865mm) above **mast datum**.

F.2.5  Spreaders

A. Lower spreaders

   1. The **lower spreader length** is 3’-4” (1016mm) with a minimum of 3’-3” (991mm) and a maximum of 3’-5” (1041mm).

   2. The **lower spreader height** is 13’-6 9/16” (4129mm) with a minimum of 13’-6 1/16” (4116mm) and a maximum of 14’-0 1/16” (4269mm).

B. Diamond spreaders

   1. The **diamond spreader length** is 2’-4” (711mm) with a minimum of 2’-0” (610mm) and a maximum of 2’-5” (737mm).

   2. The **diamond spreader height** is 27’-2 ¾” (8300mm) with a minimum of 26’-10 5/16” (8186mm) and a maximum of 27’-3 5/16” (8313mm).

C. Jumper spreader

   1. The **jumper spreader length** is 2’-0” (610mm) with a minimum of 1’-11” (584mm) and a maximum of 2’-1” (635mm).

   2. The **jumper spreader separation** is 2’-0” (610mm) with a minimum of 2’-0” (61mm) and a maximum of 2’-6” (762mm).

   3. The **jumper spreader height** is 27’-7 ¾” (8426mm) with a minimum of 27’-7 ¼” (8413mm) and a maximum of 28’-1 11/16” (8578mm).

F.2.6  Mast Crane

A. The **mast** crane length is 6” (152mm) with a minimum of 6” (152mm) and a maximum of 8” (203mm).

F.2.7  Halyards

A. Main Halyard

   1. The maximum **main halyard height** shall be 38’- 5” (11709mm).

B. Jib Halyard

   1. The **jib halyard height** shall be less than the **forestay height**.
C. Spinnaker Halyard

1. The **spinnaker halyard height** is 27’-6 ¼” (8388mm) with a minimum of 26’-10 ¼” (8185mm) and a maximum of 27’-6 ¼” (8388mm).

**F.3 BOOM**

F.3.1 General

A. The **boom** shall be made of a single material, fasteners, fittings, **corrector weights** and adhesives excluded. Approved materials are wood, aluminum, and carbon fiber.

F.3.2 Measurement Points

A. The **outer point** distance shall be a max of 16’-2” (4928mm).

F.3.3 Weight

A. The minimum **boom weight** shall be 40 lbs (18.1kg).

B. The **center of gravity** of the **boom** shall be a minimum of 8’-0” (2438mm) from the aft edge of the **mast**.

F.3.4 Section

A. The minimum vertical dimension of the **boom section** shall be 4 ½” (114mm).

B. The minimum transverse dimension of the **boom section** shall be 2 ¾” (70mm).

**F.4 SPINNAKER POLE**

F.4.1 Spinnaker Pole - General

A. The **spinnaker pole** shall be made of a single material, fasteners, fittings, **corrector weights** and adhesives excluded. Approved materials are wood aluminum, and carbon fiber.

F.4.2 Length

A. The maximum **spinnaker pole length** shall be 8’-5” (2565mm).

F.4.3 Weight

A. The minimum **spinnaker pole weight** shall be 8 lbs (3.6kg).

B. The **center of gravity** of the **spinnaker pole** shall be approximately equidistant from each end.

F.4.4 Section

A. The minimum cross-sectional dimension of the **spinnaker pole** shall be 2 ¼” (57mm).

**F.5 STANDING RIGGING**

F.5.1 General

A. The measurement information that follows is for **boats** rigged with Classic **spars**.
International One Design Class Rules

B. The rules governing sails for Modern spars are found in Section G of the Appendix of these rules.

C. Rod rigging is not allowed.

F.5.2 Forestay
A. The forestay height is 26'-7 ½”” (8116mm) with a minimum of 26'-6 1/16” (8078mm) and a maximum of 27'-5 ½” (8370mm).

B. The forestay shall be 3/16” dia 1x19 or 7x19 stainless steel wire.

C. Pennants may be ¼” dia 7x19 stainless steel wire.

F.5.3 Backstay
A. The backstay height is 39’-1 7/16” (11924mm) with a minimum of 39’-1 3/16” (11918mm) and a maximum of 39’-3 3/16” (11968mm).

B. The backstay shall be 5/32” dia 1x19 or 7x19 stainless steel wire.

C. Pennants may be 5/32” dia 7x19 stainless steel wire.

F.5.4 Upper shrouds
A. The upper shroud height is 27’-1 13/16” (8276mm) with a minimum of 26’-10 1/16” (8180mm) and a maximum of 27’-6 1/16” (8384mm).

B. Upper shrouds shall be 3/16” dia 1x19 stainless steel wire.

F.5.5 Lower shrouds
A. The lower shroud height is 13’-6 9/16” (4129mm) with a minimum of 13’-0 15/16” (3986mm) and a maximum of 13’-8 7/16” (4177mm).

B. Lower shrouds shall be 3/16” dia 1x19 stainless steel wire.

F.5.6 Diamond shrouds
A. The diamond shroud top height is 38’-4 15/16” (11708mm) with a minimum of 38’- 4 1/16” (11686mm) and a maximum of 38’- 11 1/16” (11864mm).

B. The diamond shroud bottom height is 13’- 8 15/16” (4189mm) with a minimum of 13’- 8 3/16” (4177mm) and a maximum of 14’- 6 3/16” (5339mm).

C. Diamond shrouds shall be 1/8” dia 1x19 stainless steel wire.

F.5.7 Jumper shrouds
A. The jumper shroud top height is 39’-1 1/8”” (11916mm) with a minimum of 38’-5 1/8”” (11713mm) and a maximum of 39’-1 1/8”” (11916mm).

B. The jumper shroud bottom height is 16’-1 15/16”” (4926mm) with a minimum of 16’-1 3/16”” (4907mm) and a maximum of 17’-6 3/16”” (5339mm).

C. Jumper shrouds shall be 1/8” dia 1x19 stainless steel wire.

F.6 RUNNING RIGGING

Effective January 1, 2019
International One Design Class Rules

F.6.1 General

A. In order to stimulate individual initiative and to improve control, unless specifically prohibited, nothing in these rules should limit the creativity or design of the running rigging, fittings, controls or equipment.

F.6.2 Jib Sheeting

A. Other than the spinnaker pole, no device or method may be employed to lead a sheet outside of the chain plates.

Section G - Sails

G.1 MAINSAIL

G.1.1 Dimensions

A. The distance between the forward head point and the aft head point shall not exceed 6 11/16” (170mm).

1. The length of the leech measured between the forward head point and the clew point shall not exceed 41’-6” (12,650mm).

   (a) The mainsail shall have 4 battens that divide the leech into 5 nearly equal parts.

2. The mainsail shall attach to the mast by a boltrope.

3. Boltropes shall not be cut away from the head or tack points by more than 2’-5 ½” (750mm).

G.1.2 Mainsail Girths

A. The closest point of the luff of the mainsail shall not exceed:

   1. 5’-5 15/16” (1675mm) from a point on the leech 10’-4 13/16” (3170mm) below the forward head point.

   2. 9-9 5/16” (2980mm) from a point on the leech 20’-10” (6350mm) below the forward head point.

   3. 13’-2 11/16” (4030mm) from a point on the leech 31’-3 3/16” (9530mm) below the forward head point.

G.1.3 Miscellaneous

A. The sail insignia must be displayed on both sides of the mainsail at approximately two-thirds the height of the sail and may be displayed on both sides of the spinnaker in approximately the middle of the sail.

B. In accordance with the ISAF RRS Appendix G, the sail insignia shall be at least 1’-7” (483mm) in height and not more than 2’-0” (610mm).

C. The boat's number in its LFA shall be displayed underneath the sail insignia on the main sail and spinnaker in the same size as the sail insignia.

G.2 JIB

G.2.1 Dimensions
International One Design Class Rules

A. The luff length measured between the forward head point and the tack point shall not exceed 25'-7 1/16” (7800mm).

B. The leech length measured between the forward head point and the clew point shall not exceed 23'-9 13/16” (7260mm).

C. The foot length measured between the tack point and the clew point shall not exceed 9'-6 3/16” (2900mm).

D. The distance between the forward head point and the mid-foot point shall not exceed 25'-2 3/16” (7675mm). Foot irregularity shall not exceed 2” (50mm).

E. The distance between the forward head point and the aft head point shall not exceed 2” (50mm).

G.2.2 Jib Girths

A. The closest point of the luff of the jib shall not exceed:
   1. 2'-7 1/8” (790mm) from a point on the leech 5’-11 ¼” (1810mm) below the forward head point.
   2. 4’-9 3/4” (1465mm) from a point on the leech 11’-10 ½” (3620mm) below the forward head point.
   3. 6’-10 ¾” (2100mm) from a point on the leech 17’-6 ¼” (5430mm) below the forward head point.

G.2.3 Miscellaneous

A. The jib shall have three battens that divide the leech into four nearly equal parts.

B. The jib shall attach to the forestay by hanks.

G.3 SPINNAKER

G.3.1 General

A. The spinnaker shall be symmetrical around its centerline.

G.3.2 Dimensions

A. The luff length shall not exceed 30’-1 7/16” (9180mm).

B. The girth shall not exceed 20’-0 3/16” (6100mm) at any point.

C. The distance from the head point to the mid-foot point shall not exceed 34’-9 11/16” (10610mm).
PART III - APPENDICES

Section H - Modern Rig

H.1 SPARS

H.1.1 MAST

A. General

1. There are two class-approved rig configurations, the Classic rig and the Modern rig.
   (a) The Modern rig was developed in the 1970s and is sometimes referred to as the Long Island Sound or Bermuda rig. It is a single spreader 7/8 rig with jumpers and no upper diamond and is described below.

2. Masts shall be made of a single material, fasteners, fittings, corrector weights and adhesives excluded. Approved materials are wood, aluminum, or carbon fiber.

B. Measurement Points

1. The datum point should be 2’-8 7/8” (835mm) above the deck and is limited to plus or minus 3/8” (10mm).
   (a) All vertical mast dimensions are measured to this datum point.
   (b) The datum point shall be permanently etched into the surface of the mast.

2. The top point shall be a maximum of 39’-8 7/8” (12114mm), above the mast datum.

3. The heel point can vary but shall be a minimum of 5’-2” (1575mm) below the mast datum.

4. The upper limit point shall be 38’-11 5/8” (11878mm), above the mast datum.

5. The lower limit point is the mast datum.

6. Mast Bands
   (a) The distance between the lower mast band and the upper mast band shall not exceed 38’-10” (11836mm).

7. Boom Band
   (a) The distance from the aft face of the mast to the inner edge of the boom band shall not exceed 16’-2” (4928mm).

C. Weight

1. The mast weight shall be a minimum of 200 lbs (90.7kg).

2. The mast center of gravity shall be a minimum of 14’-4 1/8” (4372mm) above the mast datum.
1. Fore-aft dimension
   (a) The typical fore-aft dimension of the mast section is 5 1/4” (133mm).
   (b) The fore-aft dimension of the mast section at the top of the taper is 3 1/4” (83mm).
2. Transverse dimension
   (a) The typical transverse dimension of the mast section is 4 1/8” (105mm).
   (b) The transverse dimension of the mast section at the top of the taper is 4 1/8” (105mm).
3. Taper
   (a) The mast taper shall not be longer than 9'-3" (2819mm).
E. Spreaders
   1. Lower spreaders
      (a) The lower spreader length is 3’-4” (1016mm) with a minimum of 3’-3” (991mm)
          and a maximum of 3’-5” (1041mm).
      (b) The lower spreader height is 13’-6 9/16” (4129mm) with a minimum of 13’-6
          1/16” (4116mm) and a maximum of 14’-0 1/16” (4269mm).
   2. Jumper spreader
      (a) The jumper spreader length is 1’-8 1/4” (515mm).
      (b) The jumper spreader separation is 3’-2” (965mm).
      (c) The jumper spreader height is 30’-8 1/2” (9361mm).
   3. Mast Crane
      (a) The mast crane length is 5 1/4” (133mm).
F. Standing Rigging
   1. Forestay
      (a) The forestay height is 29’-9 7/8” (9090mm).
      (b) The forestay shall be 3/16” dia 1x19 or 7x19 stainless steel wire.
      (c) Pennants may be 1/4” dia 7x19 stainless steel wire.
   2. Backstay
      (a) The backstay height is 39’-7 3/4” (12084mm).
      (b) The backstay shall be 5/32” dia 1x19 or 7x19 stainless steel wire.
      (c) Pennants may be 5/32” dia 7x19 stainless steel wire.
   3. Upper shrouds
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(a) The **upper shroud height** is 30’- 7 3/4” (9340mm).

(b) **Upper shrouds** shall be 3/16” dia 1x19 stainless steel wire.

4. **Lower shrouds**
   (a) The **lower shroud height** is 15’-5 7/8” (4721mm).
   (b) **Lower shrouds** shall be 3/16” dia 1x19 stainless steel wire.

5. **Jumper shrouds**
   (a) The **jumper shroud top height** is 39’-2 3/4” (11956mm).
   (b) The **jumper shroud bottom height** is 15’-6 5/8” (4739mm).
   (c) **Jumper shrouds** shall be 1/8” dia 1x19 stainless steel wire.
   (d) Extension of the **jumper stays** to a control point inside the **cabin** is allowed.

6. **Rod rigging** is not allowed.

G. **Halyards**

1. **Main Halyard**
   (a) The maximum **main halyard height** shall be 38’- 5” (11709mm).

2. **Jib Halyard**
   (a) The **jib halyard height** shall be less than the **forestay height**.

3. **Spinnaker Halyard**
   (a) The **spinnaker halyard height** is 30’-9 1/4” (9380mm).

H.1.2 **Boom**

A. **General**

1. The **boom** shall be made of a single material, fasteners, fittings, **corrector weights** and adhesives excluded. Approved materials are wood aluminum, and carbon fiber.

B. **Measurement Points**

1. The **outer point** distance shall be a max of 16’-2” (4928mm).

C. **Weight**

1. The minimum weight of the **boom** shall be 40 lbs (18.1kg).

2. The **center of gravity** of the **boom** shall be a minimum of 8’-0” (2438mm) from the aft edge of the **mast**.

D. **Section**

1. The minimum vertical dimension of the **boom section** shall be 4 1/2” (114mm).

2. The minimum transverse dimension of the **boom section** shall be 2 3/4” (70mm).
H.1.3 Spinnaker Pole

A. General

1. The spinnaker pole shall be made of a single material, fasteners, fittings, corrector weights and adhesives excluded. Approved materials are wood, aluminum, and carbon fiber.

B. Length

1. The maximum spinnaker pole length is 8’-5” (2565mm).

C. Weight

1. The minimum spinnaker pole weight shall be 8 lbs (3.6kg).
2. The center of gravity of the spinnaker pole shall be approximately equidistant from each end.

D. Section

1. The minimum cross-sectional dimension of the spinnaker pole shall be 2” (57mm).

H.2 SAILS

H.2.1 Mainsail

A. The distance between the forward head point and the aft head point shall not exceed 6 11/16” (170mm).

B. The leech length measured between the forward head point and the clew point shall not exceed 41’-4” (12,597mm).

C. The mainsail shall have four battens that divide the leech into five nearly equal parts.

D. The mainsail shall attach to the mast by a boltrope.

1. Boltropes shall not be cut away from the head or tack points by more than 2’-5 1/2” (750mm).

E. Mainsail Girths

1. The one quarter girth shall not exceed 13’-5 1/8” (4092mm).
2. The one half girth shall not exceed 10’-1 3/4” (3092mm).
3. The one quarter girth shall not exceed 5’-10 5/8” (1800mm).

F. The sail insignia must be displayed on both sides of the mainsail at approximately two-thirds the height of the sail and may be displayed on both sides of the spinnaker in approximately the middle of the sail.

1. In accordance with the ISAF RRS Appendix G, the sail insignia shall be at least 1’-7” (483mm) in height and not more than 2’-0” (610mm).
2. The boat’s number in its LFA shall be displayed underneath the sail insignia on the main and spinnaker in the same size as the class insignia.
H.2.2 Jib

A. The **luff length** measured between the **forward head point** and the **tack point** shall not exceed 29'-3" (8915mm).

B. The **leech length** measured between the **forward head point** and the **clew point** shall not exceed 27'-6 1/8" (8384mm).

C. The **foot length** measured between the **tack point** and the **clew point** shall not exceed 9'-3" (2819mm).

D. **Foot irregularity** shall not exceed 2" (50mm).

E. The distance between the **forward head point** and the **aft head point** shall not exceed 2" (50mm).

F. Jib Girths

   1. The maximum **one quarter girth** is 6’-9 1/4” (2064mm).

   2. The maximum **one half girth** is 4’-8 1/4” (1428mm).

   3. The maximum **one quarter girth** is 2’-6 3/4” (780mm).

G. The jib shall have three **battens** that divide the **leech** into four nearly equal parts

H. The jib shall attach to the **forestay** by hanks.

H.2.3 Spinnaker

A. The **spinnaker** shall be symmetrical around its **centerline**.

B. The maximum **luff length** is 32’-0” (9754mm).

C. The maximum **half girth** is 19’-12” (6096mm).

D. The maximum **foot round** is 9 7/8” (250mm).
The dimensions shown in this drawing have been changed in the Class Rules. The drawing has been included for general arrangement & historical reference.
Table of Offsets

International One Design - Class Rules
Rudder

International One Design - Class Rules
Measurements shall conform to ISAF Equipment Rules of Sailing unless specifically noted otherwise.

All vertical mast dimensions are measured to the datum point.

International One Design - Class Rules

Classic Spars
MEASUREMENTS SHALL CONFORM TO ISAF EQUIPMENT RULES OF SAILING, UNLESS SPECIFICALLY NOTED OTHERWISE

ALL VERTICAL MAST DIMENSIONS ARE MEASURED TO THE DATUM POINT

Modern Spars
International One Design - Class Rules
This logo was used by Bjarne Aas on the original design drawings for the Class.

The layout of this sail insignia is intended to standardize the Class symbol which has varied considerably over time. This design is based on the earliest insignias from the original Long Island Sound Fleet.

SAIL INSIGNIA

LOGO

Sail Insignia & Class Logo

International One Design - Class Rules