

## **Open 5.70 Class Measurement Rules**

### **1. Introduction**

The Open 5.70 was created as a strict one-design sportboat where the true test when raced is between crews and not boats and equipment.

The fundamental objective of the Open 5.70 Class Rules ("The Rules") is to ensure the strict one design concept is maintained.

The English text of the Rules shall govern.

### **2. Fundamental Rules**

#### **2.1. Equipment**

The Open 5.70 shall be raced only with hull, mast, boom, sails, battens, keel, rudders system, tiller, fittings, equipment, standing rigging and running rigging conforming to these rules.

#### **2.2. Additions, Alterations and Repairs**

No additions alterations or repairs may be made to any part of the boat including the hull, mast, boom, sails, battens, keel, rudders system, tiller, fittings, standing rigging or running rigging supplied by a licensed Builder (see paragraph 3) except when such an addition, alteration or repair is specifically authorised by these Rules (see paragraph 4).

#### **2.3. Replacements**

Replacement of the hull, mast, boom, sails, battens, keel, rudder system, tiller, fittings, equipment (including location) standing rigging and running rigging shall

- only be from parts supplied by a licensed Builder unless such replacement from another supplier is specifically authorised by these Rules (see paragraph 4)
- Where replacement alteration or repairs are authorised by these rules, these shall be carried out using materials of construction and in a manner that gives no weight or other advantage.

### **3. Definition of Builders and Hull identification.**

#### **3.1. Definition of Builders**

The builders of the Open 5.70 shall be only those licensed by Phileas Boats and approved by the Open 5.70 Class Association.

#### **3.2. Identification**

Each Open 5.70 shall have a builder's Hull identification plaque in the rear of the cockpit.

### **4. Permitted Replacements, Additions, Alterations and Repairs.**

#### **4.1. Hull.**

The following may be replaced by any of similar type, size and function, but from any supplier

- Use of protection tape, i.e. rigging tape for deck hardware, turnbuckles, protection of the deck from rubbing marks with jib sheets blocks, spinnakers blocks.
- Use of non-skid and / or acrylic pressure sensitive marine grade uv resistant eva foam - no limit on size provided it is only mounted on the forward deck or cockpit surfaces.
- Use of bottom paint (for boats that stay in the water). Use of an anti-foul coating is permitted in a manner that gives no weight or other advantage.
- Use of paint on the hull or decorative sticker.

- Repair or refinishing of the hull in case of damages.

**NOTE:**

- The form and geometry of the hull's surface, rudders, foil and bulb for the keel CAN NOT be modified
- Drilling holes in the boat is prohibited.

**4.2. Sails**

- The only authorised sails are the ones supplied with the boat. One (1) new set of sail is authorised per racing season (January 1<sup>st</sup> – December 31<sup>st</sup>). New sails can be purchased from the authorised builder if sails become unusable during the season.
- The battens, if replaced must be change with same quality and diameter type of battens.
- Sails number must be 12 inches (300 mm) in height and RED.
- Sails number must be placed on the main sail. Sail numbers on the main sail must be placed between the 2nd and 3rd battens (from the bottom). The sail number on starboard must be above the sail number on port.
- The sails number correspond to the hull number and becomes USA XXX. For example: if the hull number is OSC57277E909, the sails number becomes: **USA 277**.
- Note: sails numbers have to be ACROSS and not UNDER:



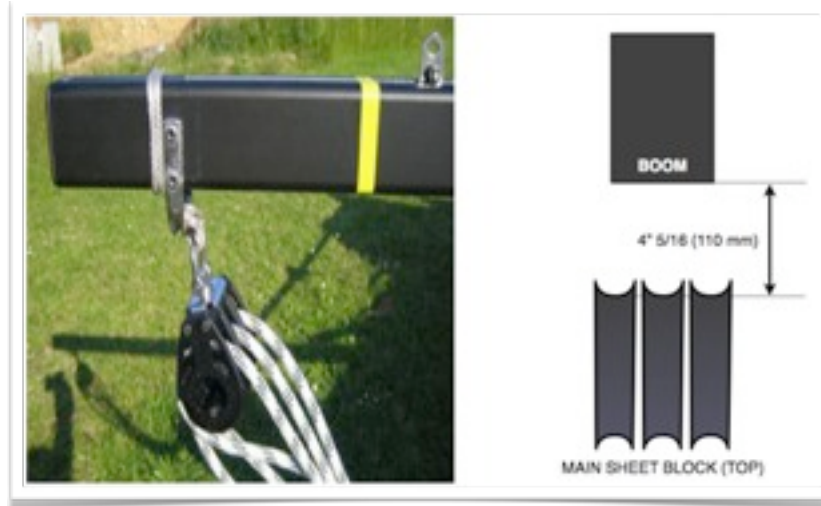
**WRONG**    USA    **CORRECT**    USA 277  
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- It is authorised to carry a spare authorised spinnaker aboard during races. The spare spinnaker can only be used if the original one is completely unusable. Change of spinnaker can only be done in between races.

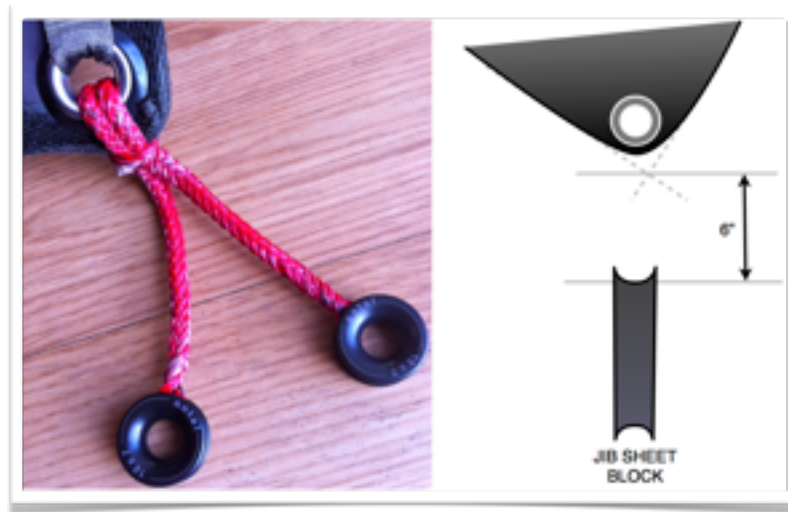
**4.3. Hardware / Equipment.**

Are authorised:

- Tiller extension.
- Additional tell-tales in the sails and on the standing rigging.
- Bungee to keep the hiking straps off the deck.
- Cleats, blocks can be replaced with hardware of the same working load and similar size but with no brand obligation.
- The method of attachment of any fitting to the boat is unrestricted but shall not modify the fitting's position, the effective operation of the fitting nor the intended purpose or action of any equipment.
- Standing rigging of the same material, diameter and length as that supplied by the licensed Builder.
- The addition of loops to attach mainsheet, spinnaker and / or jib blocks. However, the distance of the loop between the block and its attach point must not exceed:



- 12" between the upper block of the mainsheet and the boom.



- 6" between the jib block and the clew of the jib.



- 6" between the aft spinnaker blocks and their attach point on the main track

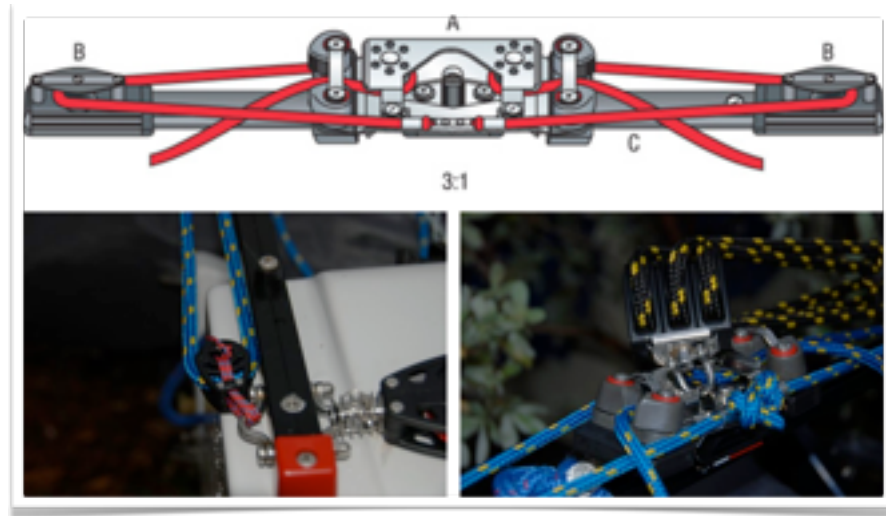


- 6" between the forward spinnaker blocks and their attach point on the chainplates

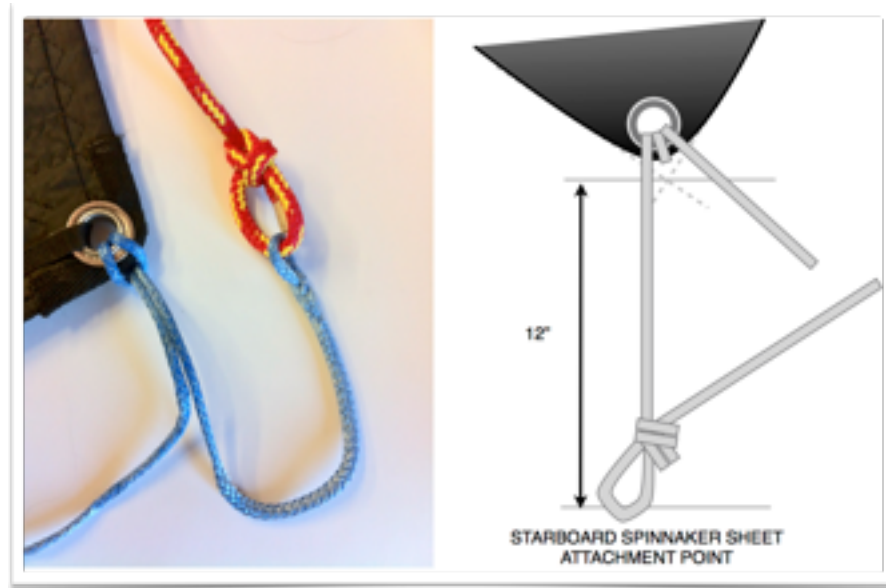


- Splicing the mainsail traveller line to help centering the traveller.
- The traveller can be changed to have a 3-to-1 purchase. The recommended setup is based on the Harken 2745 Small Boat Windward Sheeting Car (A in the diagram). A 2nd block (Harken

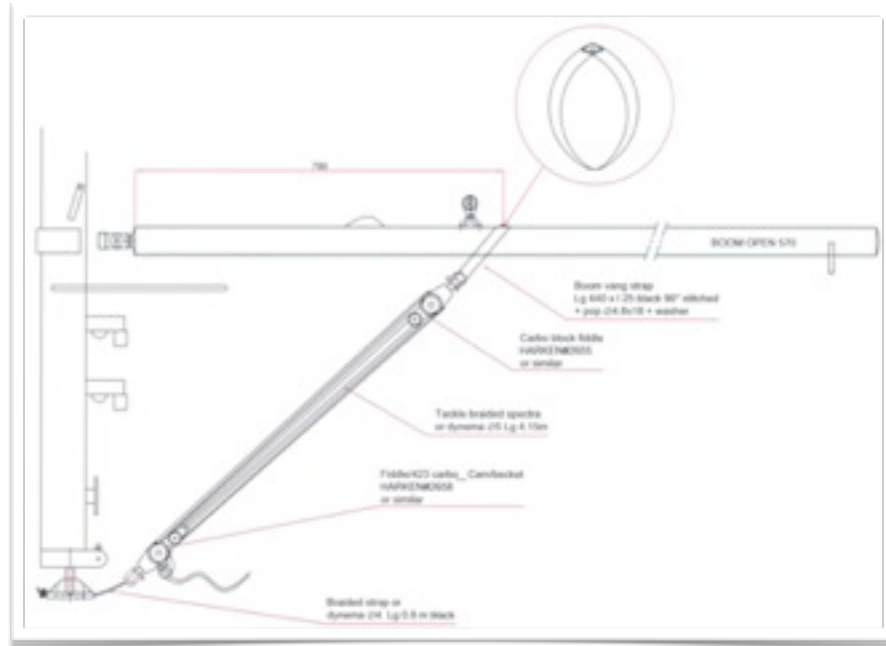
2651 40mm Carbo Airblock, or equivalent) can be lashed to the existing padeye on the main



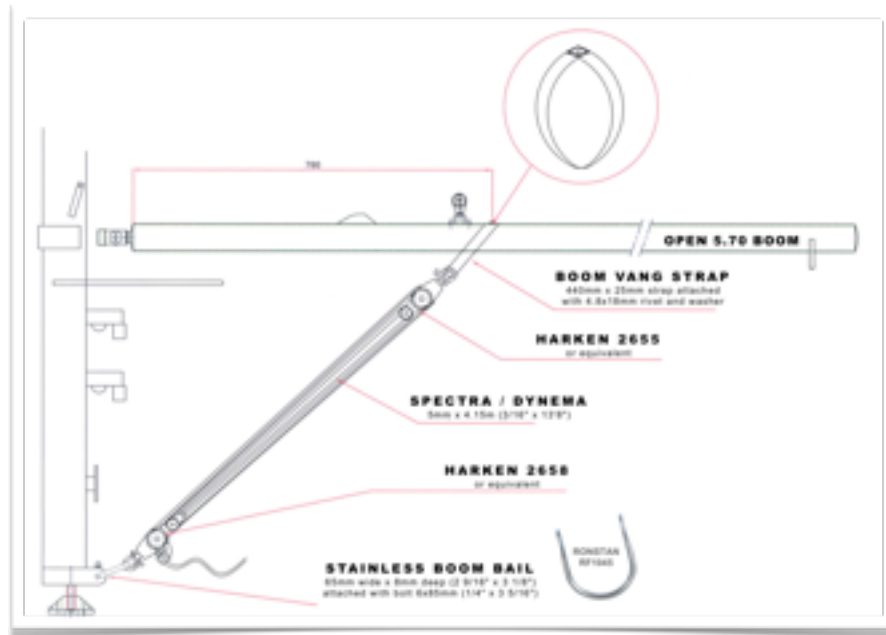
traveller (rather than installing more hardware, B, in the diagram).



- Addition of a tail line on the clew of the spinnaker to facilitate gybes and dousing. The tail line must be under 12" long.



- Addition of a boom vang using a dyneema line through the mast base as recommended by the builder



- An alternative boom vang setup using a stainless boom bail at the base of the mast is also permitted, however, this has **not been officially approved** by the builder.

#### 4.4. Running Rigging

Running rigging must only be arranged as supplied and documented by The Builder. Lines may be replaced but must be of the same size (+/- 2 mm for sheets, +/- 1mm for halyards) however lines can be tapered.

##### 4.4.1. Sheets:

Name	Diameter		Factory Length	
	mm	inches	m	feet
Main Sheet	10	3 / 8	19.65	64' 6"
Jib Sheet	8	5 / 16	13.56	44' 6"
Spinnaker Sheet	8	5 / 16	25.60	84' 0"
Tack Line	6	1 / 4	9.50	32' 0"
Traveller Line (when separated)	any	any	4.50	15' 0"

A tolerance of  $\pm 2$  mm will be allowed.

##### 4.4.2. Halyards:

Name	Diameter		Factory Length	
	mm	inches	m	feet
Main Halyard	6	1 / 4	26.25	86' 0"
Jib Halyard (continuous)	5	3 / 16	14.25	46' 9"
Jib Halyard (single)	5	3 / 16	7.25	23' 6"
Spinnaker Halyard	6	1 / 4	16.65	54' 7"

A tolerance of  $\pm 1$  mm will be allowed.

Halyards must be made out of Spectra or Dyneema.

The jib halyard can be a single 23' 6" line (with a messenger that is used to raise and lower the sail), rather than a continuous halyard.

##### 4.4.3. Not authorised

- Addition of trapeze
- Addition of a backstay or running backstays.

#### 4.5. Additions and Alterations

The following additions and alterations are permitted and may include parts, which can be obtained from any supplier.

- PVC film attached to any part of the hull, sails or spars, for example to display a yachts name or identify a sponsor, provided their fixing gives no material performance advantage.
- Any small attachment to the end of the boom intended to minimise damage to the deck when the boom is lowered.
- The carrying of ropes, fenders, spares, loose or fitted internal buoyancy and any safety equipment is unrestricted as long as it does not change the stiffness or other structural properties of the boat.
- Any system of tape, line or clips intended only to prevent lines from becoming tangled or twisted when racing is permitted.

- Non slip material (Maximum thickness 5 millimetres) may be added anywhere on the decks or down below.
- Calibration marks of any kind are permitted
- One mechanical wind indication device may be fitted to the top of the mast
- Wedges may be fitted under cleats
- Clips, ties or bags to secure safety or other equipment are permitted

#### **4.5.1. Instruments**

- Instruments may be fitted that display all or some of the following information:
  - Compass (Bearing and Tactical)
  - Clock/Timer
  - Speed
- A GPS based instrument may be used (except for VMG functionality) but it shall not be connected by any means to any other instrument or electronic device on board.

#### **4.6. Repairs**

- Repairs and preventative maintenance to hull, mast, boom, keel, rudders system, tiller fittings equipment, standing rigging and running rigging and sails may be carried out without violation of these Rules provided such repairs are made in such a way that neither the essential shape, characteristics or function of the original are effected or improved
- Preventative maintenance shall include the replacement of fastenings with alternatives providing that the equipment is replaced in the original position and in accordance with these Rules where relevant.
- No sail repairs are permitted which alter the shape of the sail.
- The head of the keel and the keel box may be packed using packing strips, Velcro or other materials to ensure a snug fit. No altering of the alignment is permitted. No packing is permitted which has the effect of moving the keel forward or aft in the boat.
- Waxing and polishing of the hull is permitted provided the intention and effect is to polish the hull only. Any work intended or with the effect of lightening the hull or improving, shape or performance beyond the original is not permitted.
- Surface refinishing of the keel and rudders are permitted provided the original shape, thickness, weight, profile, alignment and other characteristics are not altered. Re-profiling is absolutely prohibited.

### **5. Measurements**

#### **5.1. Conformity**

The Open 5.70 shall conform to these Rules. All fitted or fixed equipment shall be carried in the position as supplied by the builder. In the case of a measurement dispute not explicitly covered by these rules, the procedure set out in paragraph 5.2 shall be adopted.

#### **5.2. Exception Procedure**

A sample of 5 sailboats or, if appropriate a sample of 5 items, not the subject of the measurement dispute shall be taken and measured using identical techniques. The dimensions of the disputed sailboat or item shall be compared to the measurements taken from the sample and if the sailboat or item is outside the maximum or minimum dimensions obtained from the sample. The matter together with details of the measurement methods and any other relevant information shall be referred to the Chief Measurer of the Class Association whose decision shall be final and binding on all parties.



### 5.3. Disputes

In the event of a dispute alleging non-compliance with these Rules, the matter, together with any relevant information shall be referred to the Chief Measurer (or if none was appointed then the President) of the Class Association whose decision shall be final and binding on all parties.

## 6. Sailing Requirements

### 6.1. Crew Numbers and Weights - General

- The Open 5.70 shall be raced with a 2-4 people on board.
- No minimum or maximum crew weight.
- The number of crew on a particular boat should remain constant for the duration of an event.

### 6.2. Membership and Helms person

Anybody can drive the Open 5.70 in any regatta as long as they are a member of the Class Association, regardless of whether or not they are an owner.

Only one driver is permitted per race, but drivers can switch between races on the same day.

### 6.3. Standard Equipment, Safety Equipment and Personal Buoyancy

#### 6.3.1. All racers must comply with the United States Coast Guard Safety Equipment.

- **Display of Numbers**
  - (a) Plain Block letters/numbers not less than 3 inches in height must be affixed on each side of the forward half of the vessel (Contrasting color to boat exterior).
  - (b) State validation sticker must be affixed within six inches of the registration number
- **Registration / Documentation**

Certificate of Number must be on board when vessel is in use.
- **Personal Flotation Devices (PFD)**
  - (a) One Type I, II, III, or V wearable PFD for each person on board. (must be USCG approved)
  - (b) In addition to paragraph (a), must carry One Type IV (throwable) PFD.
- **Visual Distress Signals**

One of the following combinations:

  - (a) One orange distress flag and One electric distress light
  - (b) Three hand-held or floating orange smoke signals and One electric distress light
  - (c) Three combination (day/night) red flares: hand-held, meteor or parachute type.
- **Fire Extinguishers**

One B-I (required when carrying outboard)
- **Sound Producing Device**

Some means of making an "efficient" sound signal - (i.e. handheld air horn, athletic whistle - Human voice/ sound not acceptable).
- **Navigational Lights**

Required to be displayed from sunset to sunrise and in or near areas of reduced visibility.

#### 6.3.2. Additional Items Required by the Class:

- **Anchor** - minimum total weight including shackles 5 lbs (2.25 kg)
- **Anchor chain** - minimum of 6.5 ft (2m) of 5/16" (8 mm) steel chain.
- **Anchor line** - minimum of 100 ft (30m) of non floating 5/16" (8 mm) line
- **First Aid Kit** - in a waterproof bag or container

- **VHF Radio** - demonstrably functioning at the start of the event
- **Throwing line** - minimum of 33 ft (10m) of 1/4" (6 mm) line.
- **Bucket** - 2 Gallon (9 Litres) plus minimum of 6.5 ft (2m) of 1/8 (4 mm) lanyard
- The following is not required by default unless explicitly stated by the Fleet Captain before a regatta.
  - Either:
    - **Outboard Engine 2 HP** or more securely stowed in designated location
    - **Outboard Bracket** as supplied by the Builder
    - **Fire Extinguisher**
  - OR
    - **45 lbs (20 kg) ballast** correctors of lead or water securely stowed below decks behind the mast support on starboard side as close as reasonably possible to the position for the engine.  
(*Engine - 32 lbs, 1 gallon of gas - 6 lbs, outboard bracket - 5 lbs, fire extinguisher - 2 lbs*)

**6.4. Keel Position**

Whilst racing the keel must be securely tied down in the fully down position, and may only be released for the purposes of re-floating when aground after which it shall be secured fully down at the earliest opportunity.

**6.5. Bow Sprit Position**

The bow sprit must be **fully** retracted whenever the spinnaker is not being flown.

**6.6. Roll Tacking**

Roll tacking is allowed however, it is forbidden to stand and/or hang from any part of the standing rigging (mast, diamond wire, shrouds) before / during / after a roll tack.

**7. Measurements**

LOA	18 feet 9 inches
LWL	18 feet 9 inches
Beam	8 feet 4 inches
Draft (keel up)	8 inches
Draft (keel down)	5 feet 9 inches
Draft (shallow water)	4 feet 7 inches
Displacement	1,100 lbs
Ballast	405 lbs
SA upwind (main + jib)	272 sq. feet
Asymmetrical Spinnaker	378 sq. feet