

# UK Cherub Class Rules 2022

## 1 INTRODUCTION

The object of these rules is to provide a set of rules to which inexpensive high performance Dinghies may be designed and built.

## 2 CONSTITUTIONS

### 2.1 ADMINISTRATION

The Association shall be known as **UK Cherub Class Owners Association** (UKCCOA). The Association shall hold an Annual General Meeting (AGM), normally at the National Championship. The date and venue of the AGM shall be published at least one month before it is due to be held. The AGM shall elect the following Association Officials: President, Secretary, Treasurer, Registrar, and Technical Officer.

It may also elect the following additional Officials: Magazine Editor, Publicity Officer, and Fixtures Secretary.

All these Officials shall be members of the Association Committee. The AGM may elect additional committee members up to a total of ten.

### 2.2 AMENDMENTS TO CLASS RULES

Changes to these **Class Rules** may only be made as a result of a 2/3 majority vote in favour in a ballot of all paid up members of the association. The 2/3 majority applies to those that respond. The vote may be conducted via electronic format.

Proposals for changes to these rules may be submitted to the Association Committee at any time. Such proposals must be signed by five members and must detail the precise wording of the proposed change.

The Committee shall consider each proposal and may suggest possible changes to the proposers. The final wording shall be agreed upon within two months of the original submission. The Committee shall, within a further one month, conduct a ballot of all members. The ballot shall include the full detailed wording of the proposals, any explanation submitted by the proposers and any comments from the Committee or Technical Officer.

The ballot will close one month after the date of posting (this date to be stated in the ballot). If passed by the ballot, the rule will come into force on the 1st of January following the date of the rule being passed

## **3 GENERAL**

### **3.1 TITLE**

The class shall be known as the UNITED KINGDOM CHERUB 12ft. DEVELOPMENT CLASS.

### **3.2 INSIGNIA**

The insignia shall consist of a heart shaped silhouette of a size which would approximately be contained in a 300mm diameter circle. The insignia shall be placed on both sides of the mainsail, approximately one third from the top, and shall be of a colour contrasting with the mainsail. UK

### **3.3 REGISTRATION**

On completion of measurement by an authorised measurer and subject to conforming with the class restrictions and payment of the prescribed fee, each boat shall be issued with a registration number by the Class Registrar. This number shall be displayed on both sides of mainsail directly under the insignia, in contrasting colours. The numbers shall be approximately 300mm high and have a trunk width of approximately 50mm.

### **3.4 CREW**

The crew shall consist of two persons.

### **3.5 INTERPRETATION**

The CHERUB is a development class and these rules may not cover every eventuality. In cases where doubt exists, account should be taken of the intentions and spirit of the rules and the matter should be referred to the Technical Officer and Association Committee.

### **3.6 ADVERTISING**

UK CHERUB races shall adhere to the rules as prescribed by The World Sailing Advertising Code (World Sailing Regulation 20)

### **3.7 LANGUAGE**

#### **3.7.1**

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

## 3.8 ISAF RULES

### 3.8.1

These class rules shall be read in conjunction with the current version of **Equipment Rules of Sailing** (ERS).

### 3.8.2

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 Racing Rules of Sailing applies.

## 4 CLASS RESTRICTIONS

### 4.1 HULL

#### 4.1.1 Length

Between Stem and Transom shall not exceed 3700mm. No part of the hull may extend more than 4000mm from the transom. (Note: For boats with inset or open transoms this measurement shall be taken from the after extremity of the hull skin at or below the waterline.)

#### 4.1.2 Beam

The maximum **hull beam** shall be 1800mm. (Note: Foot stops and foot loops only may extend beyond this beam.)

#### 4.1.3 Depth of Hull

Depth at mid - length, measured vertically from **sheer** to the lowest point of the hull, shall be at least 450mm.

#### 4.1.4 Stem

The profile of the stem shall be approximately vertical for a minimum of 200mm from its bottom.

#### 4.1.5 Chine(s)

Chines shall be fair and continuous curves. There will be at least one chine at least 2000mm long. All chines at some point shall be at least 450mm from the centreline. No part of the outer skin above a chine shall be inside a vertical line passing through the chine.

#### 4.1.6 Anti- multihull rule

In any cross-section of the hull, no horizontal line shall pass through the hull skin more than once either side of the centreline. (Note: It is not the intention of this rule to prohibit 'tubular wings'.)

#### 4.1.7 Weight

The **hull weight** in dry condition shall not be less than 50kg. The weight shall include all permanently fixed fittings and bowsprit, but shall exclude sails, spars, standing rigging, centreboard, rudder, rudder stock and other loose gear.

#### 4.1.8 Buoyancy

The hull shall be fitted with built-in buoyancy self-certified by the owner to provide flotation for the crew in normal, capsized and swamped conditions.

## 4.2 SPARS

### 4.2.1 Spars

The area of spars shall be considered as sail area. The area shall be taken as:-

$$\text{Spar Area} = (\text{Spar Chord} - 100) \times \text{Spar Length}$$

Where: spar chord = the diameter of the smallest circle through which the spar could be passed when stripped of all fittings.

If the spar chord < 100mm then the area shall be disregarded.

### 4.2.2 Spinnaker Pole

Either a Spinnaker Pole or a Bowsprit may be used for setting a spinnaker, but both may not be carried in any race.

### 4.2.3 Bowsprit

The bowsprit, if fitted, shall be retractable to within 4300mm of the transom. The outer end of the bowsprit shall be solid or capped. No sail other than a spinnaker may be set from the bowsprit.

### 4.2.4 Upper Limit mark

The **upper limit mark** is to be placed on the mast so that the distance from the **heel point** of the mast to the **upper limit mark** plus the vertical distance from the mast step to the lowest point of the hull shall not exceed 7100mm.

### 4.2.5 Sail Height

The **luff** of the **mainsail** shall not be set above the **upper limit mark** on the **mast**. The lower edge of the spinnaker **halyard** shall not be above the **upper limit mark** on the **mast** when at 90° to the **spar**, each extended as necessary.

## 4.3 SAILS

### 4.3.1 Material

The sails must be **soft sails** that can be stowed in sail bags of normal dimensions with battens fitted (for the purpose of this rule, 'long' sail bags for the stowing of rolled up sails are regarded as normal).

### 4.3.2 Mainsail and Jib

The areas of the mainsail and jib will be measured in accordance with the **Equipment Rules of Sailing** measurement instructions, measurement and calculation of sail area (printed in appendix 1).

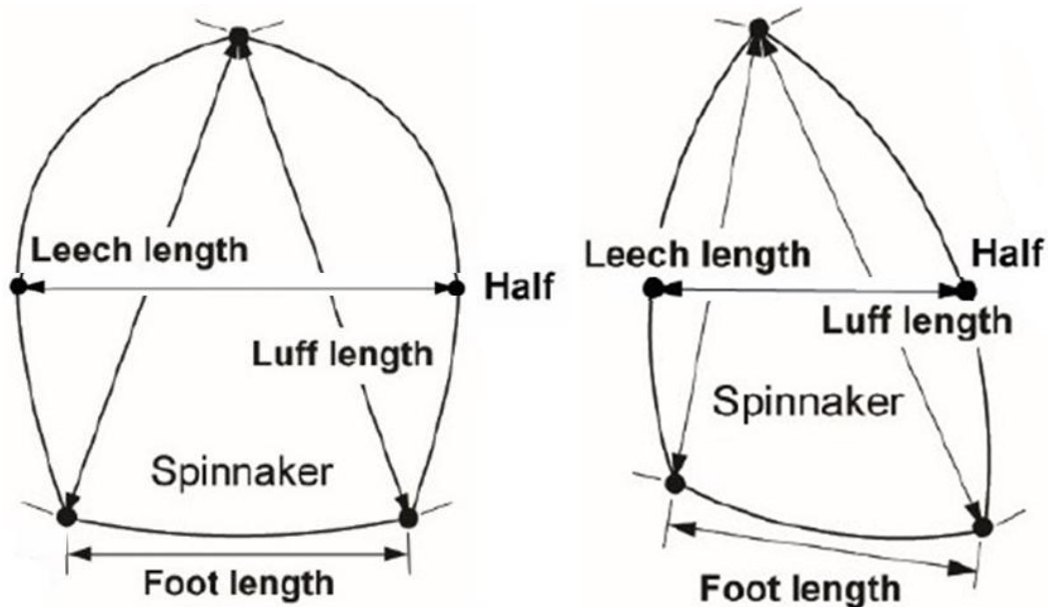
The combined area of the mainsail and jib shall not exceed  $15.50\text{m}^2$

### 4.3.3

The mainsail must be removable without releasing the standing rigging.

### 4.3.4 Spinnaker

Spinnakers shall be measured in a dry condition. All measurements shall be taken with the sail pulled taut between the relevant points.



### Spinnaker Calculation

$$\text{Mean Length} = \frac{\text{Luff Length} + \text{Leech Length}}{2}$$

$$F = \sqrt{(\text{Foot Length})^2 - (\text{Leech Length} - \text{Foot Length})^2}$$

$$G = \sqrt{(\text{Half})^2 - \left(\frac{\text{Leech Length} - \text{Foot Length}}{2}\right)^2}$$

$$\text{Spinnaker Area} = \left(\frac{\text{Mean Length} \times F}{6}\right) + \left(\frac{2 \times \text{Mean Length} \times G}{3}\right)$$

The area of spinnaker may not exceed 21m<sup>2</sup>.

Only one spinnaker may be carried on board in any race.

#### 4.3.5

**Equipment Rules of Sailing** G.1.3(d) Head Sails shall not apply.

#### **4.4 NOT PERMITTED**

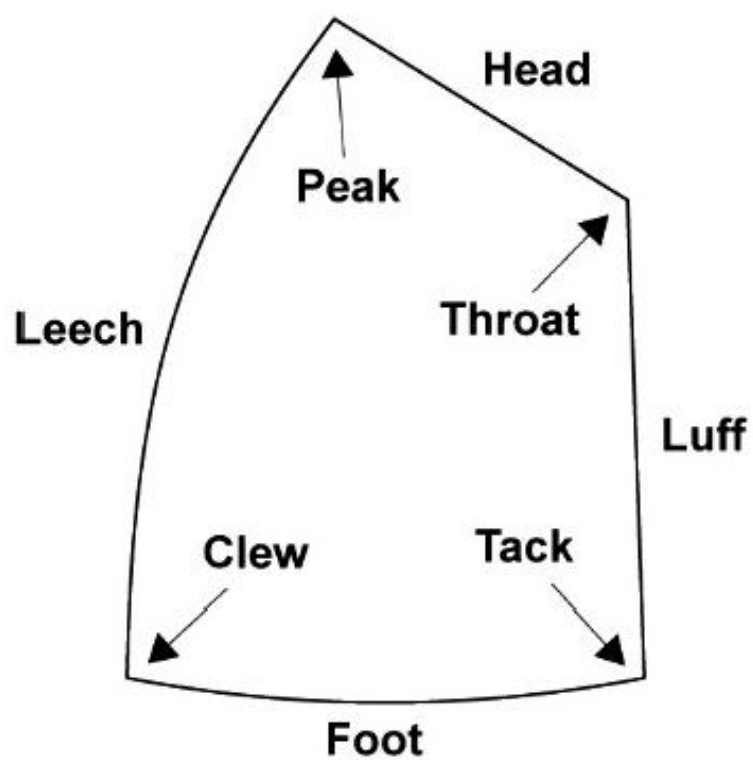
The following are not permitted:

- a) Any contrivance other than a trapeze extending out board to support the crew or helm.



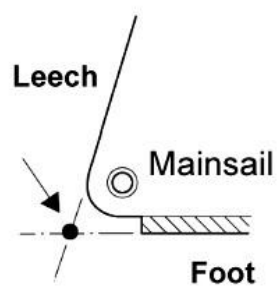
## Appendix 1 – Sail Edges, Corners and Measurement Points

### Mainsail



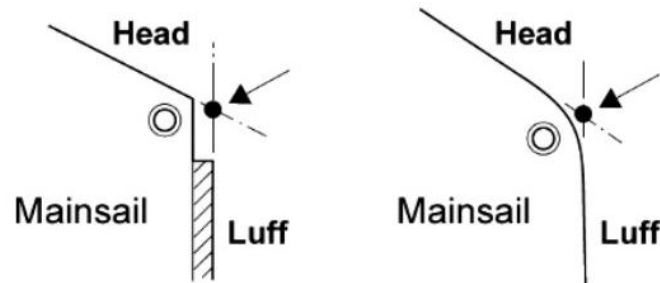
### Mainsail Clew Point

The intersection of the **foot** and the **leech**, extend as necessary



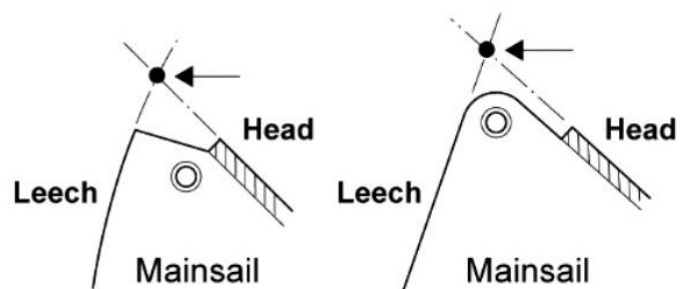
### Mainsail Throat Point

The intersection of the **head** and the **luff**, extend as necessary



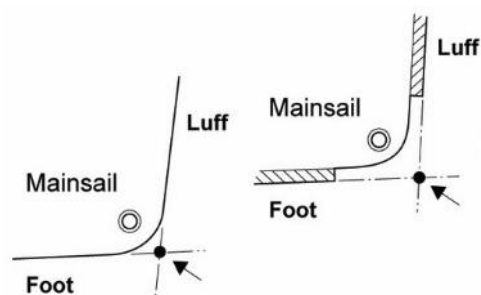
### Mainsail Peak Point

The intersection of the **head** and the **leech**, extend as necessary

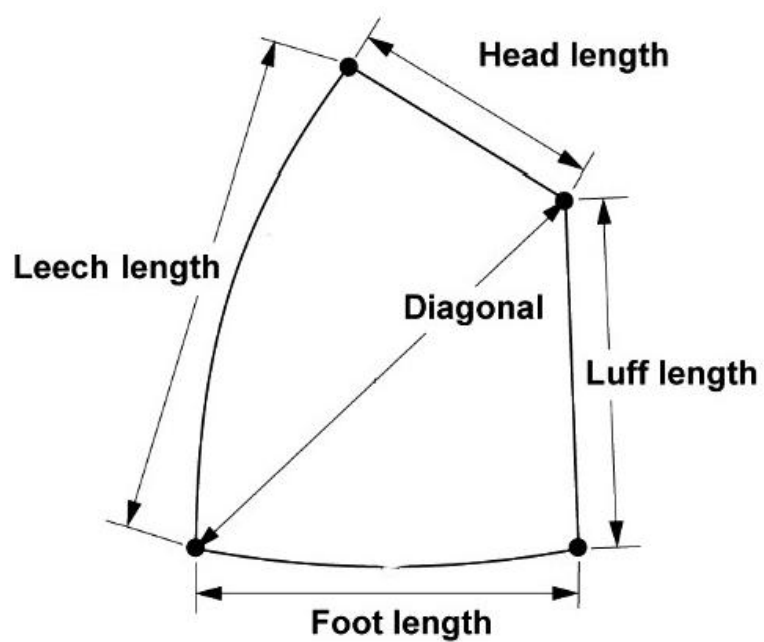


### Mainsail Tack Point

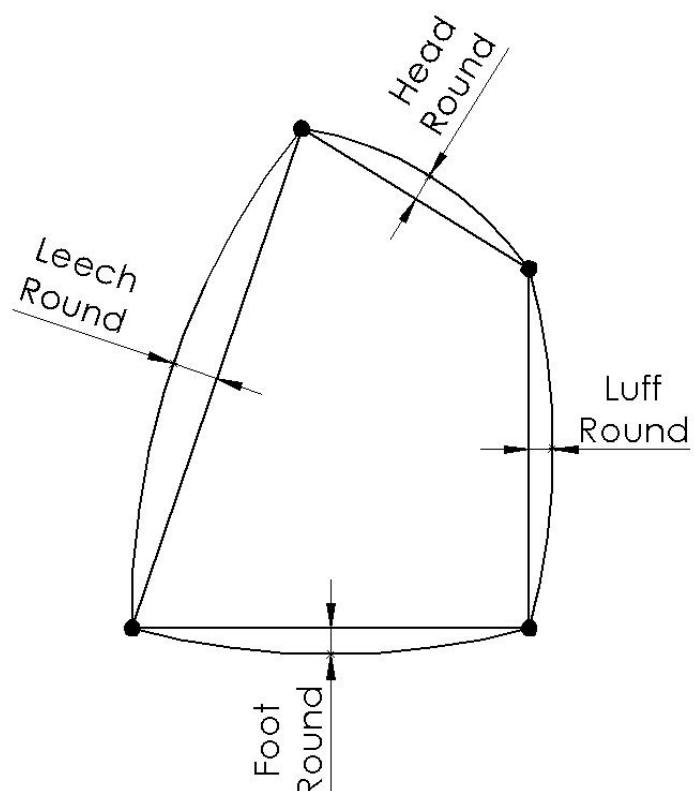
The intersection of the **foot** and the **luff**, extend as necessary



## Mainsail Primary Dimensions



**Mainsail Rounds** – to be measured at the widest point, perpendicular to the straight line between two corners



## Mainsail Calculation

$$\text{Luff Roach (LuR)} = \frac{2}{3} \times \text{Luff Length} \times \text{Luff Round}$$

$$\text{Foot Roach (FR)} = \frac{2}{3} \times \text{Foot Length} \times \text{Foot Round}$$

$$\text{Leech Roach (LeR)} = \frac{2}{3} \times \text{Leech Length} \times \text{Leech Round}$$

$$\text{Head Roach (HR)} = \frac{2}{3} \times \text{Head Length} \times \text{Head Round}$$

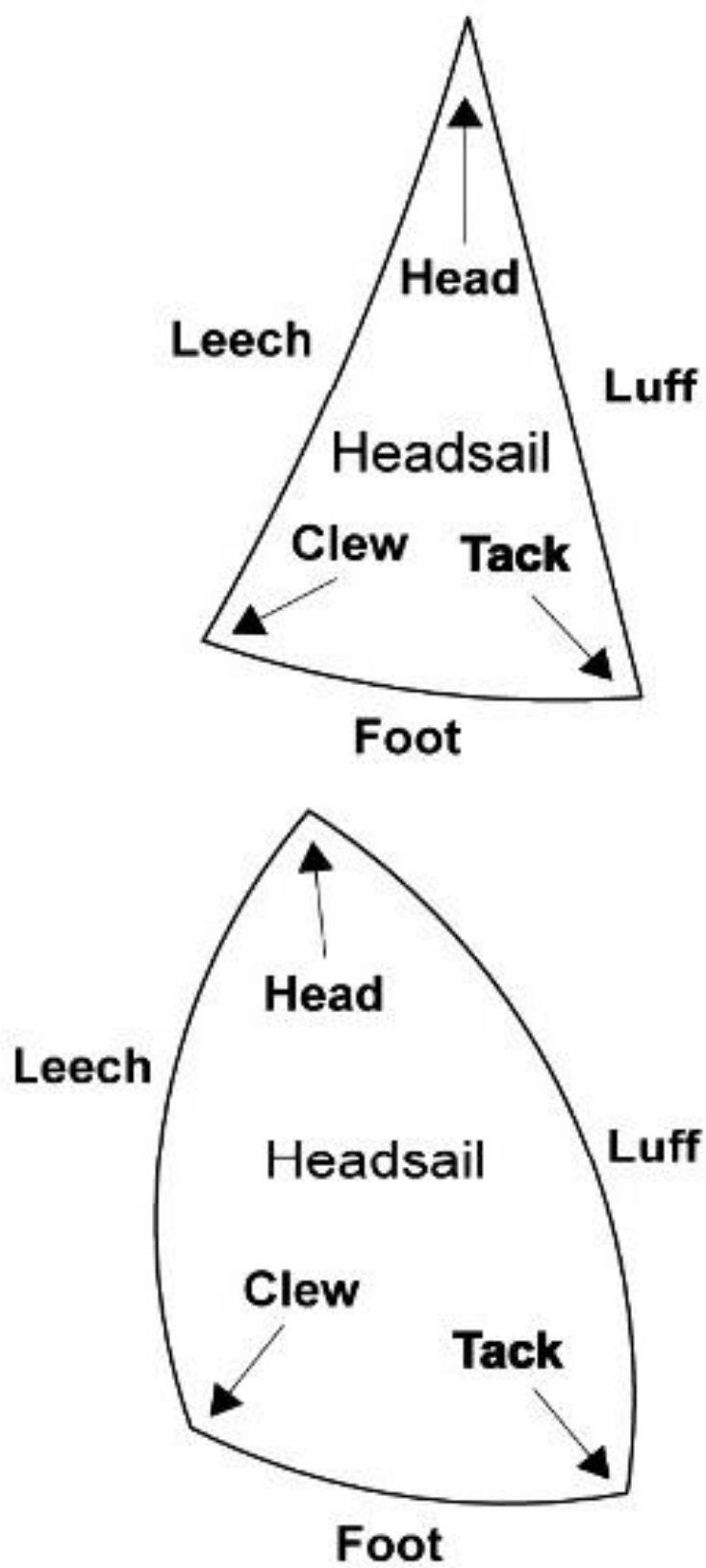
$$\text{Lower Section (LS)} = \frac{\text{Luff Length} + \text{Foot Length} + \text{Diagonal}}{2}$$

$$\text{Upper Section (US)} = \frac{\text{Head Length} + \text{Leech Length} + \text{Diagonal}}{2}$$

$$\text{Lower Area (LA)} = \sqrt{\text{LS} \times (\text{LS} - \text{Luff Length}) \times (\text{LS} - \text{Foot Length}) \times (\text{LS} - \text{Diagonal})}$$

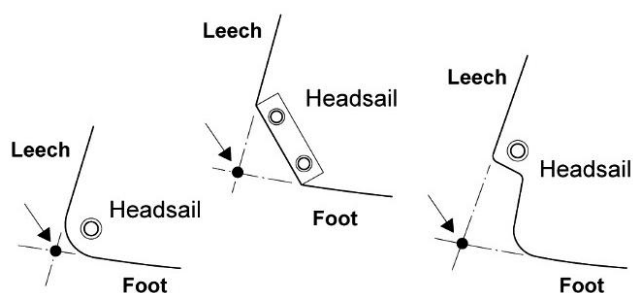
$$\text{Upper Area (UA)} = \sqrt{\text{US} \times (\text{US} - \text{Luff Length}) \times (\text{US} - \text{Head Length}) \times (\text{US} - \text{Diagonal})}$$

$$\text{Mainsail Area} = \text{LuR} + \text{FR} + \text{LeR} + \text{HR} + \text{LA} + \text{UA}$$



### Jib Clew Point

The intersection of the **foot** and the **leech**, extend as necessary



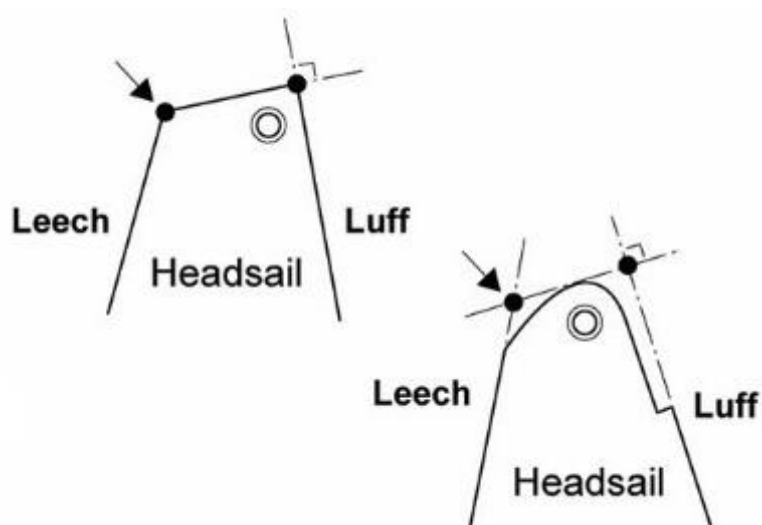
### Jib Head Point

The intersection of the **head** and the **luff**, extend as necessary



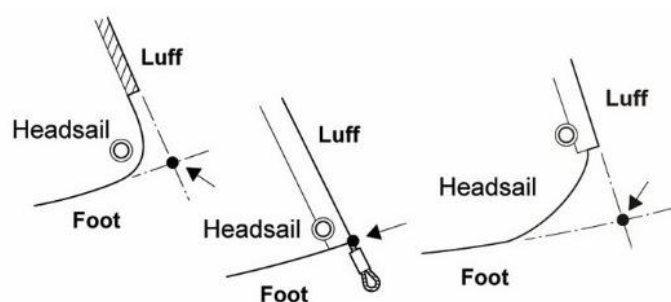
### Jib Aft Head Point

The intersection of the **head** and the **leech**, extend as necessary

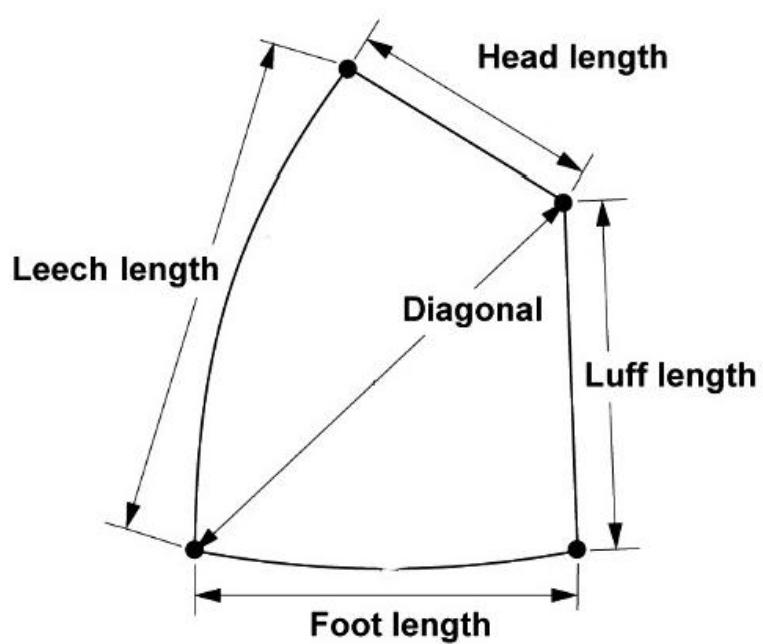


### Jib Tack Point

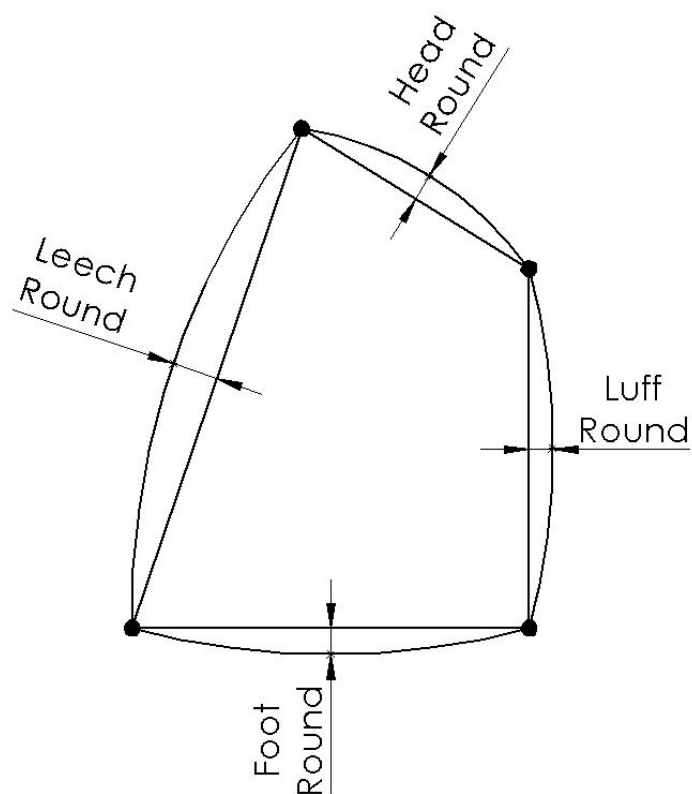
The intersection of the **foot** and the **luff**, extend as necessary



### Jib Primary Dimensions



**Jib Rounds** – to be measured at the widest point, perpendicular to the straight line between two corners





## Jib Calculation

$$\text{Luff Roach (LuR)} = \frac{2}{3} \times \text{Luff Length} \times \text{Luff Round}$$

$$\text{Foot Roach (FR)} = \frac{2}{3} \times \text{Foot Length} \times \text{Foot Round}$$

$$\text{Leech Roach (LeR)} = \frac{2}{3} \times \text{Leech Length} \times \text{Leech Round}$$

$$\text{Head Roach (HR)} = \frac{2}{3} \times \text{Head Length} \times \text{Head Round}$$

$$\text{Lower Section (LS)} = \frac{\text{Luff Length} + \text{Foot Length} + \text{Diagonal}}{2}$$

$$\text{Upper Section (US)} = \frac{\text{Head Length} + \text{Leech Length} + \text{Diagonal}}{2}$$

$$\text{Lower Area (LA)} = \sqrt{\text{LS} \times (\text{LS} - \text{Luff Length}) \times (\text{LS} - \text{Foot Length}) \times (\text{LS} - \text{Diagonal})}$$

$$\text{Upper Area (UA)} = \sqrt{\text{US} \times (\text{US} - \text{Luff Length}) \times (\text{US} - \text{Head Length}) \times (\text{US} - \text{Diagonal})}$$

$$\text{Jib Area} = \text{LuR} + \text{FR} + \text{LeR} + \text{HR} + \text{LA} + \text{UA}$$