SOUTH SHORE PERFORMANCE HANDICAP RACING FLEET

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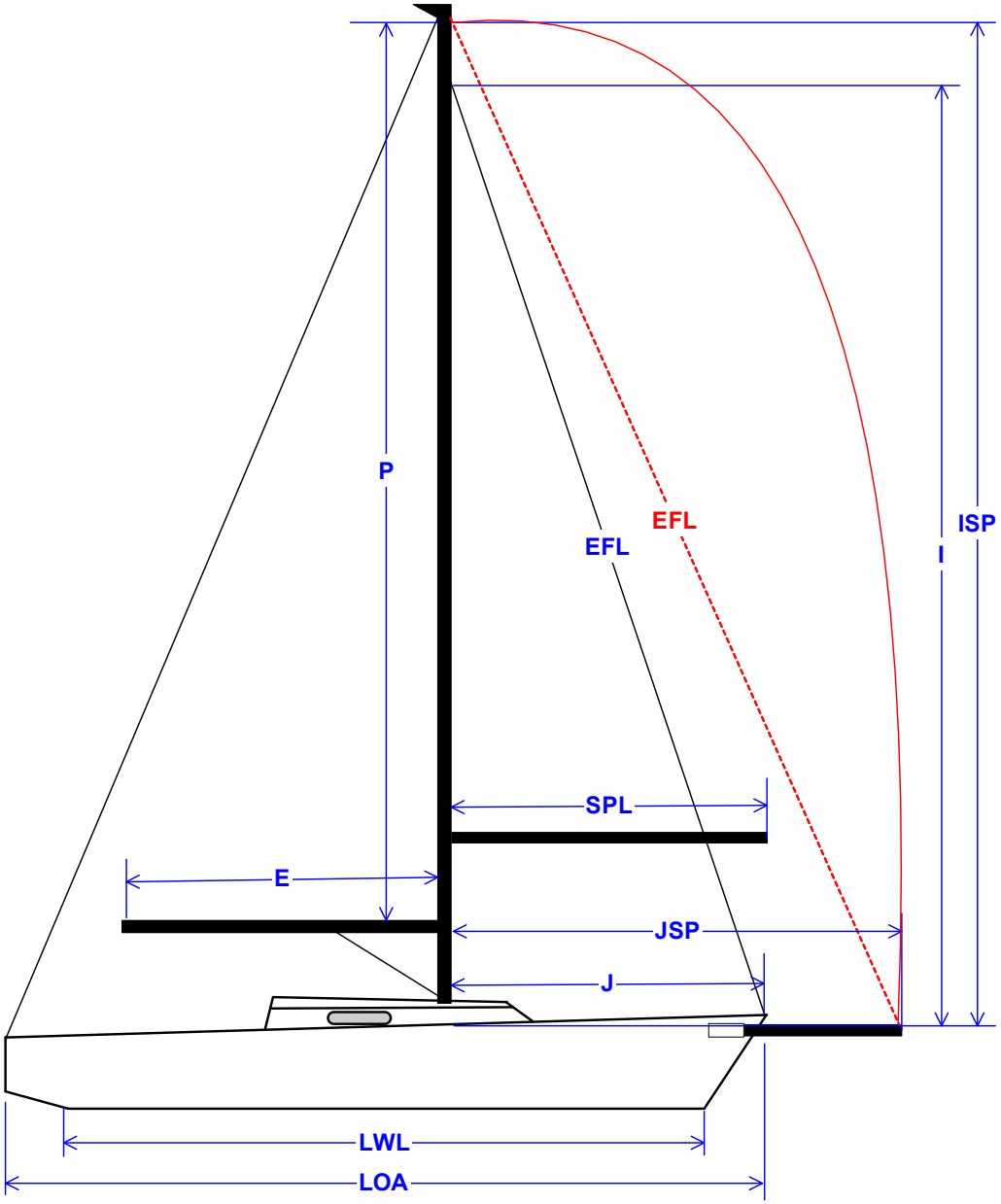
MEASUREMENT REFERENCE MANUAL



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1.0 INTRODUCTION

This manual is being offered as an aid to PHRF-SS measurers. All sails used in PHRF-SS shall be constructed in conformance with “IMS Rule © 2020 PART G – SAILS”

2.0 MEASUREMENT REFERENCE DIAGRAM

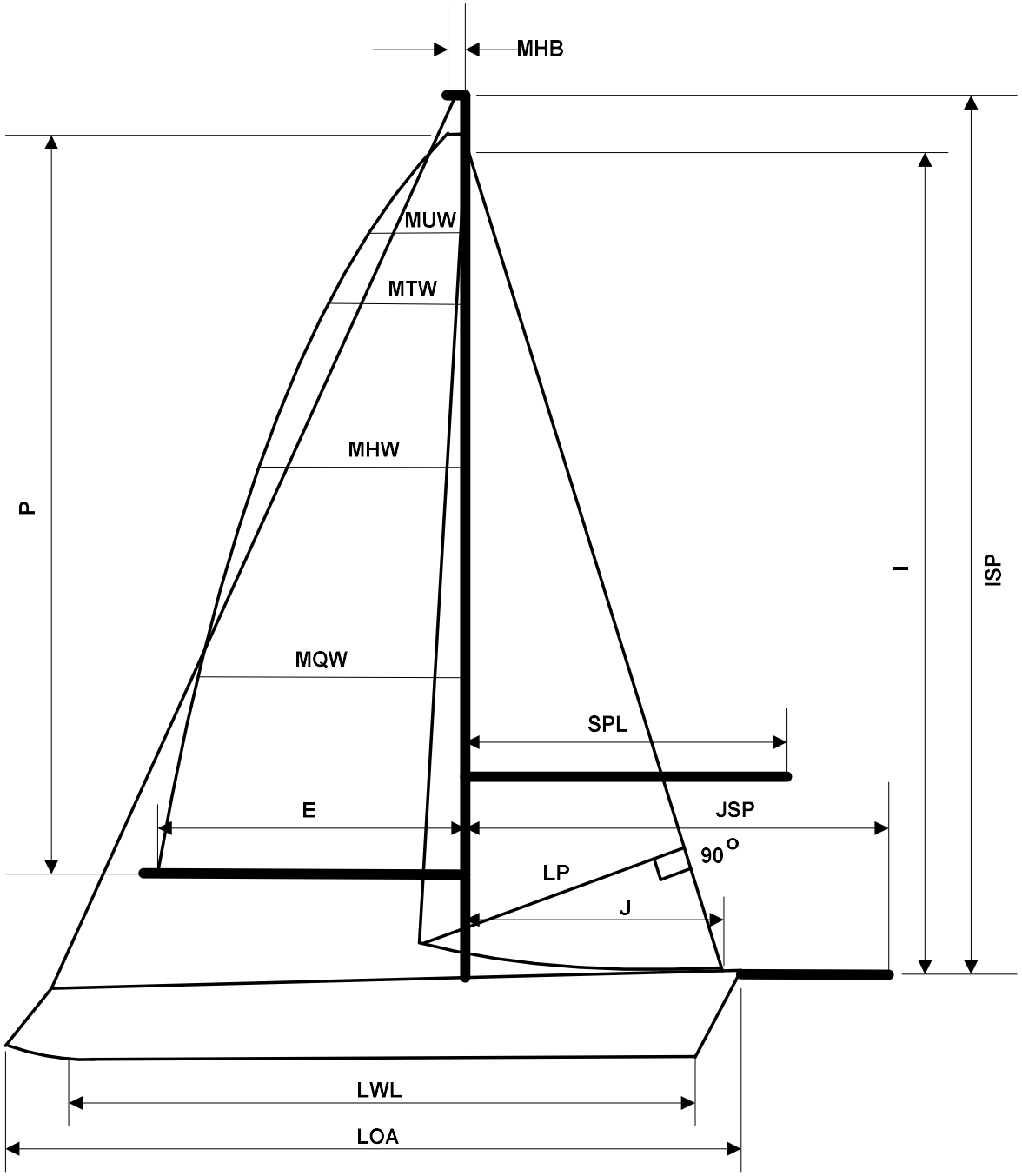
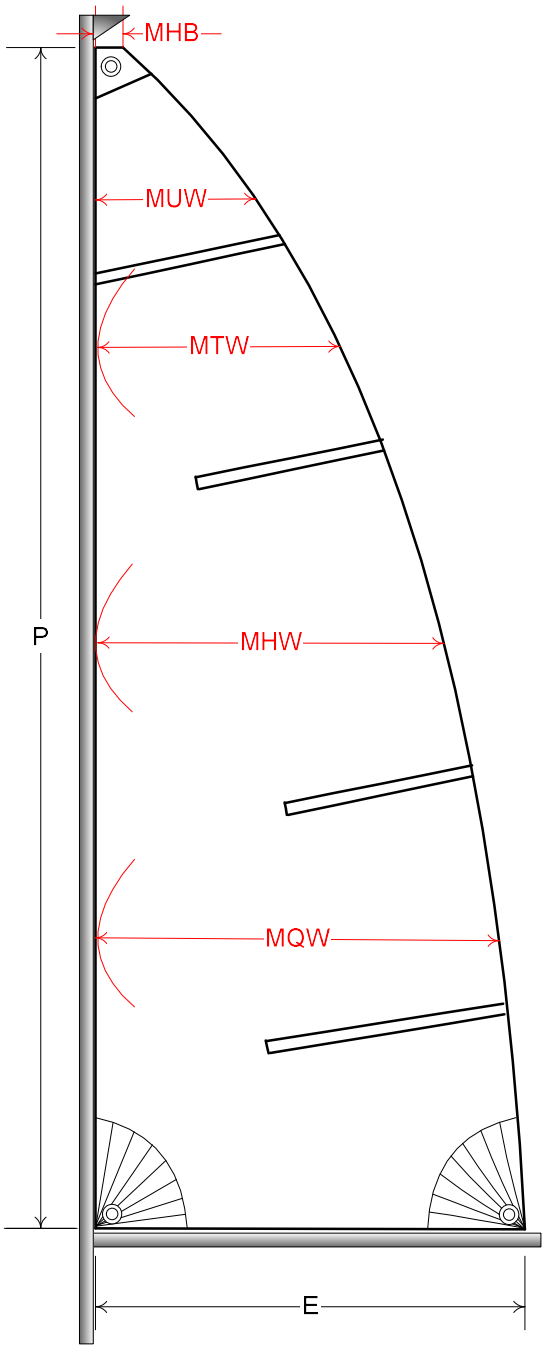


FIGURE 2.0 - MEASUREMENT REFERENCE DIAGRAM

3.0 MAINSAIL MEASUREMENTS

The mainsail is measured with width at the top (MHB) and four widths found on the leach between head and clew: at 1/4 (MQW), 1/2 (MHW), 3/4 (MTW) and 7/8 (MUW) leech heights. Points on the leech are found by folding the sail to find equal distances between clew and head or between two adjacent measurement points. The height of the mainsail luff (P) and mainsail foot (E) are measured on the mast and boom as part of the rig measurements.



The mainsail measured area is calculated by the simplified trapezoid formula above, dividing the luff in amounts of 1/4, 1/2, 3/4 and 7/8. However, the mainsail rated area is calculated by using the actual heights on the luff from the tack point to the points where mainsail widths are measured. The amount of roach will therefore proportionally increase the rated area from the measured one by giving the exact area and center of effort height for square top and other high roach main sails.

If there is a batten above the 7/8 (MUW) leech point, then the top width (MHB) measurement is increased taking in account effect of a batten positioned this high on the mainsail.

Mizzen measurements are the same as for the mainsail, with all corresponding measurements abbreviations having "Y" as a suffix. The basic formula for mainsail area is shown below. Reference Offshore Racing Congress (ORC) Sail Measurement requirements.

Square Top or Fat Head Mains must be declared and will incur an automatic 3 second penalty. Any excess beyond the above stipulations may result in a penalty and must be reviewed by the HRB.

Area = P/8*(E + 2*MQW + 2*MHW + 1.5*MTW + MUW + 0.5*MHB)

4.0 HEADSAIL MEASUREMENTS

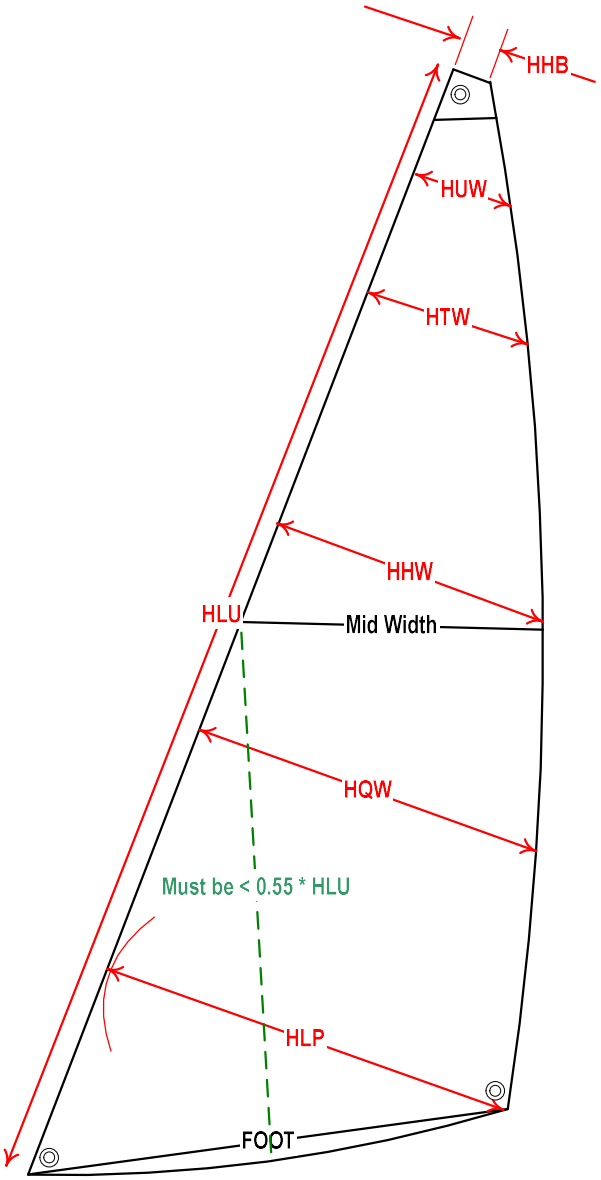
Headsails shall have the distance between half luff point and half leech point of less than 75% or the foot length.

Headsails may be used on a furler system. In such a case, a rating credit will be given if the furling system is used in association with one headsail only.

Headsails may be set on the forestay or set flying, i.e., with no sail edge attached to the rig such as a Code 0. As a part of measurement process, headsails shall be flagged when set flying and/or having battens.

Headsail measurements are similar to those of the mainsail, including the top width (HHB) as well as four widths found on the leach between head and the clew: at 1/4 (HQW), 1/2 (HHW), 3/4 (HTW) and 7/8 (HUW) leech heights. Points on the leech are found by folding the sail to find equal distances between clew and head or between two adjacent measurement points.

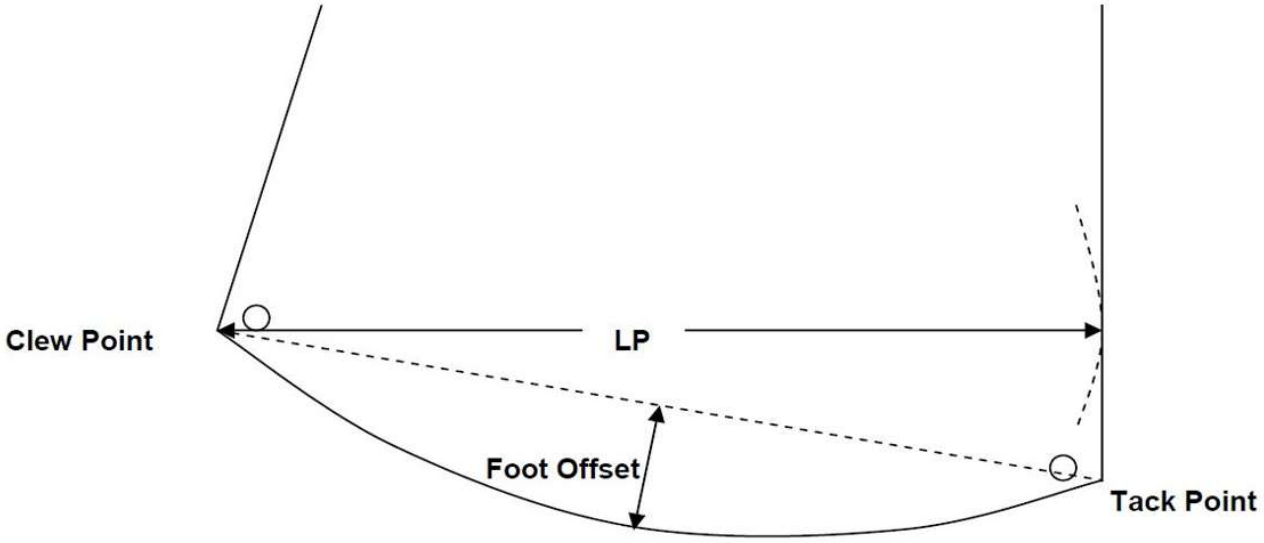
Additional measurements for headsails are: luff length (HLU) and luff perpendicular (HLP) as the shortest distance from the clew point to the luff. When the leech has a clear hollow or the headsail is not the largest in the sails inventory, measurements can be reduced to HLU and HLP only. Mid-width must be < 0.75 * FOOT



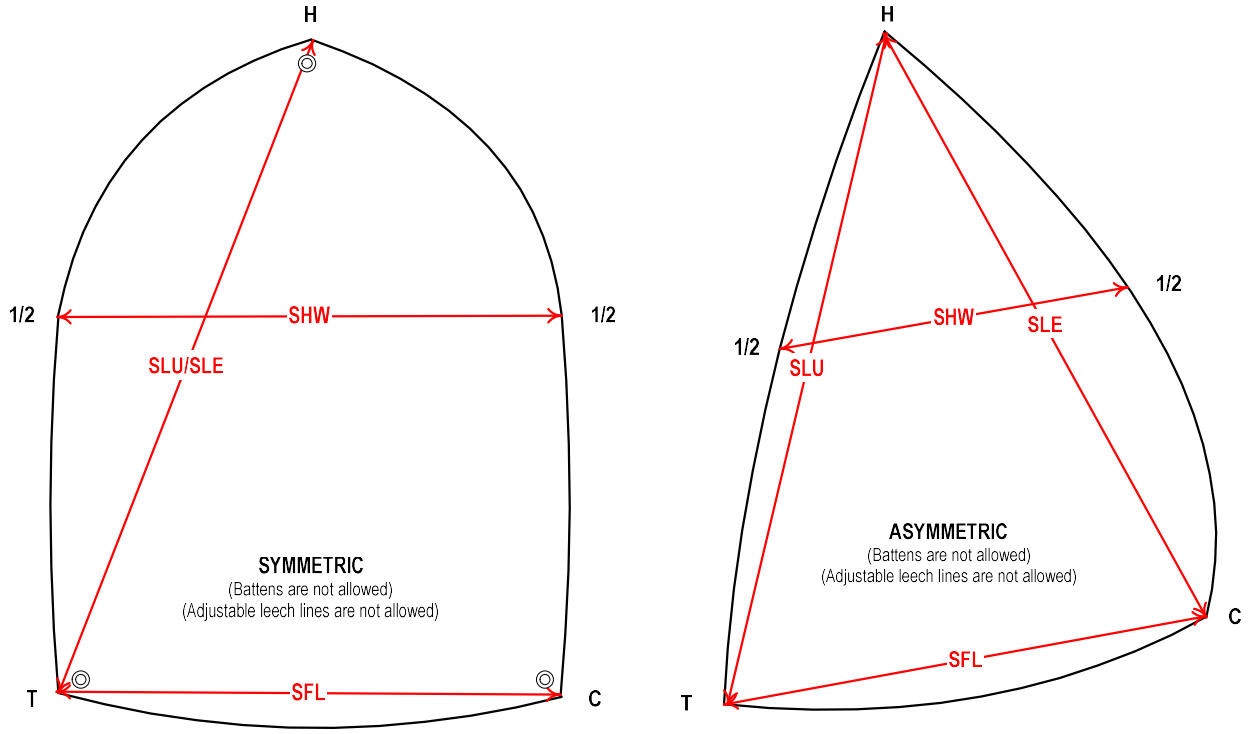
Area = 0.1125*HLU*(1.445*HLP + 2*HQW + 2*HHW + 1.5*HTW + HUW + 0.5*HHB

5.0 ROLLER FURLED HEDSAIL CREDIT

To qualify or obtain a roller furling headsail credit, the foot offset of the roller furled headsail shall not exceed 2% of the LP when measured perpendicular to the foot at mid-point. No other headsail may be substituted at any time for the qualified sail without losing the credit.



6.0 SPINNAKER MEASUREMENTS



The half width of any spinnaker shall be 75 % or more of the foot length.

The symmetric spinnaker shall be symmetric in shape, material and cut, about a line joining the head to the center of the foot. The symmetric spinnaker shall not have adjustable leech lines.

Any spinnaker not qualifying as symmetric shall be considered as asymmetric. Where the asymmetric spinnaker is tacked on the centerline, tack pennants of any length may be used.

Battens are not permitted on any spinnaker. Spinnaker measurements include: leech length (SLU), luff length (SLE), half width (SHW) as the distance between midpoints on the luff and leech and the foot length (SFL). The asymmetric spinnaker luff ASL is then calculated as the average of the luff length (SLU) and the leech length (SLE) making it possible to use the same formula for spinnaker area.

Symmetric Spinnaker Area:

Area = (SLU*(SFL + 4*SHW))/6

Asymmetric Spinnaker Area:

Area = (ASL*(SFL + 4*SHW))/6