



Rig Measurement

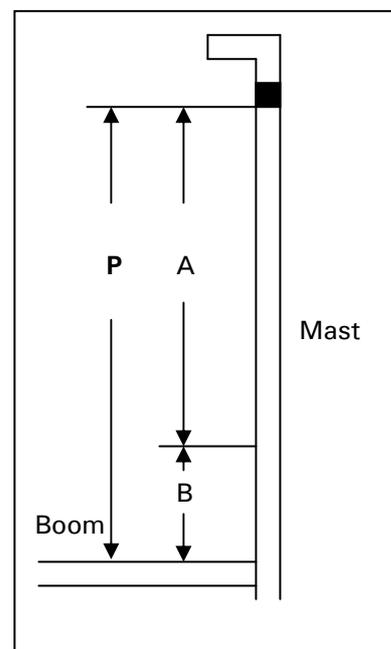
- What is being measured?
- P** Maximum mainsail hoist measured on the mast as the distance between the **mainsail upper limit mark** and the top of the boom.
 - E** Mainsail **outer point distance** measured on the boom as the distance between the **mainsail outer point** and the aft edge of the mast **spar**.
 - J** Foretriangle base measured as the horizontal distance between the fore side of the mast **spar** at the deck/coachroof and the intersection of the centreline of the forestay with the deck.
 - FL** Forestay length measured as the distance between the forward end of J and the forestay rigging point.
 - STL** Spinnaker tack length measured as the length of the longest of the **spinnaker pole, whisker pole, bowsprit** or spinnaker tack point on the deck.

P can be measured with the mast either in or out of the boat.

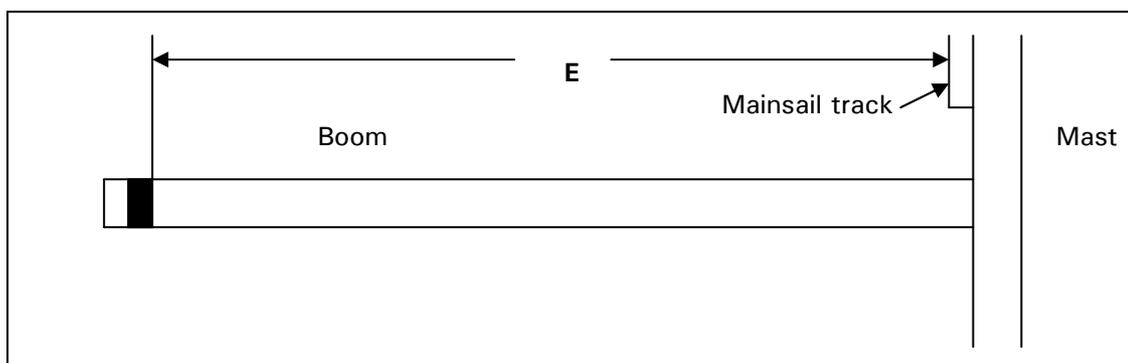
With the mast out: Lay the mast horizontally with the aft face upwards. Make a reference mark on the mast above where the boom top surface will be. Measure distance A between this reference mark and the lower edge of the black band at the top of the mast, or if there is no black band to the bearing surface of the fully hoisted halyard shackle.

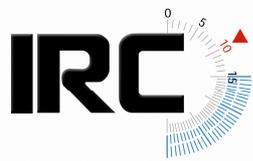
When the mast has been stepped and the boom fitted, with the boom horizontal measure the distance B down from the reference mark to the top of the boom and add this to A to get P.

With the mast up: This should be done on a day with light winds to avoid inaccuracy due to wind effects on the tape measure. Send a crew member aloft to the masthead with a steel tape measure. Measure the distance from the lower edge of the black band at the masthead, or if there is no black band to the bearing surface of the fully hoisted halyard shackle, to the top of the boom.



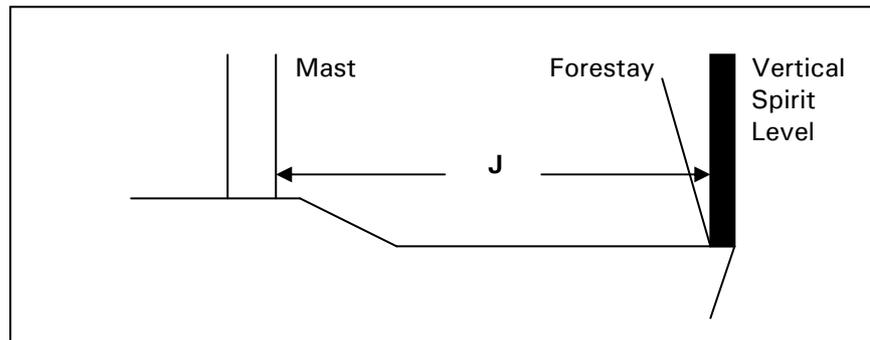
E is measured with the mast stepped and the boom fitted. Set the boom horizontal and on the centreline. Measure the distance between the aft face of the mast, or the aft face of any external mainsail track, to the forward edge of the black band at the end of the boom, or if there is no black band, to the aft end of the boom.





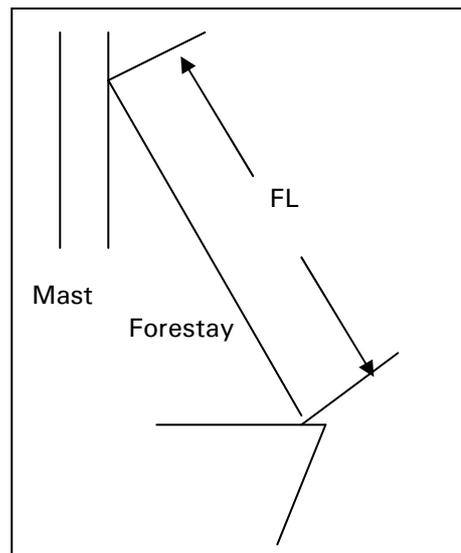
J is measured with the mast stepped and chocked at deck level, standing rigging tensioned, and backstay/runners hand tight.

Position and hold a spirit level vertically on the deck at the centreline of the forestay. Measure the horizontal distance between the front face of the mast at deck level and the spirit level. This will be the shortest distance found when moving the tape measure up and down the spirit level while the end is held at the mast.



FL is measured with the mast stepped and chocked at deck level, standing rigging tensioned, and backstay/runners hand tight. If the forestay is adjustable (either while racing or at any other time) it must be set to the maximum length that will be used while racing. As with P, this should be done on a day with light winds to avoid inaccuracy due to wind effects on the tape measure.

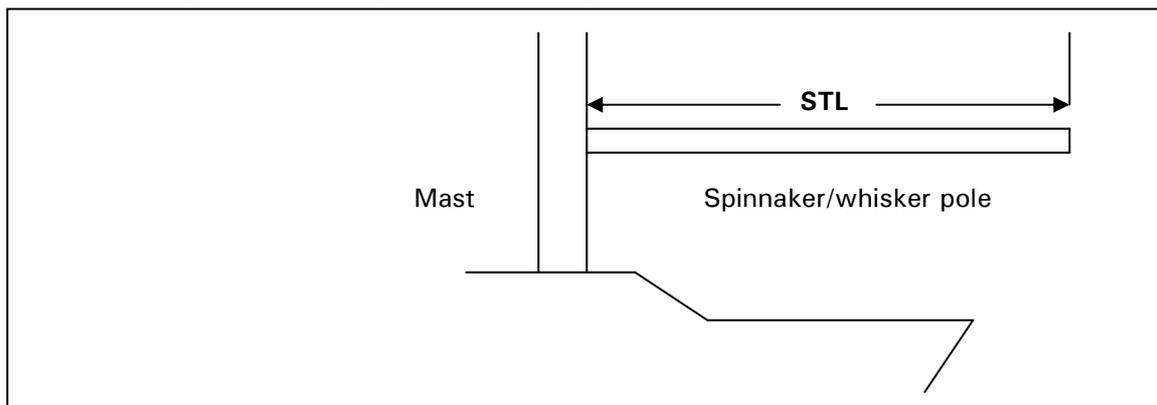
Send a crew member aloft to the hounds with a steel tape measure. Measure the distance from the forestay attachment point on the mast to the bottom of the forestay where it intersects the deck.



STL is measured with the mast up. It is the **longest** of any of the following:

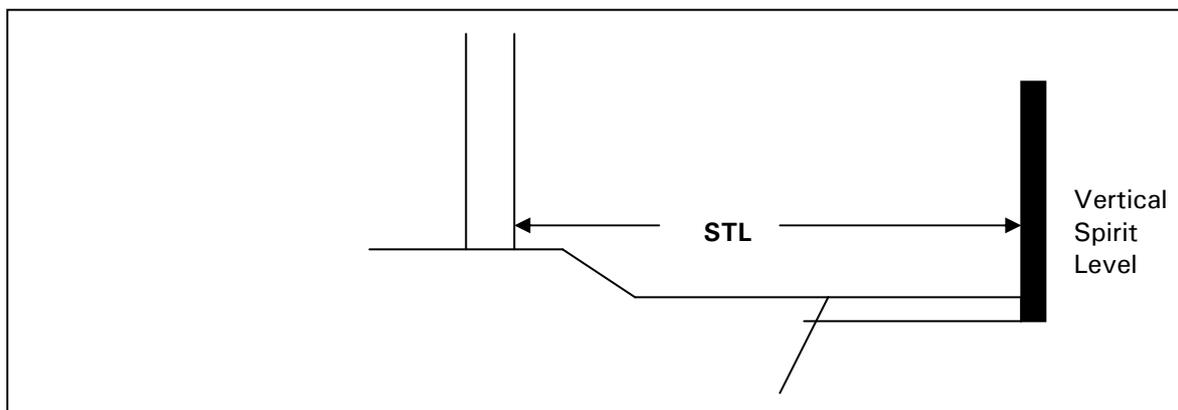
Spinnaker pole length: Rig the pole at a convenient height horizontally on the mast on the centreline of the boat. Ensuring that the pole is pulled forward to its maximum extension on the heel fitting, measure the distance from the front face of the mast to the extremity of the pole.

Whisker pole length: As spinnaker pole length.





Bowsprit length: Fully extend the bowsprit. Position and hold a spirit level vertically against the end of the bowsprit. Measure the horizontal distance between the front face of the mast at deck level and the spirit level. This will be the shortest distance found when moving the tape measure up and down the spirit level while the end is held at the mast.



Spinnaker tack point on deck: As for bowsprit, but with the spirit level positioned at the spinnaker tack point on deck.

References:

Equipment Rules of Sailing. <http://www.sailing.org/documents/isaf-equipment-rules.php>.

F.2.2 (b) defines **mainsail upper limit mark**. F.3.2 and F.3.3 define **outer limit mark** and **outer point distance**. F.2.3 (d) defines **rigging point**.

IRC definitions:

- E** The **outer point distance** of a **mainsail** (or in the case of a **schooner**, a **foremast sail**). The **outer limit mark** shall be permanently marked by a 25mm band of contrasting colour. If there is no band the measurement shall be taken to the aft end of the boom.
- FL** The **forestay** length measured from the forward end of J to the **forestay rigging point**.
- Forestay** The ERS definition of **forestay** shall not apply. Forestay is defined as: Permanently attached **rigging** providing forward support for a mast **spar**.
- J** The longitudinal distance between the intersection of the fore side of the mast **spar**, extended as necessary, and the deck including any superstructure; and the intersection of the centreline of the **forestay**, extended as necessary, and the deck, or bowsprit **spar**.
- P** The distance between the **mainsail** (in the case of a **schooner**, the **foremast sail**) **upper limit mark**, which shall be permanently marked by a 25mm band of contrasting colour, and the top of the boom when set at right angles to the **mast**, or the **mainsail tack point** whichever is lower, on the **mainmast** (in the case of a **schooner**, the **foremast**). If there is no band the measurement shall be taken to the top bearing surface of the halyard shackle. In the case of a gaff rig, the upper measurement point is the **peak point** of the **mainsail** or the **head point** of the topsail if on board.
- STL** The length of the longest **spinnaker pole**, **whisker pole** or **bowsprit** measured on or near the centre line of the **boat** from the forward face of the mast **spar** to the extremity of the **spinnaker pole**, **whisker pole** or **bowsprit**, or the horizontal length from the forward face of the mast **spar** at deck level to the spinnaker tack point on deck projected vertically as necessary, whichever is the greatest.