

Submission: **ESP 3**

Reporting committee: **ITC
MEASUREMENT COMMITTEE**

BOOM DIAMETER

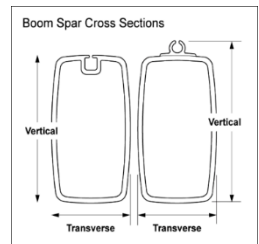
PROPOSAL

Clarify the way to measure the Boom Diameter (BD) on so-called “Park Avenue” boom types.

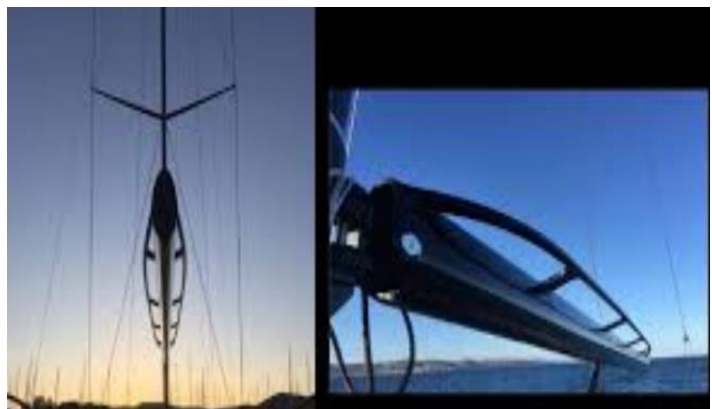
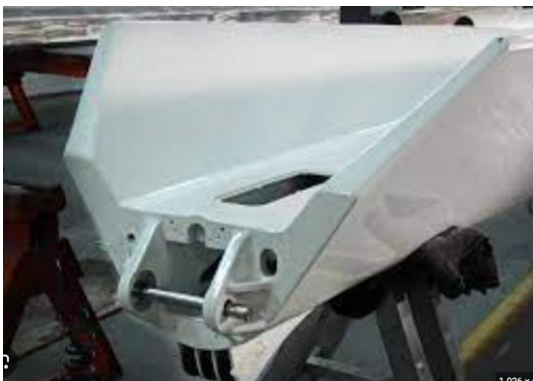
RATIONALE

The way we normally measure “BD” is quite clear on “conventional booms”:

- IMS F5.2 BD shall be the maximum vertical boom spar cross section.
- ERS F3.3(d) BOOM SPAR CROSS SECTION
 - (i) VERTICAL: The vertical dimension, including any sail track, at a specified distance from the outer point.



In the past, only big boats and super yachts had so-called “Park Avenue” booms, which have (solid) extensions with the aim to store the mainsail when it is lowered (see photos below), but nowadays we are finding them on smaller boats as well.



The BD value influences the rating certificate, as ORC 108.3 reads:

ORC 108.3 Boom diameter by default shall be $0.06 \times E$. If BD exceeds this default, the mainsail rated area shall be increased as defined in 109.2.

ORC 109.2 If BD exceeds the limit determined in 108.3, the mainsail rated area shall be increased by $2 \times E \cdot (BD - 0.06 \times E)$.

So, the way we measure the BD on this type of boom may have a non-desired effect on the final rating of a boat if we measure the total height of the boom, by doubling the increment stated in ORC 109.2.

Besides the problem with the BD, this measurement also has an effect on the BAS value / position.

IMS F3.4 reads: BAS shall be the highest vertical distance between the mast datum point and the lower point; and ERS B.1.2 defines Mast Lower Limit Mark as:

When a sail is set on a main boom, foremast boom or mizzen boom, the extension of the upper edge of the spar shall intersect the mast spar above the mast lower limit mark, with the boom spar on the mast spar centerplane and at 90° to the mast spar.