

## 104 Appendages

The longitudinal movement of the center of gravity of a centerboard when it is being raised or lowered shall not exceed  $0.06 * LOA$ .

## 105 Propeller

- 105.1 PIPA shall be the propeller installation projected area calculated on propeller type, installation and measurements.
- 105.2 For twin propeller installation, PIPA is doubled.

## 106 Stability

- 106.1 Limit of positive stability (LPS) as calculated by the LPP from the measured righting moment shall not be less than 103.0 degrees, except for the ORC Sportboats for which the limit is 90.0 degrees.
- 106.2 Stability Index shall be calculated as follows:

Stability Index = LPS + Capsize Increment (CI) + Size Increment (SI)

$$CI = 18.75 \cdot \left( 2 - \frac{MB}{\sqrt[3]{DSPM/64}} \right) \quad SI = \frac{\left( \frac{12 \cdot \sqrt[3]{DSPM/64 + LSM0}}{3} \right) - 30}{3}$$

DSPM – Displacement in measurement trim calculated by the VPP

LSM0 – Second moment length calculated by the VPP

CI shall not be taken as greater than 5.0

SI shall not be taken as greater than 10.0.

Stability Index for water ballast yachts is calculated with the ballast tankage full on one side, empty on the other and for canting keel yachts with the keel fully canted.

- 106.3 Minimum Stability Index may be limited by the Notice of Race and Sailing Instructions for the Offshore Special Regulations Categories 0, 1 or 2 events, but other limits may also be set for any particular event.

|                         |     |     |     |
|-------------------------|-----|-----|-----|
| Offshore Race Category: | 0   | 1   | 2   |
| Minimum Stability Index | 120 | 115 | 110 |

- 106.4 For a boat with water ballast or canting keel, the Ballast Leeward Recovery (BLR) Index represents such a boat's relative ability to recover from a knock down with sails aback, i.e., knocked down with all water ballast or canting keel to leeward. BLR Index shall be calculated as follows:

$$BLRIndex = \frac{RA90 \cdot DSPS}{6 \cdot SA \cdot CE} + 0.5$$

Where the following values taken with full leeward cant or leeward ballast tankage full, windward empty, they are calculated by the VPP, in metric units:

RA90 - Righting arm, 90 degrees heel, sailing trim

SA - Rated sail area

CE - Center of Effort of the rated sail area

- 106.5 Minimum BLR Index may be limited by the Notice of Race and Sailing Instructions for the Offshore Special Regulations Categories 0, 1 or 2 events, but other limits may also be set for any particular event.

Offshore Race Category 0: Minimum BLR Index =  $0.90 + 0.007 * (LSM1 - 5)$

Offshore Race Category 1 & 2: Minimum BLR Index =  $0.75 + 0.007 * (LSM1 - 5)$