

Submission: **SR04-15**

Offshore Special Regulation - 3.04.4

A submission from the Chairman

Purpose or Objective

Modify the stability requirements for greater consistency between ISO, ORC and SSS. Addition of missing ISO 12217-2 requirements to the stability regulations

Proposal

- 3.04.3 Yachts shall demonstrate compliance with ISO 12217-2*, either by EC Recreational Craft Directive certification (having obtained the CE mark) or the designer's declaration, for the race categories as follows:

TABLE 3

ISO Category	A	B
OSR Category	0,1,2	3

* The latest effective version of ISO 12217-2 should be used unless the yacht was already designed to a previous version

- 3.04.4 For yachts which cannot demonstrate compliance in accordance with 3.04.3 they shall provide:

- STIX, AVS and Minimum righting energy values as in Table 4; or
- the stability index/AVS in ORC Rating System as in Table 4; or
- IRC SSS Base value as in Table 4

TABLE 4

OSR Category	0	1	2	3
STIX min	32			23
AVS min	130-0.002*m but always $\geq 100^\circ$			130-0.005*m but always $\geq 95^\circ$
Minimum righting energy	$m \cdot A_{GZ} > 172000$			$m \cdot A_{GZ} > 57000$
ORC Stability Index min	120	115	110	103
IRC SSS Base Value min	35		28	15

Where "m" is the mass of the boat in the minimum operating condition as defined by ISO 12217-2

Where A_{GZ} is the positive area under the righting lever curve in the minimum operating condition, expressed in metre degrees from upright to AVS.

Current Position

Current OSR 3.04.3 and 3.04.4 as amended above

Mo0,1,2,3

Mo0,1,2,3

Extract from Minutes of 2014 Special Regulation Sub-Committee

4 (i) OSR 3.04.4 Monohull Stability

Submission SR09-14 from Sail Canada was received.

Will Apold explained that the submission sought to introduce a minimum mass requirement in order to assist a Race Committee in screening yachts which cannot demonstrate compliance with ISO 12217-2, either by EC Recreational Craft Directive certification (having obtained the CE mark) or the designer's declaration.

As a member of the monohull stability working party, Mike Urwin noted that when the ISO Stability Standard 12217-2 was re-published in 2013, the following requirements had been amended:

“6.3 Angle of Vanishing stability and minimum mass “, had been deleted and replaced by :

“6.4 Minimum Righting Energy” and “6.5 Angle of vanishing stability”

As a minimum mass requirement has been removed from the ISO standard and replaced by a minimum righting energy he felt that this should be reflected in any change to 3.04.4.

Boris Hepp questioned how an owner was supposed to know all the details of ISO 12217.

It was noted that the primary simple solution applicable to most competing yachts was that the yacht has the appropriate CE mark or a designer's declaration.

There was a view that the term “or failing that” in the proposal was not appropriate and that a simple ‘or’ would be preferable. It was also noted that 3.04.3 ISO Category A should be linked to ORC Category ‘0-2’, currently noted as ‘1-2’.

Sten Edholm noted that the submission needed further work. He felt that the subject had reached a level of complexity that he was not comfortable with and that he wished to withdraw from being chairman of the Monohull Stability working party.

On a proposal to defer by Sten Edholm, seconded by Will Apold and a vote of 9 in favour, 0 against and 0 abstentions it was agreed:

Recommendation to the Oceanic and Offshore Committee: Defer

Oceanic and Offshore Committee Decision: Defer

See also Item 3(a)-Deferred submission SR09-14