Reporting Committee Special Regulations
Other Committee – (World Sailing use only)

Submission: SR13-24

Offshore Special Regulations 2024-2025

Rule 3.04 Stability-Monohulls

A submission from the Chair of the Oceanic and Offshore Committee on behalf of the Stability Working Party

Purpose or Objective

To improve the safety of offshore sailing by changing the requirements relating to stability in Category 0 and 1. See report.

Proposal

Summary of changes to Offshore Special Regulations 3.04:

1. For offshore categories 2 and 3, make no changes.
2. For offshore categories 0 and 1, require the most stringent requirement of ISO 12217-2 or ORC Stability Index.
3. For offshore category 0 and 1, measured displacement and stability shall be used for the ISO and ORC calculations.

3.04 Stability – Monohulls

Mo0 — 3.04.1 a) Compliant with ISO 12217-2[a] design category A and having a minimum Stability Index in the ORC rating system of 120[b]. Starting in 2027, this compliance shall be confirmed by having the actual displacement measured and by an inclination test.

Mo1 — b) Compliant with ISO 12217-2[a] design category A and having a minimum Stability Index in the ORC rating system of 115[b]. Starting in 2027, this compliance shall be confirmed by having the actual displacement measured and by an inclination test.

Mo~~2~~ — c) Compliant with ISO 12217-2[a] design category A.

Mo3 — d) Compliant with ISO 12217-2[a] design category B or higher.

Mo0,1,2,3 — [a] This can be demonstrated either by EC Recreational Craft Directive certification having obtained the CE mark or by the designer's declaration. The latest effective version of ISO 12217-2 should be used unless the boat was already designed to a previous version.

Mo0,1 — [b] This can be demonstrated either by a valid ORC international rating certificate or by the designer's declaration.

Mo0,1,2,3 — 3.04.2 Where compliance in accordance with OSR 3.04.1 cannot be demonstrated, a boat shall be able to demonstrate either:

Mo0,1,2,3 — **Table 2 – STIX, AVS, m*A_{GZ} and ORC Requirements**

Mo0,1,2,3 — a)

Race Category	0	1	2	3
minimum Stability Index in the ORC rating system	120	115		
minimum ISO 12217-2 Stability Index (STIX)	32			23
minimum ISO 12217-2 Angle of Vanishing Stability (AVS)	130-0.002*m			130-0.005*m
but AVS always >=	100°			95°
a minimum righting energy m*A_{GZ} (where A_{GZ} is the positive area under the righting lever curve in the	172000			57000

minimum operating condition, expressed in kg metre degrees from upright to AVS)		

Mo0,1,2,3 or

Mo0,1,2,3 **Table 3 – ORC Stability Index or SSS Requirements**

Mo0,1,2,3 b)

Race Category	0	1	2	3
minimum Stability Index in ORC Rating System, or			110	103
minimum IRC Safety and Stability Screening numeral (SSS) Base value			28	15
SSS may only be used if the series date is before			1995	2000

Mo0 3.04.3 A boat shall be capable of self-righting from an inverted position with or without reasonable intervention from the crew and independent of the condition of the rig.

Current Position

The current position shows the original including changes

3.04 Stability – Monohulls

Mo0 3.04.1 a) Compliant with ISO 12217-2*[a] design category A **and having a minimum Stability Index in the ORC rating system of 120[b]. Starting in 2027, this compliance shall be confirmed by having the actual displacement measured and by an inclination test.**

Mo1 b) Compliant with ISO 12217-2*[a] design category A **and having a minimum Stability Index in the ORC rating system of 115[b]. Starting in 2027, this compliance shall be confirmed by having the actual displacement measured and by an inclination test.**

Mo~~0,1,~~2 ~~a)~~c) ~~Able to demonstrate c~~**C**ompliant~~ce~~ with ISO 12217-2*[a] design category A~~ or higher either by EC Recreational Craft Directive certification having obtained the CE mark or by the designer's declaration~~.

Mo3 ~~b)~~d) ~~Able to demonstrate c~~**C**ompliant~~ce~~ with ISO 12217-2*[a] design category B or higher ~~either by EC Recreational Craft Directive certification having obtained the CE mark or by the designer's declaration~~.

Mo0,1,2,3 *[a] **This can be demonstrated either by EC Recreational Craft Directive certification having obtained the CE mark or by the designer's declaration.** The latest effective version of ISO 12217-2 should be used unless the boat was already designed to a previous version.

Mo0,1 [b] **This can be demonstrated either by a valid ORC international rating certificate or by the designer's declaration.**

Mo0,1,2,3 3.04.2 Where compliance in accordance with OSR 3.04.1 cannot be demonstrated, a boat shall be able to demonstrate either:

Mo0,1,2,3 **Table 2 – STIX, AVS, ~~and~~ m*A_{GZ} and ORC Requirements**

Mo0,1,2,3 a)

Race Category	0	1	2	3
minimum Stability Index in the ORC rating system	**120**	**115**		
minimum ISO 12217-2 Stability Index (STIX)	32			23
minimum ISO 12217-2 Angle of Vanishing Stability (AVS)	130-0.002*m			130-0.005*m
but AVS always >=	100°			95°

		a minimum righting energy m*A_{GZ} (where A_{GZ} is the positive area under the righting lever curve in the minimum operating condition, expressed in kg metre degrees from upright to AVS)	172000	57000

Mo0,1,2,3 or

Mo0,1,2,3 **Table 3 – ORC Stability Index or SSS Requirements**

Mo0,1,2,3 b)

Race Category	0	1	2	3
minimum Stability Index in ORC Rating System, or	~~120~~	~~115~~	110	103
minimum IRC Safety and Stability Screening numeral (SSS) Base value			28	15
SSS may only be used if the series date is before			1995	2000

Mo0 3.04.3 A boat shall be capable of self-righting from an inverted position with or without reasonable intervention from the crew and independent of the condition of the rig.

Reasons
(See the report)