



Use of RORC Stability Index SSS in the Offshore Special Regulations

Dr Jason Smithwick – RORC Rating Office.

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RYA and IRC Submission to World Sailing

IRC and the RYA have made an Offshore Special Regulations (OSR) submission to World Sailing (WS) limiting the use of the RORC stability index; “SSS” to older boats, exactly in line with the current RORC Notice of Race that has been used for many years. The reasons are clear and mentioned within this submission as follows:

- 1. RORC SSS is still used as a stability criteria in the OSR and may apply to modern boats when no recent work has been done to assess the suitability of SSS to newer designs, when STIX and AVS should be readily available. OSR cannot delete this as it is still useful for event organisers with older designs entered with a good track record in safety where they were designed before STIX and AVS stability criteria.*
- 2. Event organisers, including RORC, continue to use SSS in its assessment of the stability for older designs. The Primary Launch dates proposed have been used and proven for many different category races for many racing seasons and prove to be safe and effective.*

ORC Counter Submission

Subsequently the ORC has made a counter submission to remove the use of SSS from the OSR citing the following reasons:

The Angle of Vanishing Stability is one of the most important criteria to determine eligibility of a boat to enter different categories of offshore races. The current OSR rules use either the ISO standard, ORC Stability Index and IRC SSS values. The ISO standards and ORC Stability Index are based on an inclining test and known hull geometry to determine the boats VCG and Angle of Vanishing Stability. IRC SSS is not based on any stability measurement and is therefore not appropriate for safety screening.

World Sailing Request for Compromise and ORC Proposal

WS subsequently asked for the two counter submitters to see if they could come to a joint proposal on the use of SSS in the OSR. A review and proposal have been received from ORC that states SSS should be phased out as follows:

ORC acknowledges that removing SSS from the OSR at short notice is not feasible. That said, it is our responsibility to do the right thing for our constituency and mandate the use of safety standards that conform to international best practice as soon as possible. i.e.

Remove SSS for Cat 0 and 1 races for 2025.

Remove SSS for Cat 2 and 3 races for 2026.

IRC Congress, IRC Technical Committee, RYA Technical Committee, RORC Main Committee and associated sub-committees do not support the ORC proposal and wish to continue with the original IRC and RYA submission as presented.

division of Royal Ocean Racing Club Ltd

Seahorse Rating Ltd, Seahorse Building, Bath Road, LYMINGTON SO41 3SE, UK

Tel: +44(0)1590 677030 Email: info@rorcrating.com Web: www.rorcrating.com www.ircrating.org

Social Media: Facebook www.facebook.com/RORCrating Twitter: @RORCrating

Company Registration Number: 2041269, Registered in England and Wales.



Reality of Removal of SSS from OSR

On this basis, for example, all boats for the 2025 Transatlantic and 2027 Fastnet race that used SSS would either have to undertake that required to calculation STIX and AVS or simply could not enter. This is 20% of the fleet and as an example for the 2023 Rolex Fastnet Race: 65 boats that entered used SSS, this number included 8 x Sigma 38's, 2 x Sigma 33's, 2 x X332's, 1 x Rainbow 42, 1 x Hanse 370. 291 boats used modern STIX and AVS.

For information to obtain STIX and AVS for a boat that does not have this information readily available would include the following steps:

1. 3D scan of complete hull and appendages up to deck.
2. Inclining experiment
3. Weighing or freeboard measurement
4. Naval Architect hydrostatics and stability calculation.

On a 40ft boat it is estimated that the costs to undertake the above to be around £4000
It is notable that for ORC measurement and ORC certification step 1 and 2 above is required.

For the UK JOG fleet, a large proportion rely on the SSS for stability assessment as they are older boats. We have received this specific feedback:

JOG's charter is to support and promote smaller boats in offshore racing. Many of these smaller boats are older and predate ISO and STIX. The investment to get a STIX measurement is significant and by no means proportional to the outlay or running costs of such boats.

We fully support the proposal to grandfather the use of SSS as to deprecate it would have a heavy impact on our fleet and would undoubtedly end offshore racing for the smaller classic yachts that are part of our club's fabric.

International Regulations

While it is mentioned in the ORC proposal that regulatory organisations do not approve boats based on time in service it is understood international practice does use proof of service when it comes to elements of safety for many regulatory organisations such as the UK Maritime Coastguard Agency (MCA) etc.

It is notable that the World Sailing OSR Plan review scheme has a distinct grandfathering clause for designer declaration of boats before 2009 in OSR 3.03.