

ORR OWNER'S QUICK START GUIDE

Brief

The Offshore Racing Rule (ORR) is administered by the Offshore Racing Association (ORA). ORA and US SAILING, the national authority for sailing in the United States, are both responsible for its implementation.

The ORR predicts relative time allowances between boats to permit boats of different sizes, types and ages to compete with the fairest ratings possible.

The ORR is an objective rule. Its ratings are based on full measurement of all the speed-related features of sailboats and on a Velocity Prediction Program (VPP) that calculates the speed potential of each boat at any combination of wind speed and course direction. The VPP is a set of algorithms developed through systematic research that use fundamental scientific methods.

ORR is intended to be a non-typeforming measurement rule that fairly rates properly designed and prepared yachts which are equipped for offshore racing. It must be clearly understood by all who use ORR that it is not a development rule and therefore is not intended for sailors who are looking to "beat" the rule. In order to discourage attempts to design yachts "to the rule", the algorithms of the VPP are non-public. ORR will be updated on a regular basis to stay ahead of design developments.

The ORR Rulebook provides details about measurement, restrictions, ratings and everything else required to race under the ORR. Owners, sailors, designers, sail-makers and builders should consult the rulebook to prepare and race their boats. This Quick Start Guide provides an overview to help owners understand what they need to do to race under ORR.

1. Scope of Rule

The ORR is intended to rate a broad diversity of sailing yachts but limits are imposed either to ensure reasonably close racing or because there is insufficient science. For example, at present ORR does not rate multi-hull yachts or kite sails.

2. Certificates

Valid certificates, issued by US SAILING, are required for racing under ORR. This guide, and the rulebook, will help owners through the process of measurement and certification.

3. Getting Started

The ORR requires a full description of the geometry of hull, rig, and sails; how the boat sits in the water (to get length, weight, wetted area, etc.) and the stability of the boat (resistance to heeling over.)

Owners should contact US SAILING who will provide necessary information and refer them to a trained and certified measurer for their geographic area. The owner should familiarize himself with this guide and contact the measurer to begin the measurement process.

For boats with a valid IMS or fully measured valid AMERICAP certificate, that is sufficient information for a "Fully Measured" ORR certificate. For boats with a valid AMERICAP certificate that was issued using less than full measurements or declared input data, this information is sufficient for a "Partial Measurement" ORR certificate.
Reference: Rule 1.03

4. Hull Measurement Ashore

The owner is responsible for preparing the boat for measurement ashore. The surface of the hull will be surveyed with an instrument that provides the detailed description necessary for the calculations in the VPP.
Reference: Rule 3.02.1

If the boat has a sister ship that has been fully measured, the requirement for hull surveying may be waived by the chief measurer. Hull surveying may also be waived if the designer of the boat supplies the "lines" in a suitable electronic format. In the latter case, measurement checks will be conducted.
Reference: Rule 3.02.1.c

5. Measurement Afloat

The owner is responsible for preparing the boat for measurement afloat. This means following the instructions for Measurement Trim, basically a list of what shall and shall not be on board. The measurer will measure the freeboards of the boat and conduct an inclining test to establish the stability.
Reference: Rule 3.02.2

Fully measured boats bear the notation "FULL MEASUREMENT". If the boat has a sister ship that was measured in-water, those measurements may be used, subject to a review by ORR administration. In such a case the resulting ORR certificate will be labeled "PARTIAL MEASUREMENT".
Reference: Rule 1.03

Please be aware that some regattas may require FULL MEASUREMENT certificates.

6. Rig and Sail Measurement

The owner is responsible for declaring to the measurer all spars and sails that he proposes to carry on the yacht and make them available for measurement. The dimensions of the principal elements of the rig: masts, booms, poles, sprits and sail attachment points shall be measured. The dimensions of the sails will be measured to derive the sail areas used for rating calculation.
Reference: Rule 3.02.3, Part IX - RIG, Part XX - SAILS

7. Configuration Changes

If there are changes to the canoe body, the appendages, the rig, the sails and/or equipment carried on board, or to anything that might change the boat's rating the owner is responsible to declare these changes to the rating authority.
Reference: Rule 3.03.1

8. Stability Requirements

Participation in ORR races may be restricted on the basis of the Stability Index, derived from the boats LPS, maximum beam, displacement (weight) and sailing length. *Reference: Rule 2.02.1*

For boats with moveable ballast, participation in ORR races may be restricted on the basis of the Ballast Leeward Recovery Index (BLRI). The BLRI represents the ability of a boat to recover from a knockdown with the moveable ballast located to leeward. *Reference: Rule 2.02.2*

9. Restrictions While Racing

The purpose is to prevent boats being raced in hull, rig and/or sail configurations that are different from how the boat was measured and rated or are out of the scope of what the ORR rule permits. *Reference: PART IV*

Specific examples include:

- Movement of ballast, fixtures and accommodation
- Running the engine for propulsion
- Changes in fuel and water tankage beyond normal use
- Use of stored energy in ways other than those explicitly permitted
- Rotating masts
- Altering the location of the mast step
- Trim and use of sails not consistent with how they were measured and rated
- Changes to standing rigging is not permitted while racing